Environmental Assessment

Longfellow Corner

3801-3829 Martin Luther King, Jr. Way
Oakland, CA 94609

ALAMEDA COUNTY • CALIFORNIA

Determinations and Compliance Findings

for HUD-assisted Projects

24 CFR Part 58

September 2020

U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov
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Determinations and Compliance Findings for HUD-assisted Projects

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Project Identification:	Longfellow Corner 3801-3829 Martin Luther King, Jr. Way Oakland, Alameda County, California 94609
Responsible Entity:	City of Oakland
Preparer:	AEM Consulting
Month/Year:	September 2020

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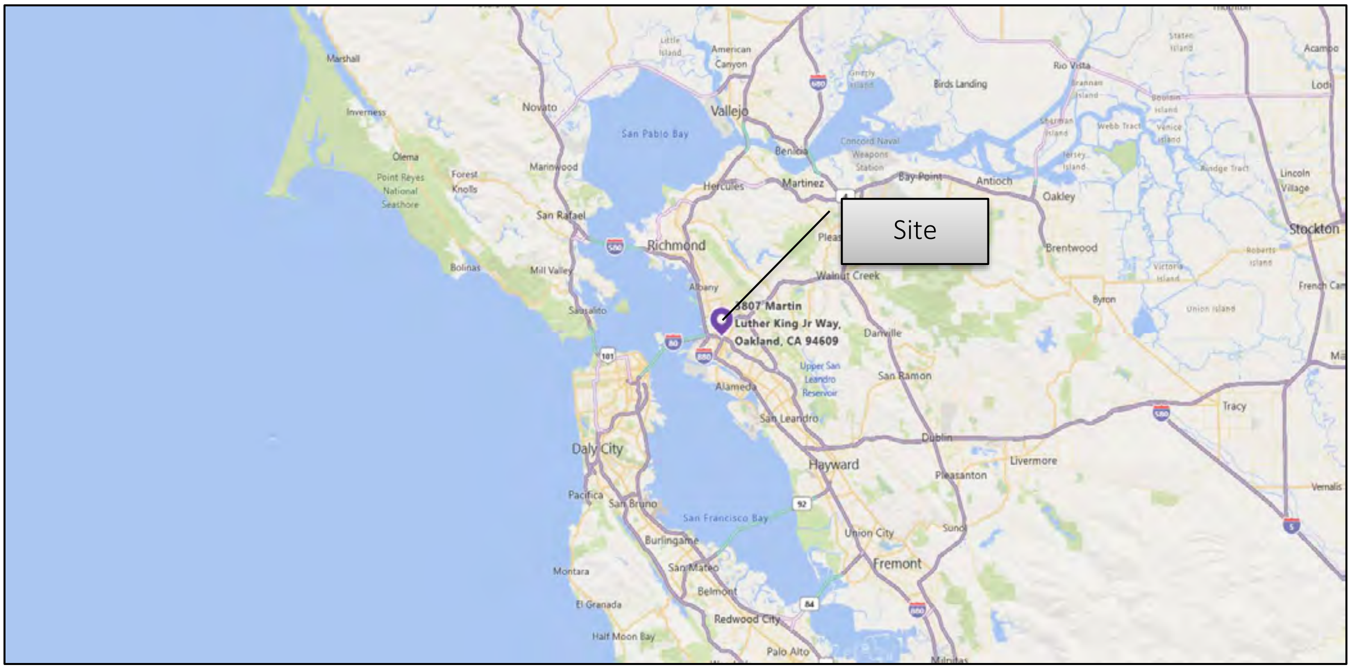
Project Information

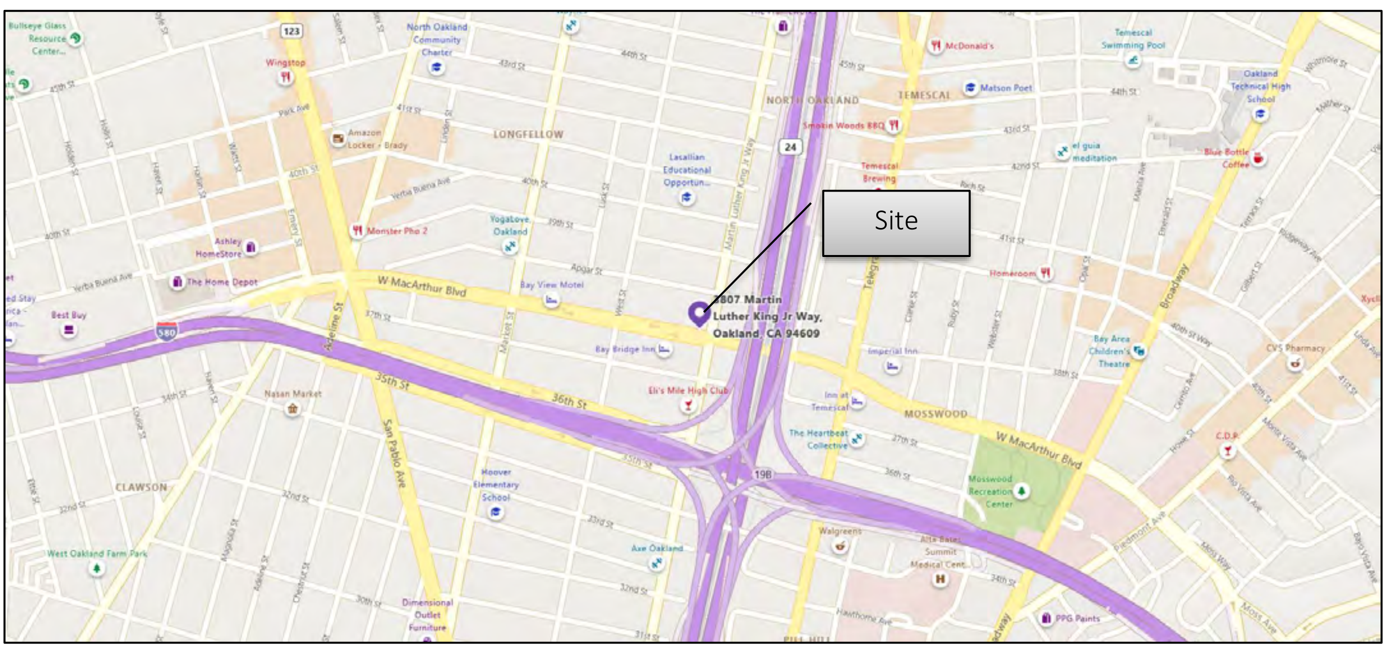
Project Name:	Longfellow Corner
Responsible Entity:	City of Oakland Bureau of Planning 250 Frank H. Ogawa Plaza, Suite 3315 Oakland, CA 94612
Grant Recipient (if different than Responsible Entity):	Oakland Housing Authority 1619 Harrison Street Oakland, CA 94612
State/Local Identifier:	ES19006
Preparer:	Cinnamon Crake, President, AEM Consulting
Certifying Officer Name and Title:	William Gilchrist, Director of Planning and Building
Consultant (if applicable):	AEM Consulting 422 Larkfield Center #104 Santa Rosa, CA 95403 (707) 523-3710 aem@aemconsulting.net
Direct Comments to:	Heather Klein, Planner IV 250 Frank Ogawa Plaza, Suite 2114 Oakland, CA 94612 (510) 238-3659 hklein@oaklandca.gov
Project Location:	3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California 94609 (APNs 012-0964-007, -006, -005 and -004)

Project Location

Longfellow Corner
3801-3829 Martin Luther King, Jr. Way
Oakland, CA 94609



Map 1 Region

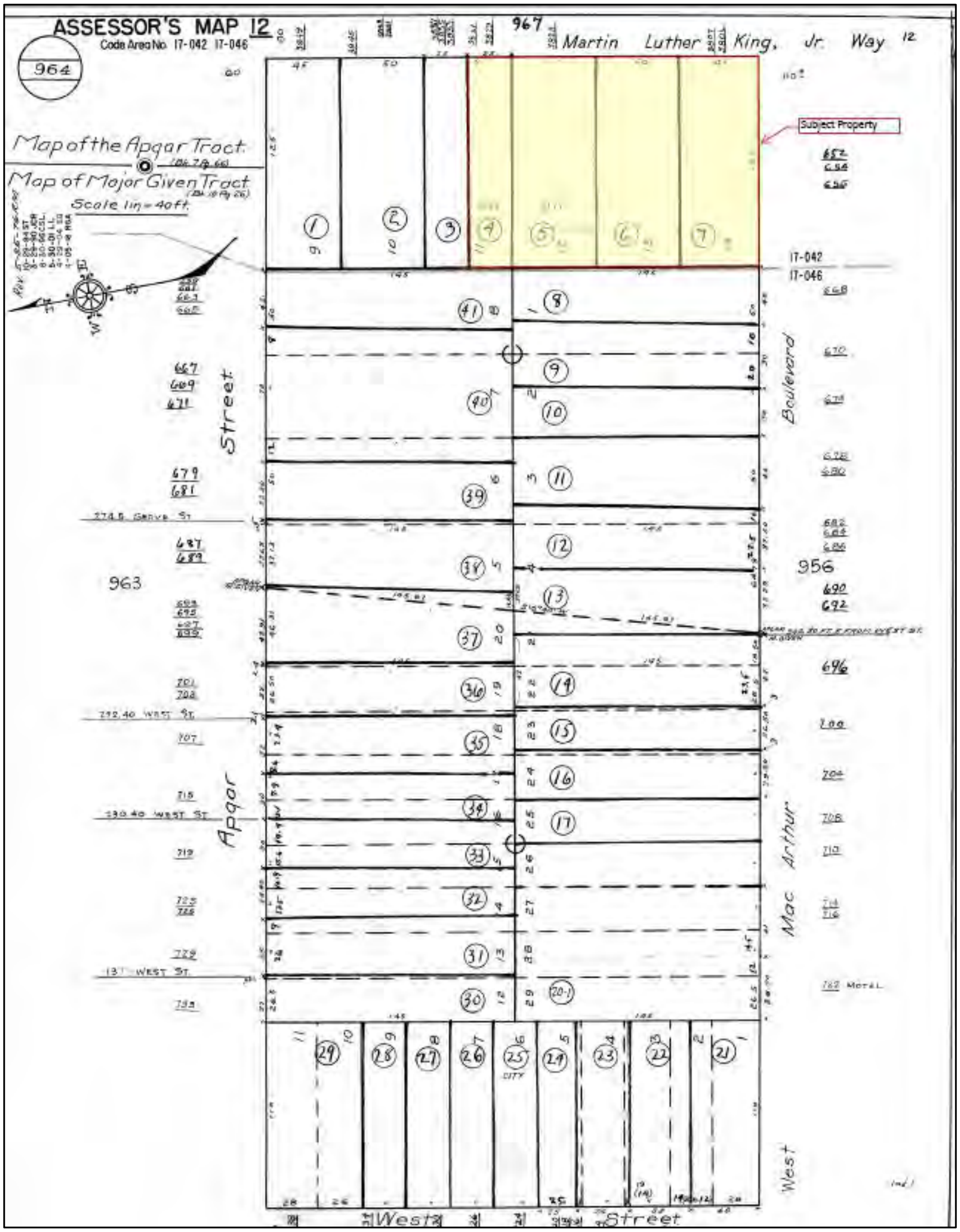


Map 2 Detail

Project Location

Longfellow Corner

3801-3829 Martin Luther King, Jr. Way
Oakland, CA 94609



Map 3 Assessor Parcel Map

Project Photographs – Existing Conditions

Longfellow Corner
3801-3829 Martin Luther King, Jr. Way
Oakland, CA 94609

Photo 1 Project Area overview, looking toward two-story commercial building in southeast corner of Project Area, facing southeast (Courtesy Evans & De Shazo, Inc.)

Project Photographs – Existing Conditions

Longfellow Corner
3801-3829 Martin Luther King, Jr. Way
Oakland, CA 94609

Photo 2 Overview of central portion of the Project Area, facing west (Courtesy Evans & De Shazo, Inc.)

Project Photographs – Existing Conditions

Longfellow Corner

3801-3829 Martin Luther King, Jr. Way
Oakland, CA 94609

Photo 3 Overview of northeastern portion of Project Area, facing north **(Courtesy Evans & De Shazo, Inc.)**

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

Longfellow Corner, 3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California 94609 (APNs 012-0964-007, -006, -005 and -004):

Resources for Community Development (RCD) proposes to acquire and develop the Longfellow Corner affordable housing project on four contiguous parcels (APNs 012-0964-007, -006, -005 and -004) with address 3801-3829 Martin Luther King, Jr. Way in Oakland, Alameda County, California 94609. The total site area is 0.48 acres. Two parcels are currently owned by RCD; two are owned by the City of Oakland. Three existing buildings at the corner of Martin Luther King, Jr. Way and MacArthur Boulevard will be demolished to construct the project. After demolition, RCD will construct a new, six-story building with 77 affordable apartments and 2,052 square feet of ground floor commercial/retail space. The unit mix will be 33 one-bedroom units, 19 two-bedroom units and 25 three-bedroom units for a total of 77 units. A total of 4,609 square feet of open space will be provided on site.

The ground floor will contain two retail spaces, parking, lobby, elevator, bicycle parking, mail boxes, trash room, management office, filing and storage room and maintenance and electrical rooms.

A total of 39 parking spaces will be provided in the ground floor parking garage and include 50 long term bicycle parking spaces with 10% or minimum four short-term bicycle parking spaces. Podium space will provide a courtyard shielded from noise that includes a BBQ, children's play area, outdoor dining and seating area.

The project is 100% affordable.

Table 1 Subject Property Information

Address	Assessor Parcel Number	Size in Acres
3801 & 3807 Martin Luther King, Jr. Way, Oakland, CA 94609	012-0964-007	0.13
Unassigned, Martin Luther King, Jr. Way, Oakland, CA 94609	012-0964-006	0.14
3823 Martin Luther King, Jr. Way, Oakland, CA 94609	012-0964-005	0.14
3829 Martin Luther King, Jr. Way, Oakland, CA 94609	012-0964-004	0.07
Total:	4 Contiguous Parcels	**0.48**

Source: (1) (Appendix A)

Figure 1 Site Plan

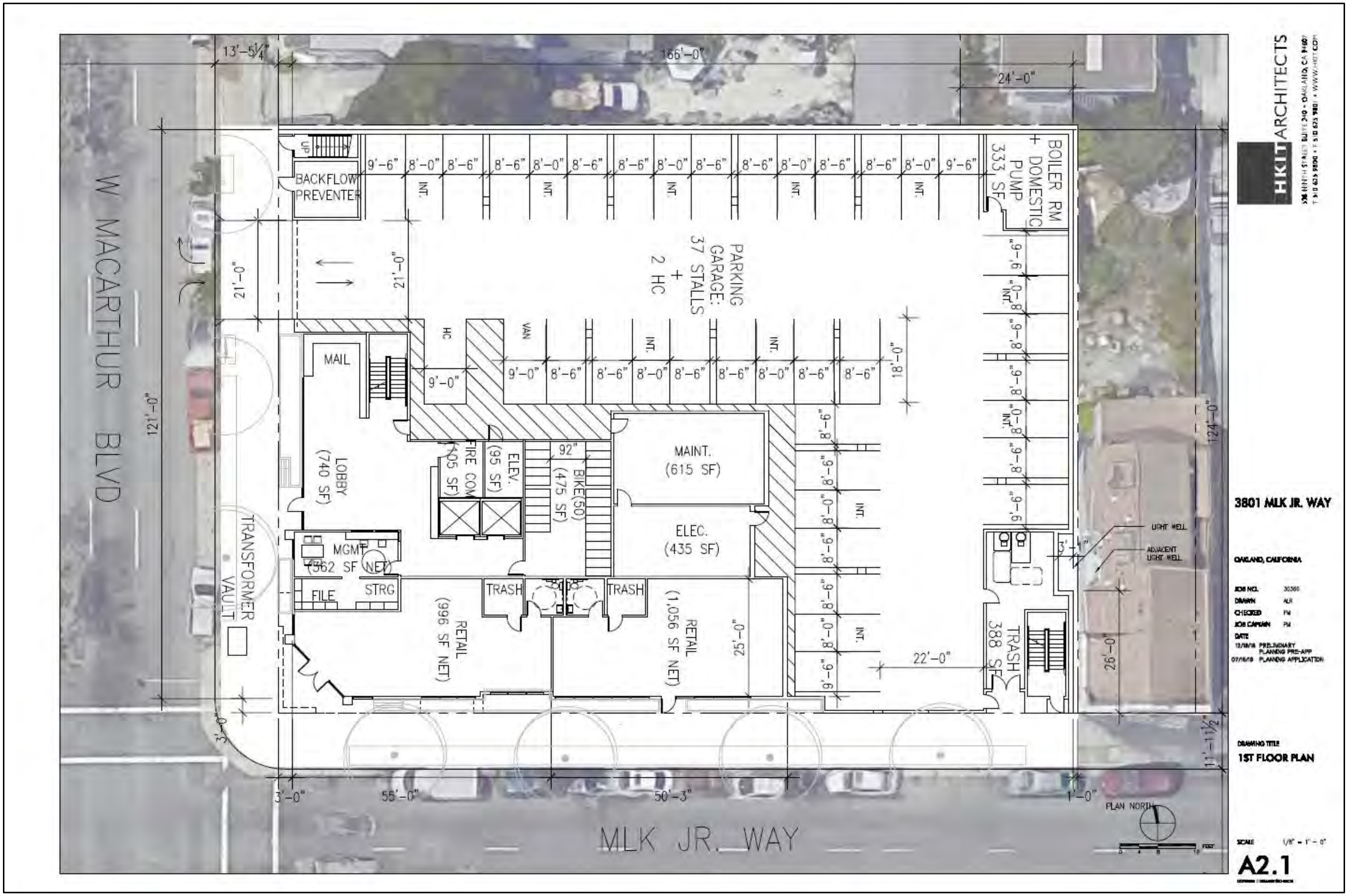


Figure 2 First Floor Plan

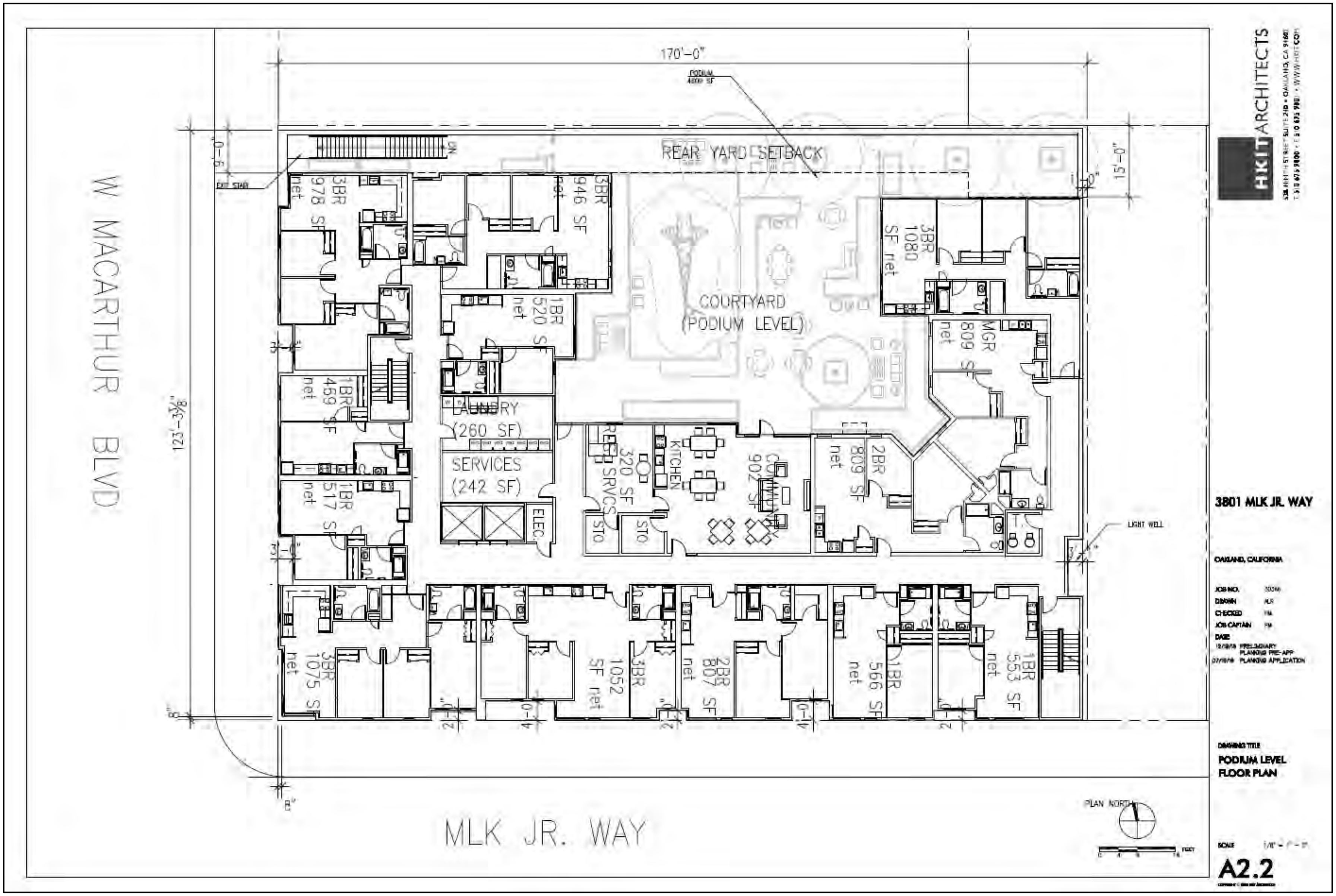


Figure 3 Podium Level Plan

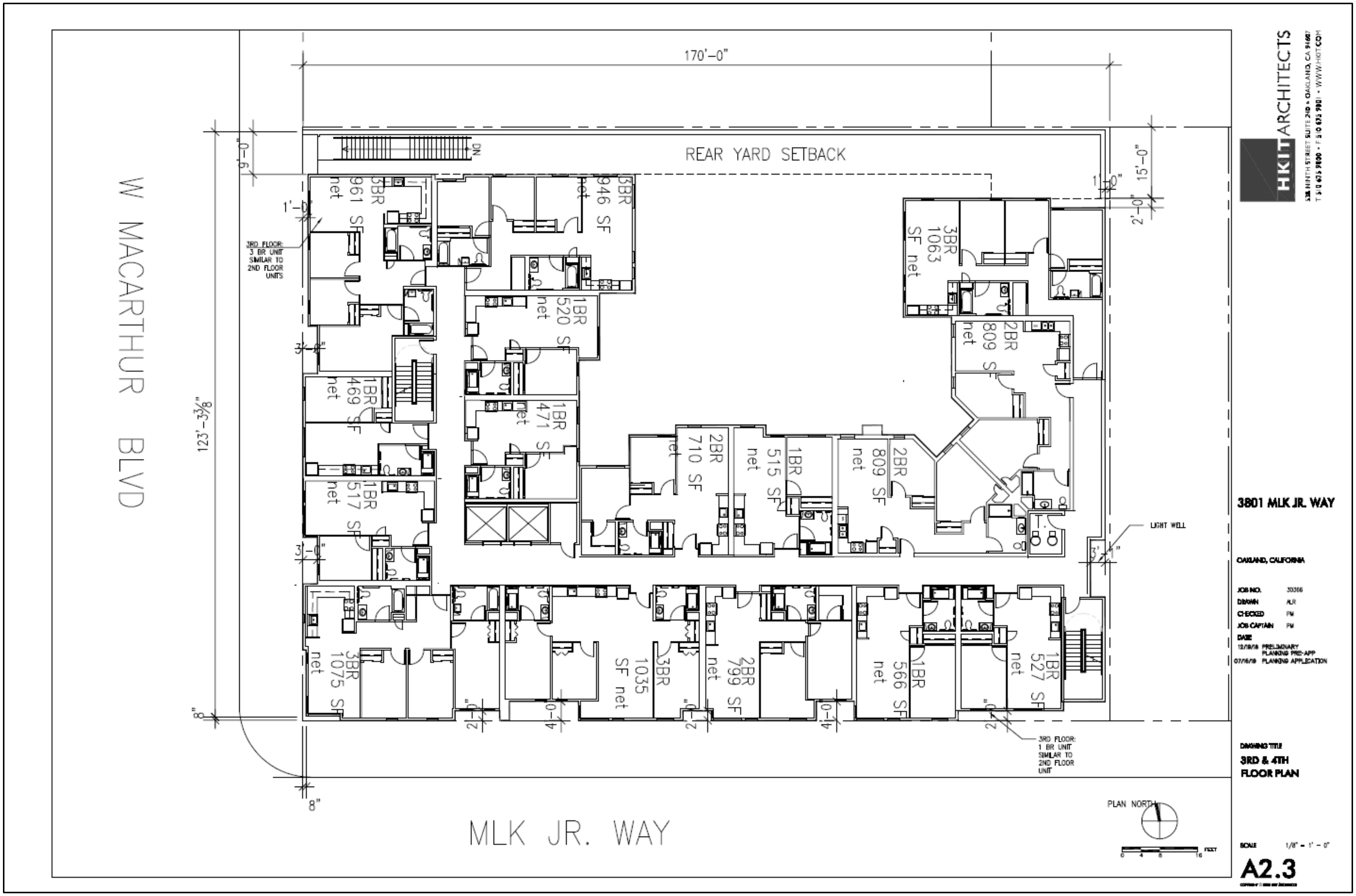


Figure 4 Third and Fourth Floor Plan

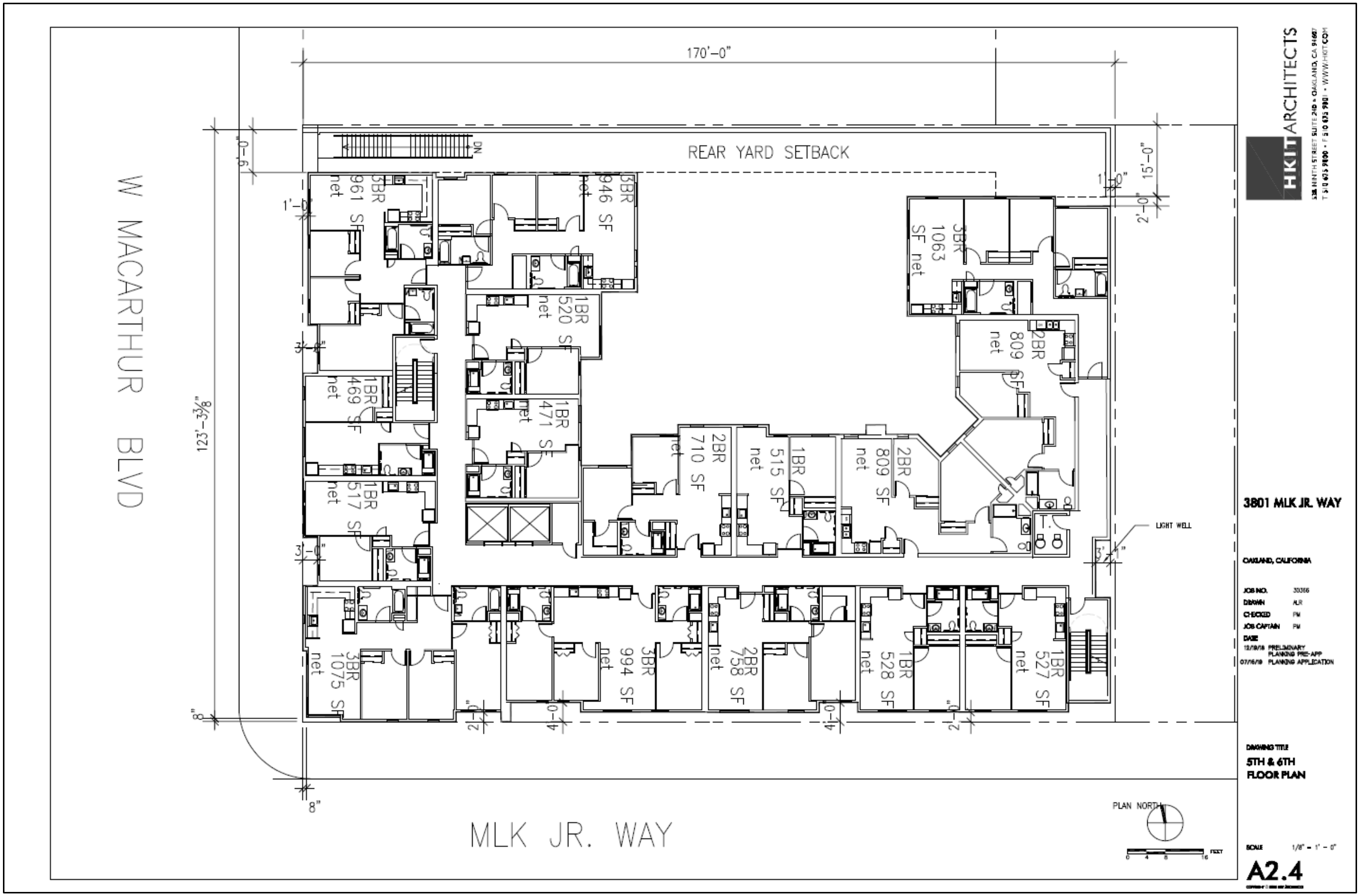


Figure 5 Fifth and Sixth Floor Plan

Figure 6 Elevations

Figure 7 Elevations

Figure 8 Perspectives

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:

The purpose of the proposal is to increase the number of affordable housing units in the City of Oakland and Alameda County as a whole. An increase of 77 affordable apartments will be accomplished by implementing the proposed project.

Regional Outlook

The San Francisco Bay Area (Bay Area) region has a population of approximately 7.2 million people. The Bay Area is the world's 21st-largest economy. The region's population is projected to swell to 9 million people by 2040. About one-fifth of the Bay Area's total population lives in areas with large numbers of low-income and minority populations.

The Association of Bay Area Governments, in conjunction with the Metropolitan Transportation Commission and representatives from each of the nine Bay Area counties and cities, has drafted a strategy for a sustainable region named Plan Bay Area. Plan Bay Area grew out of California Senate Bill AB 375 "The California Sustainable Communities and Climate Protection Act of 2008" which requires the Bay Area to reduce greenhouse gas emissions from cars and light trucks. The law requires that the Sustainable Communities Strategy promote compact, mixed-use commercial and residential development. To meet the goals of SB 375, Plan Bay Area directs more future development in areas that are or will be walkable and bike-able and close to public transit, jobs, schools, parks, recreation and other amenities. The law synchronizes the regional housing needs allocation process with the regional transportation planning process and streamlines the California Environmental Quality Act (CEQA) process for housing and mixed-use projects that are consistent with the Sustainable Communities Strategy and are in close proximity to public transportation. Local governments have identified Priority Development Areas where new development will support the day-to-day needs of residents and workers in a pedestrian-friendly environment served by transit. Priority Development Areas were established to address housing needs in infill communities and advance focused employment growth.

By 2040 the Bay Area is projected to add 2.1 million people, an increase of 30% or roughly 1% per year. The number of jobs is expected to grow by 1.1 million between 2010 and 2040, an increase of 33%, which is a slower rate of job growth than previous forecasts. During this same time period, the number of households is expected to increase by 27% to 700,000 and the number of housing units is expected to increase by 24% to 660,000. Single-family homes represent the majority of housing production in recent decades, but recent trends suggest that cities once again are becoming centers of population growth. Construction of multifamily housing in urban locations in the Bay Area increased from an average of 35% of total housing construction in the 1990s to nearly 50% in the 2000s. In 2010 it represented 65% of all housing construction. Demand for multifamily housing is projected to increase in developed areas near transit, shops and services.

The economy in the Bay Area has resulted in uneven job growth throughout the region, increased income disparity, and high foreclosure and eviction rates. At the same time, housing costs have risen for renters and, to a lesser degree, for home buyers close to the region's job centers. Bay Area communities face these challenges at a time when there are fewer public resources available than in past decades for investments in infrastructure, public transit, affordable housing, schools and parks.

Source: (2)

Local Perspective

According to the 2010 U.S. Census, Alameda County had a population of 1,510,270. Alameda County's population is expected to grow 32% to 1,987,950 in year 2040. Alameda County occupies most of the East Bay of the San Francisco Bay Area. The City of Oakland is the county seat and the largest city in Alameda County. According to the Association of Bay Area Governments (ABAG), Alameda County Housing Needs Allocation 2014 to 2022, the City of Oakland should add 14,765 new units by 2022 in order to meet the needs for housing.

Table 2 Alameda County Housing Needs Allocation 2014 to 2022

	Very low, < 50%	Low, < 80%	Moderate, < 120%	Above Moderate	Total
Alameda	444	248	283	748	1,723
Albany	80	53	57	145	335
Berkeley	532	442	584	1,401	2,959
Dublin	796	446	425	618	2,285
Emeryville	276	211	259	752	1,498
Fremont	1,714	926	978	1,837	5,455
Hayward	851	480	608	1,981	3,920
Livermore	839	474	496	920	2,729
Newark	330	167	158	423	1,078
Oakland	2,059	2,075	2,815	7,816	14,765
Piedmont	24	14	15	7	60
Pleasanton	716	391	407	553	2,067
San Leandro	504	270	352	1,161	2,287
Union City	317	180	192	417	1,106
Unincorporated	430	227	295	817	1,769
Alameda County Total	*9,912*	*6,604*	*7,924*	*19,596*	*44,036*

Source: (3) (4)

Local housing elements must include an analysis of special housing needs. Under State law, special needs refer to those households that contain seniors, persons with disabilities, large households, female-headed households, homeless, veterans and farmworkers.

The City of Oakland, in its 2015-2023 Housing Element, outlines its goals, policies and planned actions to address its housing needs. The following applies to this project and affordable housing in general.

Goal 2: Promote the development of adequate housing for low- and moderate-income households

Policy 2.1 *Affordable housing development programs*

Provide financing for the development of affordable housing for low- and moderate-income households. The City's financing programs will promote a mix of housing types, including homeownership, multifamily rental housing and housing for seniors and persons with special needs.

Policy 2.10 *Promote an equitable distribution of affordable housing throughout the community*

The City will undertake a number of efforts to distribute assisted housing widely throughout the community and avoid the over-concentration of assisted housing in any particular neighborhood, in order to provide a more equitable distribution of households by income and by race and ethnicity.

Goal 7: Promote sustainable development and sustainable communities

Policy 7.1 *Sustainable residential development programs*

In conjunction with the City's adopted Energy and Climate Action Plan (ECAP), develop and promote programs to foster the incorporation of sustainable design principals, energy efficiency and smart growth principles into residential developments. Offer education and technical assistance regarding sustainable development of project applicants.

Policy 7.2 *Minimize energy consumption*

Encourage the incorporation of energy conservation design features in existing and future residential development beyond minimum standards required by State building code.

Policy 7.3 *Encourage development that reduces carbon emissions*

Continue to direct development toward existing communities and encourage infill development at densities that are higher than – but compatible with – the surrounding communities. Encourage development in close proximity to transit, and with a mix of land uses in the same zoning district, or on the same site, so as to reduce the number and frequency of trips made by automobile. Source: (5)

The proposed project will help to achieve the stated goals by its consistency with the policies stated above. The project provides a mix of unit types, is high-density, energy efficient and located near high-quality transit, thereby reducing carbon emissions. The site is one block away from the MacArthur Bay Area Rapid Transit (BART) light rail station and two blocks from Interstate 580.

Existing Conditions and Trends [24 CFR 58.40(a)]:

Existing Conditions

As of the 2010 census, the population of Oakland was 397,011. Oakland is a major West Coast port city in the U.S. state of California. The Port of Oakland is the busiest port for San Francisco Bay and all of Northern California. Oakland is the third largest city in the San Francisco Bay Area, the eighth-largest city in California, and the 45th – largest city in the United States. Incorporated in 1852, Oakland is the county seat of Alameda County. It serves as a major transportation hub and trade center for the entire region and is also the principal city of the Bay Area Region known as the East Bay. The City is situated directly across the bay, six miles east of San Francisco.

A steady influx of immigrants during the 20th century, along with thousands of African-American war-industry workers who relocated from the Deep South during the 1940s, have made Oakland one of the most ethnically diverse major cities in the country. Oakland is known for its history of political activism, as well as its professional sports franchises and major corporations, which include health care, dot-com companies and manufacturers of household products. The city is a transportation hub for the greater Bay Area, and its shipping port is the fifth busiest in the United States.

Oakland has a Mediterranean climate with an average of 260 sunny days per year. Lake Merritt, a large estuary centrally located east of Downtown, was designated the United States' first official wildlife refuge. Jack London Square, named for the author and former resident, is a tourist destination on the Oakland waterfront.

The United States Census Bureau says the City's total area is 78.0 square miles, including 55.8 square miles of land and 22.2 square miles (28.48%) of water. Oakland's highest point is near Grizzly Peak Blvd, east of Berkeley, just over 1,760 feet above sea level. Oakland has 19 miles of shoreline. Oakland residents refer to their city's terrain as "the flatlands" and "the hills", which until recent waves of gentrification have also been a reference to Oakland's deep economic divide, with "the hills" being more affluent communities. About two-thirds of Oakland lies in the flat plain of the East Bay, with one-third rising into the foothills and hills of the East Bay range.

Site Characteristics

The project site is situated within a topographically flat area in the Longfellow neighborhood of northern Oakland at approximately 60 feet above mean sea level (amsl), and is bordered on the north by a commercial/residential building, on the south by MacArthur Boulevard, on the west by a residence, and on the east by Martin Luther King Jr. Way (historically known as Grove Street). The project area is located approximately 1.5 miles east of San Francisco Bay. Source: (6)

Trends

According to HUD's Comprehensive Housing Affordability Strategy 2007-11 (CHAS) data for Oakland, 52% of Oakland households (79,860 households) are extremely low-income, very low income, or low-income, with incomes ranging from 0-80% of Area Median Income (AMI). Of those, 23% are extremely low-income (35,610 households at 0-30% AMI), 14% are very low-income (21,455 households at 30-50% AMI), and 15% are low-income (22,795 households at 50-80% AMI).

Many low income households (0-80% AMI) are cost burdened. Of all low income households, 68% of homeowners and 71% of renters are paying more than 30% of their income towards housing costs (13,440 and 42,530 respectively); 49% of homeowners and 43% percent of renters are paying more than 50% of their income toward housing costs (9,640 and 25,780 respectively)—these households are considered households with severe cost burdens. Significantly, of the severely cost burdened renters, 56% of all households with severe cost burdens are extremely low income households (19,770 households).

As of December 2014, there are 9,797 privately owned, publicly subsidized rental housing units in over 180 developments in Oakland. Of these units, 166 are designated for persons with disabilities and/or HIV/AIDS, 3,649 for families, and 4,547 for seniors. Another 685 privately owned subsidized rental units are in residential hotels and 141 are transitional housing units for homeless individuals and families. Many of these units include Project-Based Section 8 Voucher Allocations.

Housing in Oakland, both ownership and rental, continues to become more expensive and the gap between housing costs and income is becoming more dramatic. The construction of subsidized rental housing also continues to be a challenge as the subsidy cost per unit assumption continues to climb resulting in more challenges to provide more deeply affordable units.

Source: (7)

These trends are likely to continue in the absence of the project. The project will help to stem the trends outlined above by providing affordable housing.

Funding Information

Grant Number	HUD Program	Funding Amount
	Project-Based Section 8 Vouchers (PBV) – CDFA No. 14.871	16 Vouchers

Estimated Total HUD Funded Amount: 16 Project-Based Section 8 Vouchers awarded by the Oakland Housing Authority

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: **$ 67,000,000**

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	There are two major airports and one minor airport within 15 miles of the project site. Oakland International Airport is the nearest airport and lies approximately 7.12 miles south of the project site. Arrivals and departures at Oakland International Airport occur over the bay in a north to south direction, parallel to the project site. San Francisco International Airport lies approximately 15 miles to the southwest, across San Francisco Bay. Minor airport Hayward Executive Airport is located 13.43 miles south. No airport clear zones or accident potential zones from any nearby airport extend to the site. Source Documentation: (8) (9) (10) (11) (12) (Appendix B)
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	The Coastal Barrier Resources Act of the United States (CBRA, Public Law 97-348), enacted October 18, 1982, designated various undeveloped coastal barriers, depicted by a set of maps adopted by law, for inclusion in the John H. Chafee Coastal Barrier Resources System (CBRS). Areas so designated were made ineligible for direct or indirect Federal national security, navigability, and energy exploration. CBRS areas extend along the coasts of the Atlantic Ocean and the Gulf of Mexico, Puerto Rico, the U.S. Virgin Islands, and the Great Lakes, and consist of 857 units. There are no Coastal Barrier Resources in California. Source Documentation: (13)
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood	Yes ☐ No ☒	The subject parcels are not located within a 100 year floodplain (Zones A or V) or 500 year floodplain (Zone B) identified on a

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]		Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM). The project is not located in a Flood Zone. The area is a Flood Hazard Area Designation Zone X: Areas of minimal flooding. No Base Flood Elevations or depths are shown within this zone. Insurance purchase is not required in these zones. Flood hazard designation is depicted on FIRM Map Number 06001C0059G, with an effective date of August 3, 2009. Flood insurance is not required. Source Documentation: (14) (Appendix C)
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes No ☒ ☐	**Criteria Air Pollutants** The Federal Clean Air Act governs air quality in the United States. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act. At the Federal level, the United States Environmental Protection Agency (USEPA) administers the Clean Air Act. The California Clean Air Act is administered by the CARB at the State level and by the Air Quality Management Districts at the regional and local levels. BAAQMD regulates air quality at the regional level, which includes the nine-county Bay Area. The federal Clean Air Act requires each state to identify areas that have ambient air quality in violation of federal standards. States are required to develop, adopt, and implement a state implementation plan (SIP) to achieve, maintain, and enforce federal ambient air quality standards in these nonattainment areas. SIP elements are developed on a pollutant-by-pollutant basis whenever one or more air quality standards are being violated. In California, local and regional air pollution control agencies have primary responsibility for developing SIPs, generally in coordination with local and regional land use and transportation planning agencies. BAAQMD is the

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		responsible regional air pollution control agency in the San Francisco Bay Area. An area's compliance with national ambient air quality standards under the Clean Air Act is categorized as nonattainment, attainment (better than national standards), unclassifiable, or attainment/cannot be classified. The unclassified designation includes attainment areas that comply with federal standards, as well as areas for which monitoring data are lacking. Unclassified areas are treated as attainment areas for most regulatory purposes. Simple attainment designations generally are used only for areas that transition from nonattainment status to attainment status. Areas that have been reclassified from nonattainment to attainment of federal air quality standards are automatically considered maintenance areas, although this designation is seldom noted in status listings. The San Francisco Bay Area is designated as nonattainment for the federal 8-hour ozone standard and the 24-hour $PM_{2.5}$ standard. The San Francisco Bay Area is designated as attainment or unclassified for the other national ambient air quality standards. With respect to the state ambient air quality standards, California classifies areas as attainment, nonattainment, nonattainment-transitional, or unclassified. The San Francisco Bay Area is designated as nonattainment for the state ozone, inhalable particulate matter (PM_{10}), and $PM_{2.5}$ standards and as attainment or unclassified for the other state ambient air quality standards. The predominant regulation that guides assessment of air quality impacts of federal actions is the General Conformity Rule, established under the Clean Air Act (Section 176(c)(4)). The General Conformity Rule ensures that the actions taken by federal agencies in nonattainment and maintenance areas do not interfere with a state's plans to meet national standards for air quality. The project area is located within the San Francisco Bay Area Air Basin, which is designated as a nonattainment area for the federal 8-hour ozone standard and the federal $PM_{2.5}$ standard. The air basin is designated

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		as a maintenance area with respect to the federal carbon monoxide (CO) standards. In keeping with the General Conformity Rule process, this assessment applies the appropriate *de minimis* thresholds of the Rule as they apply to the San Francisco Bay Area Air Basin for ozone precursors, PM2.5, and CO. The *de minimis* thresholds for these three pollutants in the San Francisco Bay Area Air Basin are 100 tons per year for each pollutant. **Criteria Air Pollutant Analysis** The BAAQMD CEQA Air Quality Guidelines include project screening sizes that identify projects would potentially exceeding BAAQMD-recommended significance thresholds. These thresholds include criteria air pollutants or their precursor pollutants that are considered non-attainment under the NAAQS for the Bay Area. Applicable non-attainment pollutants (or precursors) are shown in the table below. **Table 3 BAAQMD Thresholds of Significance for Project Emissions**

Pollutant	Construction Threshold	Operational Threshold
Ozone precursor (ROG)	54 lbs/day or 10 tons per year	54 lbs/day or 10 tons per year
Ozone Precursor (NOx)	54 lbs/day or 10 tons per year	54 lbs/day or 10 tons per year
$PM_{2.5}$	54 lbs/day or 10 tons per year	54 lbs/day or 10 tons per year

The BAAQMD CEQA guidelines include significance thresholds screening level project sizes that can be used to assess whether projects would exceed the emission-based thresholds shown in the table above. The project, which includes 77 residential units and 2,052-sf of retail, would be well below these screening criteria. The construction screening size for the project is 240 dwelling units and

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		277,000-sf for the retail portion of the project. Combined, the project would be 33 percent of the construction screening size that would have emissions above the significance threshold. The operational screening size for the project is 494 dwelling units and 99,000-sf for the retail portion of the project. Combined, the project would be 18 percent of the operational screening size that would have emissions above the significance threshold. Since the project would have construction and operational maximum annual emissions well below 10 tons per year for any non-attainment pollutant (or precursor), the emissions would not exceed the de minimis thresholds for these pollutants in the San Francisco Bay Area Air Basin of 100 tons per year for each pollutant. As a result, features to mitigate or reduce these criteria air pollutant impacts are not necessary. **Health Risk Assessment** The project site is near several sources of emissions that affect air quality at the site. Interstate 580 lies approximately 800 feet south of the project site, State Route 24 lies approximately 300 feet east where BART tracks also lie. Due to the proximity of these sources of emissions, a community risk assessment was conducted to determine the level of exposure to these sources by sensitive receptors (i.e. future residents). A Community Risk Assessment was conducted for the project by Illingworth & Rodkin, Inc. in August 2019. A summary of the report follows and is included in Appendix D. **Setting** The project site is located in Alameda County which is a part of San Francisco Bay Area Air Basin. Air quality in the region is affected by natural factors such as proximity to the Bay and ocean, topography, and meteorology, as well as proximity to sources of air pollution. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$).

		Air Pollution and Toxic Air Contaminants (TACs) Particulate matter (PM) is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as metals, soot, soil, and dust. Particles 10 microns or less in diameter are defined as "respirable particulate matter" or "PM_{10}." Fine particles are 2.5 microns or less in diameter ($PM_{2.5}$) and, while also respirable, can contribute significantly to regional haze and reduction of visibility. Inhalable particulates come from smoke, dust, aerosols, and metallic oxides. Although particulates are found naturally in the air, most particulate matter found in the vicinity of the project site is emitted either directly or indirectly by motor vehicles, industry, construction, agricultural activities, and wind erosion of disturbed areas. Most $PM_{2.5}$ is comprised of combustion products such as smoke. Toxic Air Contaminants (TACs) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer or serious illness) and include, but are not limited to criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level. Diesel exhaust is the predominant cancer causing TAC in California. CARB estimates that about 70% of total known cancer risk related to air toxics in California is attributable to diesel particulate matter (DPM). **Impact Analysis** The City of Oakland uses the BAAQMD California Environmental Quality Act (CEQA) Air Quality Guidelines to consider exposure of sensitive receptors to air pollutant levels that result in an unacceptable cancer risk or hazard, to be significant. For cancer risk, which is a concern with diesel particulate matter (DPM) and other mobile-source TACs, the BAAQMD considers an increased risk of contracting cancer that is 10.0 in one million chances or greater, to be significant risk for a single source. The BAAQMD CEQA Guidelines also consider single-source TAC exposure to be significant if annual

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations

fine particulate matter ($PM_{2.5}$) concentrations exceed 0.3 micrograms per cubic meter ($\mu g/m^3$) or if the computed hazard index (HI) is greater than 1.0 for non-cancer risk hazards. Cumulative exposure is assessed by combining the risks and annual $PM_{2.5}$ concentrations for all sources within 1,000 feet of a project. The thresholds for cumulative exposure are an excess cancer risk of 100 in one million, annual $PM_{2.5}$ concentrations of 0.8 $\mu g/m^3$, and a hazard index greater than 10.0. These thresholds were used to address impacts from TAC sources that could affect future project residents.

A review of the project site has identified several sources including a freeway, a high volume roadway and stationary sources that are within 1,000 feet of the site and could, therefore, adversely affect the site.

Table 4 Summary of TAC Impacts from Sources within 1,000 feet of Project

Source	Distance in Feet	Excess Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
I-580	~800	1.5	0.11	<0.01
SR-24	300	2.7	0.16	<0.01
W MacArthur Blvd.	25	3.1	0.22	<0.01
MLK Jr. Way	30	4.5	0.12	<0.03
40th Street	700	0.9	0.02	<0.03
Plant 112042 – Gas Station	~460	1.5	---	0.01
Plant 22703 – Generator	~750	<0.1	<0.01	<0.01
Plant 111397 – Gas Station	~1,000	0.2	---	<0.01
Plant 14572 - Generator	~1,000	4.9	0.01	<0.01
Combined Impact from all sources		*<19.4*	*<0.65*	*<0.13*
Threshold of Significance		100	0.8 $\mu g/m^3$	10.0
Exceeds Thresholds?		*No*	*No*	*No*

		Combined Cancer Risk, Hazard Index and Annual $PM_{2.5}$ Concentrations The maximum impacts from each source were simply added to compute the combined impacts from all sources. This is a slight overestimate, because each source affects the site at a different location and this assessment assumes the worst location for each source is at the same location. This combined cancer risk is below the threshold of 100 chances per million, the annual $PM_{2.5}$ concentration does not exceed 0.8 µg/$m^3$and the Hazard Index is well below 10.0. **Conclusion** Community risk thresholds for TAC emissions from mobile sources and stationary sources located within 1,000 feet of the project site were found to be below significance thresholds for both single and combined sources. As a result, features to mitigate or reduce these TAC impacts are not necessary. Construction and operation of the project will not result in significant or adverse effects. **Construction-related Emissions** The City has adopted Uniformly Applied Development Standards imposed as Standard Conditions of Approval that apply to potential impacts to air quality. Application of City of Oakland's Standard Conditions of Approval to limit emissions generated during project construction will bring impacts to less than significant levels. *Standard Condition of Approval Required:* **AQ1. Dust Controls - Construction Related** The project applicant shall implement all of the following applicable dust control measures during construction of the project: a) Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. d) Limit vehicle speeds on unpaved roads to 15 miles per hour. e) All demolition activities (if any) shall be suspended when average wind speeds exceed 20 mph. f) All trucks and equipment, including tires, shall be washed off prior to leaving the site. g) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.\ AQ2. **Criteria Air Pollutant Controls - Construction Related** a) Requirement: The project applicant shall implement all of the following applicable basic control measures for criteria air pollutants during construction of the project as applicable: b) Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		c) Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations ("California Air Resources Board Off- Road Diesel Regulations"). d) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. Equipment check documentation should be kept at the construction site and be available for review by the City and the Bay Area Air Quality District as needed. e) Portable equipment shall be powered by grid electricity if available. If electricity is not available, propane or natural gas generators shall be used if feasible. Diesel engines shall only be used if grid electricity is not available and propane or natural gas generators cannot meet the electrical demand. f) Low VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings. g) All equipment to be used on the construction site shall comply with the requirements of Title 13, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") and upon request by the City (and the Air District if specifically requested), the project applicant shall provide written documentation that fleet requirements have been met.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		Source Documentation: (15) (16) (Appendix D)
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	The project site is located in the City of Oakland in an urban area of the East Bay of the San Francisco Bay Area. The project is subject to requirements of the San Francisco Bay Conservation and Development Commission, as the designated governing body over the Local Coastal Program in the greater Bay Area. Activities requiring permit approval include: Filling: Placing solid material, building pile-supported or cantilevered structures, disposing of material or permanently mooring vessels in the Bay or in certain tributaries of the Bay. Dredging: Extracting material from the tidal waters. Shoreline Projects: Nearly all work, including grading, on the land within 100 feet of the Bay shoreline. Other Projects: Any filling, new construction, major remodeling, substantial change in use, and many land subdivisions in the Bay, along the shoreline, in salt ponds, duck hunting preserves or other managed wetlands adjacent to the Bay. The proposed project does not involve activities within 100 feet of the shoreline or any of the other activities described above that requires a permit. The project site is roughly 1.66 mile from the shoreline and therefore not immediately adjacent to the Bay. A Coastal Development Permit is not required. Source Documentation: (9) (17) (18)
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☒ No ☐	In August 2019 a Phase I Environmental Site Assessment (ESA) was conducted for the project site by Environmental Service by Papineau. A summary of the report follows and the entire report can be found in Appendix E. **Phase I Environmental Site Assessment** This report presents the results of a Phase I Environmental Site Assessment for improved and undeveloped lots at 3801-07, 3813-19, 3823, and 3829 Martin Luther King Jr. Way, in Oakland,

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		California, the "Property". Additional addresses associated with the Property include 652-654-656 MacArthur Boulevard. Combined, the four parcels contain approximately 0.48 acre of land. The overall lot dimension along M.L.K. Jr. Way is approximately 170 feet and the MacArthur Boulevard frontage, or lot depth from M.L.K. Jr. Way, is approximately 124 feet. The existing buildings include a former store, house, and garage, all of wood-framed construction. The buildings currently are vacant. The City of Oakland's General Plan designates the Property for Neighborhood Center Mixed Use, and the Property is zoned Neighborhood Center (CN-3) with a 45-foot building height limit. The current buildings on the Property are over 100 years old, except for the small garage which is newer. Neighborhood At the time of the reconnaissance on August 9, 2019, the Property was observed to be located in a mixed residential and commercial area with housing west and north of the Property, and some commercial uses to the east and south. Automotive repair was apparent on the adjoining parcel to the east. Dry cleaning was not apparent in any adjoining or nearby neighborhood shops. Historical Uses Based upon review of historical Oakland City Directories and Sanborn Fire Insurance Rate Maps, the first developed uses of the Property were for three houses in 1902, and likely in the years before. The original three houses have been demolished or demolished and replaced. The former house at 3801 Grove Street (today, 3801 Martin Luther King Jr. Way) was replaced with two flats and store during 1903-1910. The former house at 3809 Grove Street (today, 3823 M.L.K. Jr. Way) was demolished circa 1975-1979 and was not replaced. The former house at 3813 Grove Street (today, 3829 M.L.K. Jr, Way) was replaced with a store during 1912-1930 which was later demolished circa 2006-2007. The current buildings have been used for a drug store, Pacific Telephone and Telegraph, barber shop, hair salon, stereo store, hat store, and residences.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		Except for the corner store and flats which remain today, all other buildings on the Property were demolished by 2007. The Property has had many uses which can be classified generally as office, retail, and residential. The Property has no history of use for automotive repair, auto fuel service, dry cleaning, electronics manufacturing, metal plating, row crops or orchards, waste disposal or other uses recognized as being associated with potential uses of hazardous substances including petroleum products. **Property Reconnaissance** The assessor looked for visible signs of potential environmental impairment such as oil staining or machinery leaks, staining or etching of the concrete floor by chemicals, bulk storage of hazardous materials or waste, past or current underground or above-ground storage tanks, and stressed or dead landscape. These conditions were looked for but were not observed. No quantity of hazardous material was observed on August 9, 2019. Soil stockpiles were not observed. Solid waste is disposed by the municipal collection and landfill service. Drinking water is provided through the municipal water delivery system by East Bay Municipal Utility District (EBMUD). EBMUD's water currently meets federal Safe Drinking Water Standards. **Sites Adjoining the Property** The Property is adjoined on the south by former gas stations. However, these sites are no longer used as gas stations. One has been completely rebuilt with a church. In view of the location and direction of groundwater movement generally toward the west, west-southwest, or southwest, these adjoining sites do not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property. **National Priority List (NPL) and Other Selected Federal** Databases U.S. Brownfields and Comprehensive Environmental Response and Compensation Liability Act (CERCLA) sites were identified within the ASTM search distances from the Property. The

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		nature and locations of the identified sites is such that they pose neither an obvious likelihood nor an apparent risk of environmental impairment for the owner of the Property. No federal Superfund site, proposed or de-listed Superfund site, Resource Conservation and Recovery Act (RCRA) Corrective Actions (CORRACTS) or Treatment-Storage-Disposal (TSD) site was reported within the ASTM standard distance from the Property. Selected State of California Databases According to ERS's search of the public agency databases, the following leaking underground storage tank sites are located close to the Property: • J&H Auto Repair (3701 M.L.K. Jr. Way), 0.0.7 mile south of the Property; • Grove Street Wash Rack (3884 M.L.K. Jr. Way), 0.11 mile northeast of the Property; and, • ARCO/Westco Gas Food (731 W. MacArthur Boulevard), 0.12 mile west). In view of their distance or location west or south of the Property, none poses an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property. Toxic Pit sites and solid waste landfill (WMUD/SWAT, SWF/LF) sites were not identified by ERS as being located within the ASTM standard distances from the Property. Conclusions and Recommendations The assessment made the following conclusions and recommendations: • The assessment confirms presence of lead residues in near-surface soil on the Property which likely will necessitate remedial action.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		• The assessment has not revealed evidence of any obvious Recognized Environmental Condition (REC), historic REC, or controlled REC in connection with the Property. • The adjoining auto repair use and former gas station uses do not pose any obvious likelihood or an apparent risk of environmental impairment for the owner of the Property. • Use of the adjoining lot at 3831-33 Grove Street (today, 3833 M.L.K. Jr. Way) for U C Cleaners during 1967-1969 may have entailed use of perchloroethylene (PCE) cleaning fluid. Business Environmental Risk The contemplated use of the Property for a residential CN-3 use will entail demolition of the existing improvements. Demolition sometimes requires removal of regulated asbestos-containing materials (RACMs). Costs for removal would depend on additional information such as, for example, the locations and quantities of confirmed ACMs. Estimates could be prepared by local qualified contractors based on results of an asbestos survey. However, in view of the expected small areas of vinyl asbestos floor tile (VAT) or sheet linoleum, the cost for removal of ACM is expected to be low. Subsequent Phase II Investigation Preliminary screening identified concentrations of lead in near-surface soil, which substantially exceed the locally applicable RWQCB-SFB Table S-1 ESL for lead for unrestricted residential land use. A Soil Management Plan is recommended for proper handling and landfill disposal of soil excavated for the foundation and utilities. Soil vapor screening along the northern Property line could rule out the possibility of significant concentrations of volatile organic compounds (VOCs) in soil vapor left from the past cleaning works on the adjoining parcel in the period 1967-1969, 1935, and 1928. PCE was used in dry cleaning after 1950. Before 1950, other cleaning solvents were used in the earlier period. Soil vapor screening would

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		test for presence or absence of PCE, TCE, carbon tetrachloride, and benzene in soil vapor. Costs of Corrective & Regulatory Compliance Actions Corrective action tentatively is recommended to remove lead-affected soil for off-site disposal in appropriate landfills. A cost at this time is based on assumption about the volume of soil to be disposed and waste soil classification. For approximately 1,000 tons of soil (e.g., 15,000 square feet of surface area and 1-foot excavation depth),—all classified as California, non-RCRA hazardous waste,—the cost for disposal at Class I Kettleman Hills Landfill is approximately $160,000 (complete with disposal fees, local and State BOE taxes). Additional costs would accrue for sampling, laboratory testing, loading and trucking. Before demolition, an asbestos consultant should be retained. Building demolition in the jurisdiction of the City of Oakland and BAAQMD requires a pre-demolition asbestos survey to obtain a “J-Number” before the City of Oakland will issue a demolition or building permit. Cal/OSHA Construction Safety Orders will apply during demolition. **Soil Characterization, Soil Stockpile Sampling and Limited Soil Vapor Survey** In November 2019, Essel Environmental Engineering & Consulting (Essel) performed a soil characterization, soil stockpile sampling, and limited soil vapor survey at a vacant property located at 3801-3829 Martin Luther King Junior Way (MLK Jr. Way) in Oakland, California (Site). The soil characterization and the soil stockpile sampling were performed to evaluate options for proper off-Site disposal of shallow soil to be removed from the Site. The soil vapor survey was performed to investigate the suspected encroachment of contaminant vapors from a former north-adjacent dry-cleaning operation and to evaluate the potential for vapor intrusion health risk in a future residential building. The scope of work for soil characterization included advancing six small diameter borings to depths of 5 feet below the ground

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		surface, collecting representative soil samples, and analyzing the samples for various organic compounds and inorganic elements as required by landfills. The scope of work for the soil stockpile sampling included collecting one representative soil sample and analyzing the sample for various organic compounds and inorganic elements. The scope of work to assess the potential vapor encroachment and intrusion conditions included advancing three small-diameter borings to depths of 7 feet (ft) below the ground surface (bgs), collecting representative soil vapor samples, and analyzing the samples for volatile organic compounds (VOCs). Findings Following is a summary of the findings of the soil characterization and limited soil-vapor survey. • Historical records reviewed in the Phase I ESA indicates the Site was first developed with three houses by 1902. The southernmost house was redeveloped with the two-present day flats and a store between 1903 and 1910. The central house was demolished circa 1975 and has remained vacant, undeveloped land since. The northernmost house was replaced between 1912 and 1930, demolished sometime between 006 and 2007, and has remained undeveloped. • Adjacent and surrounding land was and is a mix of residential and commercial properties that included cleaners and presser operations, gasoline service stations, automobile repair businesses. The north-adjacent cleaner operation is hydrologically up-gradient of the subject Site and occupied the adjoining parcel from 1911 to 1935 and from 1967 to 1969. A vapor encroachment condition at the Site could not be ruled out based on the proximity of the former cleaner operation and the potential for chlorinated solvents to remain in the subsurface of that property. • Soil borings B1 through B7and SV1 through SV3 were advanced to depths of 5 to 7 feet below the ground surface and one soil sample was collected from an unknown soil

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		stockpile in October 2019. Seven soil samples from borings B1 through B6 and SS1 were analyzed for a range of organic compounds and inorganic elements and the detected concentrations were compared to applicable regulatory criteria to evaluate appropriate disposal options. a. Total petroleum hydrocarbons in the diesel and motor oil range were detected in four of the seven soil samples submitted for laboratory analysis. No total petroleum hydrocarbons in the gasoline range were detected above its respective laboratory reporting limit. b. The dry-cleaning solvent, tetrachloroethene, was detected in three of the seven soil samples submitted for laboratory analysis. The compound was found at low concentrations ranging from 0.0010 to 0.0020 mg/kg, which are below its corresponding Tier 1 ESL. No other VOCs were detected above their corresponding laboratory reporting limits. c. A number of semi-volatile organic compounds were detected, primarily polynuclear aromatic hydrocarbons (PNAs). Benzo(a)pyrene and phenol were detected above their respective Tier 1 ESLs in borings B2, B6, and in soil stockpile sample SS1. No other detected concentrations of SVOCs were above their corresponding Tier 1 ESLs. d. The organochlorine pesticides chlordane (technical), dieldrin, DDT, and heptachlor epoxide were detected above their corresponding Tier 1 ESLs. No other detected concentrations of pesticides were above their corresponding Tier 1 ESLs. e. No polychlorinated biphenyls were detected in the seven soil samples analyzed.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		f. A number of inorganic elements were detected in the soil samples, with elevated concentrations of arsenic, barium, cobalt, lead, vanadium, and zinc. The soluble concentrations of lead in the 0.5-foot-depth sample from boring B4 and the soil stockpile sample (SS1) is greater than the applicable state threshold criteria for a hazardous concentration. Arsenic was detected at concentrations greater than the corresponding Tier 1 ESL but below the generally accepted background concentration in soil for the San Francisco Bay region, with the exception of the soil stockpile sample. All soil samples contained vanadium at concentrations greater than the Tier 1 ESL; however, the relatively uniform concentrations detected in the seven soil samples suggest this element is at naturally occurring concentrations in the soil. • Soil vapor probes SV1 through SV3 were installed and sampled to evaluate potential encroachment of dry-cleaning solvents from the former north-adjacent cleaners and presser operation and evaluate on-Site vapor intrusion health risk in a future mixed-use building. The gasoline constituent benzene was detected at a concentration greater than the corresponding Tier 1 ESL in the northern soil vapor probe SV1. Benzene and the chlorinated solvent tetrachloroethene were detected above the corresponding Tier 1 ESLs in the northeastern and east-central soil vapor probes SV2 and SV3. Other detected compounds were at concentrations below the applicable Tier 1 ESLs. **Conclusions** Based on the findings of this investigation, Essel concludes the following: • The minor presence of diesel and motor oil petroleum hydrocarbons and polynuclear aromatic hydrocarbons in

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		the shallow soil appears to be derived from automobile parking on the undeveloped vacant land. • The presence of phenol and pesticides may be related to the use of pesticides and/or herbicides to control overgrowth in the undeveloped areas of the Site. • Except in the vicinity of boring B5, soil from the ground surface to 5 feet below grade is likely not suitable for off-Site disposal at an unregulated disposal site. a. Soil in the 0- to 0.5-foot-depth interval across the Site is considered Class II material and may potentially meet the criteria for a California hazardous waste; however, WET extraction tests were not performed by Environmental Science (2019) during the initial soil investigation. b. Soil in the 0.5- to 5-foot-depth interval in the vicinities of borings B1, B2, B3, and B6 may be considered to be Class II material, based on the detections of benzo(a) pyrene, phenol, chlordane (technical), dieldrin, DDT, heptachlor epoxide, lead, and vanadium above their corresponding Tier 1 ESLs. c. The soil stockpile meets the criteria for a California hazardous material, based on soluble lead in the WET extract at a concentration greater than the STLC of 5.0 milligrams per liter. • The presence of tetrachloroethene in soil vapor at the location of northeastern and central soil vapor probes SV2 and SV3 suggests encroachment of dry-cleaning solvents from the former north-adjacent cleaners and presser operation. The presence of benzene in all three soil vapor probes (SV1 through SV3) also indicates a potential exists for vapor intrusion health risk to future occupants of a mixed-use building.

		Recommendations Essel offers the following recommendations, based on the information obtained during the investigation. • Forward the laboratory analytical results of the soil characterization to applicable disposal sites, as desired, to obtain decisions on waste material acceptance or whether additional characterization is necessary. • Consider the design and installation of a vapor barrier and passive venting system beneath the future building to mitigate the potential for vapor intrusion health risk. **Soil Management Plan** A Construction Soil Management Plan (SMP) has been prepared by Essel Environmental Engineering & Consulting (Essel) on behalf of Resources for Community Development (RCD) for earthwork activities associated with the redevelopment project of 3801-3829 Martin Luther King Junior Way in Oakland, California (Figure 1) with Alameda County Assessor Parcel Numbers (APNs) 12-964-4, 12-964-5, 12-964-6, and 12-964-7 (Site). The Site is currently developed with two vacant two-story buildings and one vacant single-story building with associated undeveloped land. The redevelopment project ("Project") consists of (1) demolition of the existing structures; (2) grading and soil excavation for utilities, elevator shafts, and foundations; and (3) construction of a six-story, mixed-use residential building and a street-level parking garage. The SMP is designed to provide RCD and the construction team with guidance for the proper handling and management of contaminated soil during redevelopment activities. The goals of the SMP are to provide detailed information regarding known environmental conditions at the Site and establish a decision-making structure to assist the construction team in the identification and management of contaminated media, when and if they are encountered. The objectives of this SMP are as follows: • Communicate information to Site construction workers about Site environmental conditions; • Present protocols for appropriate community protection;

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		• Present guidelines for health and safety precautions for on-Site workers who may access soil that could contain residual chemicals of concern; • Present notification and reporting requirements; • Present protocols for management of known contaminated soil generated during Site redevelopment activities; and • Present contingency procedures in the event that localized areas of unanticipated chemically-affected soil or other subsurface features of environmental concern are encountered during earthwork or excavation activities. Representatives for the property Owner will oversee implementation of the SMP at the Site. A copy of the SMP shall be maintained at the Site at all times. The Owner and General Contractor(s) will make all third-party subcontractors working at the Site aware of the requirements of the SMP, and provide an electronic copy and hard-copy to all subcontractors that are performing activities covered by this SMP and who may encounter suspect subsurface conditions during execution of their work. The project Environmental Consultant will be present to assist the Owner and contractors with the implementation of the SMP when ground-disturbing activities are being conducted in areas where contamination is known or suspected or when unknown conditions are encountered. **Oversight Agency – Department of Toxic Substances Control** The Department of Toxic Substances Control (DTSC) has reviewed the Site Summary and Corrective Action Memo (Memo) for the Longfellow Corner site (Site) located at 3801-3829 Martin Luther King Jr. Way, California, submitted by Roux Associates, Inc. (Roux) and dated August 13, 2020. The Site is comprised of two southern parcels, owned by Longfellow Corner, L.P. (Longfellow Corner South, 3801 and 3807 Martin Luther King Jr. Way), and two northern parcels owned by the City of Oakland (Longfellow Corner North, 3823 and 3829 Martin Luther King Jr. Way). The Memo summarizes

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		previous Site environmental investigations conducted in 2017 and 2019, and results from soil, soil gas, and groundwater sampling that Roux conducted in July 2020. The Memo also outlines the likely remediation activities that will be completed at the Site. Environmental investigations indicate that the following contaminants of potential concern (COPCs) are present above applicable DTSC Human and Ecological Risk Office Note 3 screening levels and/or United States Environmental Protection Agency Regional Screening levels at the Site: organochlorine pesticides (OCPs) in soil, semi-volatile organic compounds (SVOCs) and polycyclic aromatic hydrocarbons (PAHs) in soil, metals in soil, and volatile organic compounds (VOCs) in soil, soil gas and groundwater. Based on currently available data, the Memo outlines remediation activities that may be conducted to reduce risk to human health and the environment at the Site. Remediation activities will be evaluated in more detail in a Removal Action Workplan (RAW) to be prepared in accordance with Health and Safety Code sections 25323.1 and 25356.1. DTSC concurs that remediation at the Site will likely include some combination of the following activities and controls: • Soil: Excavate and dispose of soil in areas where COPC concentrations in soil exceed applicable screening levels, conduct confirmation sampling and backfill with clean fill. Soil consolidation and stabilization may also be conducted as a part of the soil remedy. • Groundwater: Remediation of groundwater at the site will likely not be required; however, groundwater use at the Site may be restricted to prohibit extraction of groundwater for the purpose of drinking water and to prohibit drilling any wells aside from monitoring wells. • Soil Gas/Indoor Air: Prior to construction of the proposed commercial/residential development, a vapor barrier, sub slab venting system (SSVS) and/or vapor mitigation system (VMS) will be required to prevent vapor intrusion into indoor air in future Site buildings. An operation and

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		maintenance (O&M) agreement and plan will be required to ensure that the vapor barrier, SSVS and/or VMS continue to be protective of future building occupants. • Lastly, a land use covenant (LUC) may be necessary to ensure that all environmental conditions at the Site remain protective of human health and the environment for future Site occupants. DTSC hereby approves the Memo, and DTSC concurs with the likely remediation activities described in the Memo. As stated above, the Site owners will be required to submit a more detailed evaluation of proposed remediation activities in a RAW, which will require DTSC review and approval. Review and approval of the RAW will include appropriate public participation activities that will be conducted in accordance with Health and Safety Code section 25358.7. **Conclusion** A Soil Management Plan has been prepared and is attached to this document. Adherence to the plan will ensure that there is no adverse effect to workers during construction. In addition, a Remedial Action Workplan (RAW) is required to be submitted to, and approved by DTSC, which may include installation of a vapor barrier system, soil excavation and an O&M Plan for the vapor system is required. Implementation of the RAW to prevent adverse effects to future residents of the project site is a requirement of approval of the NEPA review for this project. *Mitigations Required:* HZ1. The project application shall adhere to the Soil Management Plan prepared for the project by Essel Environmental Engineering and Consulting dated November 8, 2019 at all times during construction. HZ2. The developer shall prepare and submit for review and approval a Remedial Action Workplan (RAW) to Department of Toxic Substances Control (DTSC) consistent with the possible measures outlined in the DTSC approved Corrective

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		Action Memo, which may include installation of a vapor barrier and active or passive venting system beneath the future building to mitigate the potential for vapor intrusion health risk, soil remediation, groundwater use restrictions, Land Use Covenant and O&M Plan for maintenance of the vapor barrier as approved by DTSC. HZ3. The applicant shall retain a qualified lead based paint contractor. The contractor shall prepare lead safe work practice guidance to be distributed to all workers or be supervised by a certified abatement supervisor. Caution shall be taken during demolition activities to prevent lead levels in generated airborne dust from painted surfaces (roof window caulking and paint) from exceeding the Permissible Exposure Limit (PEL) as required by California/OSHA, Title 8, CCR Construction Safety Orders for Lead, Section 1532.1. The contractor shall submit a report that all lead was handled as hazardous waste and disposed of at a proper hazardous waste facility. In addition, standard lead abatement treatment should be performed on all surfaces presumed to contain lead hazards. A licensed lead inspector, risk assessor or lead paint sampling technician shall perform a clearance evaluation to ensure that all lead based paint has been removed. If the report indicates that further cleaning is required, the contractor shall reclean and reassess the areas until the clearance report indicates a clean site. The City has adopted Uniformly Applied Development Standards imposed as Standard Conditions of Approval that apply to potential on-site hazards. Application of these standards would ensure that new residences would not be exposed to hazards and the project would have a less than significant impact with respect to hazards. *Standard Condition of Approval Required:* **HZ4. Asbestos in Structures**

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915- 25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request. HZ5. **Hazardous Materials Related to Construction** The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following: a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction; b. Avoid overtopping construction equipment fuel gas tanks; c. During routine maintenance of construction equipment, properly contain and remove grease and oils; d. Properly dispose of discarded containers of fuels and other chemicals; e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and f. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate. **HZ6. Hazardous Building Materials and Site Contamination** a. Hazardous Building Materials Assessment The project applicant shall submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACMs), lead-based paint, polychlorinated biphenyls (PCBs), and any other building materials or stored materials classified as hazardous materials by State or federal law. If lead-based paint, ACMs, PCBs, or any other building materials or stored materials classified as hazardous materials are present, the project applicant shall submit specifications prepared and signed by a qualified environmental professional, for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		remedial action and required clearances by the applicable local, state, or federal regulatory agency. b. <u>Environmental Site Assessment Required</u> The project applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. c. <u>Health and Safety Plan Required</u> The project applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan. d. <u>Best Management Practices (BMPs) Required for Contaminated Sites</u> The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following: I. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		(sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements. II. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building. **HZ7. Regulatory Permits and Authorizations from Other Agencies** The project applicant shall obtain all necessary regulatory permits and authorizations from applicable resource/regulatory agencies including, but not limited to, the Regional Water Quality Control Board, Bay Area Air Quality Management District, Bay Conservation and Development Commission, California Department of Fish and Wildlife, U. S. Fish and Wildlife Service, and Army Corps of Engineers and shall comply with all requirements and conditions of the permits/authorizations. The project applicant shall submit evidence of the approved permits/authorizations to the City, along with evidence demonstrating compliance with any regulatory permit/authorization conditions of approval. Source Documentation: (19) (20) (21) (22) (23) (24) (Appendix E)
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☒ No ☐	The U.S. Fish and Wildlife was contacted for a list of Threatened and Endangered species that may occur within the boundary of the proposed project and/or may be affected by the proposed project. There are a number of Federal Endangered and Threatened species listed for the project site and vicinity:

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		Mammals: • Salt Marsh Harvest mouse *(Reithrodontomys vaviventris)* **Birds:** • California Clapper rail *(Rallus longirostris obsoletus)* • California Least tern *(Sterna antillarum browni)* • Western Snowy Plover (*Charadrius nivosus ssp. nivosus)* **Reptiles:** • Alameda whipsnake *(Masticophis lateralis euryxanthus)* • Green Sea Turtle *(Chelonia mydas)* **Amphibians:** • California red-legged frog *(Rana draytonii)* **Fishes:** • Delta Smelt *(Hypmesus transpacificus)* • Tidewater Goby *(Eucyclogobius newberryi)* **Insects:** • San Bruno Elfin butterfly *(Callophrys mossii bayensis)* **Flowering Plants:** • California Seablite *(Suaeda californica)* • Santa Cruz Tarplant *(Holocarpha macradenia)* There is no aquatic or riparian habitat on the site for fish or crustaceans. There are no wetlands on the site. There is no Critical Habitat on the site or vicinity. The project area is urban. The site contains some exposed soil, the remainder of the site contains a building and paved parking areas. There are eight trees on the site which will be removed and 6 trees within 10’ of construction which could be impacted. **Project Impacts** There are no impacts to special-status plants or animals anticipated as a result of the project as no suitable habitat exists on the site.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		The site is infill in a highly urbanized environment. There is no potential to effect any special-status plant or animal as a result of the project. There are trees on the site and street trees; therefore mitigation for the protection of nesting and protected migratory birds is required. *Mitigations Required:* ES1. **Tree Removal Permit (T19-00045):** A Tree Removal/Preservation permit application shall be approved by the Tree Services Division for removal or construction within ten feet of all protected trees on the site and adjacent properties. ES2. **Street Trees** The Applicant shall provide one tree per 20' of street frontage in front of the building located on Macarthur Blvd and ML King Jr Way with review and approval of species , size at time of planting, and placement in the right-of-way, subject to review and approval by the Planning and Building Department unless determined infeasible by the RWQB. The City has adopted Uniformly Applied Development Standards imposed as Standard Conditions of Approval for the protection of nesting and migratory birds. Application of these standards would ensure that impacts to birds during construction would have a less than significant impact. *Standard Condition of Approval Required:* ES3. **Tree Removal During Bird Breeding Season** To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February I to August 15 (or during December I 5 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest. ES4. Tree Permit *a) Tree Permit Required* Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit. *b) Tree Protection During Construction* Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist: I. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree. II. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree. III. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		IV. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration. V. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed. VI. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations. *c) Tree Replacement Plantings* Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria: I. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		remaining trees, or where insufficient planting area exists for a mature tree of the species being considered. II. Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye), Umbellularia califomica (California Bay Laurel), or other tree species acceptable to the Tree Division. III. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate. IV. Minimum planting areas must be available on site as follows: ▪ For Sequoia sempervirens, three hundred fifteen (315) square feet per tree; ▪ For other species listed, seven hundred (700) square feet per tree. V. In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee in accordance with the City's Master Fee Schedule may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians. VI. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to become established within one year of planting shall be replanted at the project applicant's expense. Source Documentation: (8) (16) (25) (26) (Appendix C)
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	The project is located in an area surrounded by residential and commercial land uses. There are three above ground storage tanks (ASTs) within a one-mile radius of the site. Each site and the calculated Acceptable Separation Distance (ASD) using HUD's ASD Tool are listed below. **Table 5 ASTs and Acceptable Separation Distances**

AST Location	Distance from Site	Calculated Acceptable Separation Distance	Hazard to the subject property buildings and people?
UCSF Benioff Children's Hospital, 747 52nd Street, Oakland, CA	3,558 feet north	583 feet for People 115 feet for buildings	No
Kaiser Permanente Oakland Medical Center, 3459 Piedmont Avenue, Oakland, CA	3,537 feet southeast	2,032 feet for People 460 feet for buildings	No
Alta Bates Summit Medical Center, 350 Hawthorne Avenue, Oakland, CA	2,851 feet southeast	1,522 feet for People 334 for buildings	No

<table>
<tr><th>Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6</th><th>Are formal compliance steps or mitigation required?</th><th>Compliance determinations</th></tr>
<tr><td></td><td></td><td><table><tr><td>Are all ASTs located at an acceptable separation distance from the site?</td><td>Yes</td></tr><tr><td>Will future residents be subjected to Explosive and/or flammable hazards?</td><td>No</td></tr></table>The project will not be located near any explosive or thermal source hazards.

Source Documentation: (8) (9) (27) (28) (29)</td></tr>
<tr><td>Farmlands Protection

Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</td><td>Yes ☐ No ☒</td><td>Prime farmland is land best suited for producing food, forage, fiber, and oilseed crops and also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land but not urban built-up land or water). This project is located in an urban area built on bay mud fill, no longer suitable for or identified as farmland.

The project will not affect farmlands. No federally designated Farmlands have been identified within the project area.

Source Documentation: (8) (30)</td></tr>
<tr><td>Floodplain Management

Executive Order 11988, particularly section 2(a); 24 CFR Part 55</td><td>Yes ☐ No ☒</td><td>The subject parcels are not located within a 100 year floodplain (Zones A or V) or 500 year floodplain (Zone B) identified on a Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM).

The project is not located in a Flood Zone. The area is a Flood Hazard Area Designation Zone X: Areas of minimal flooding. No Base Flood Elevations or depths are shown within this zone. Insurance purchase is not required in these zones. Flood hazard designation is depicted on FIRM Map Number 06001C0059G, with an effective date of August 3, 2009.

Flood insurance is not required. There are no impacts to floodplains as a result of the project.

Source Documentation: (14) (Appendix C)</td></tr>
</table>

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes No ☒ ☐	**Undertaking** Resources for Community Development (RCD) proposes to acquire and develop the Longfellow Corner affordable housing project on four contiguous parcels (APNs 012-0964-007, -006, -005 and -004) with address 3801-3829 Martin Luther King, Jr. Way in Oakland, Alameda County, California 94609. The total site area is 0.49 acres. Two parcels are currently owned by RCD; two are owned by the City of Oakland. Three existing buildings at the corner of Martin Luther King, Jr. Way and MacArthur Boulevard will be demolished to construct the project. After demolition, RCD will construct a new, six-story building with 77 affordable apartments and 1,291 square feet of ground floor commercial/retail space. The unit mix will be 33 one-bedroom units, 19 two-bedroom units and 25 three-bedroom units for a total of 77 units. A total of 4,609 square feet of open space will be provided on site. The ground floor will contain two retail spaces, parking, lobby, elevator, bicycle parking, mail boxes, trash room, management office, filing and storage room and maintenance and electrical rooms. A total of 39 parking spaces will be provided in the ground floor parking garage and include 50 long term bicycle parking spaces with 10% or minimum four short-term bicycle parking spaces. Podium space will provide a courtyard shielded from noise that includes a BBQ, children's play area, outdoor dining and seating area. The project is 100% affordable. **Area of Potential Effects** As a new construction project, the Area of Potential Effects for direct affects is limited to the subject site itself, to the depth required for construction of the project. The APE for indirect effects includes the subject property and twenty-three (23) parcels adjacent and surrounding the project site with built environment resources at least 50 years of age.

		Built Environment A Historic Resources Evaluation (HRE) for the proposed Longfellow Corner project was conducted by Evans & De Shazo, Inc. in September 2019. The HRE was completed by EDS Principal Architectural Historian, Stacey De Shazo, M.A., who exceeds the Secretary of Interior's professional qualification standards in Architectural History and History. The methods used to complete the HRE included a record search and review of documentation available at the Northwest Information Center (NWIC) and local repositories, as well as various online sources to assist in the development of the historic context, and a field survey of the APE to document and assess the built environment resources within the project area, including age, materials, use, style, and the potential eligibility for listing on the NRHP. The HRE determined that the none of the three (3) buildings located within the Direct APE are eligible for listing in the National Register of Historic Places (NRHP) under any criteria; therefore, they are not considered Historic Properties under Section 106 of the NHPA. Within the Indirect APE, it was it was determined that the ca. 1908 multi-unit apartment building at 3848 Martin Luther King Jr. Way is likely eligible for listing on the NRHP under Criterion C due to its Italian Renaissance Revival architecture. None of the remaining 26 buildings within the Indirect APE appear eligible for listing in the NRHP under any criteria. Therefore, potential indirect affects to the ca. 1908 multi-unit apartment building as a result of the proposed project were assessed, and it was determined that the project will have no adverse effect on the ca. 1908 building. As such, a finding of no adverse effects to built environment resources was recommended pursuant to 36 CFR § 800.5 and 36 CFR § 800.11. **Archaeology** A Historic Property Survey (HPS) for the proposed Longfellow Corner project was conducted by Evans & De Shazo, Inc. in September 2019. The HPS was completed by EDS Principal Archaeologist Sally Evans, M.A., RPA, and Senior Archaeologist Gilbert Browning M.A., RPA who both exceed the Secretary of Interior's qualification standards in archaeology and history. The methods used to complete the HPS included a record search at the Northwest Information Center (NWIC) of the California Historical Information System (CHRIS), a review of background information

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		pertaining to the prehistory, history, and ethno-history of the Oakland area and the project area, and a field survey. The HPS did not result in the identification of any historic properties or cultural resources having the potential to meet the criteria of a historic property under Section 106 of the NHPA. However, it was determined that the project site has a moderate to high potential to contain buried archaeological resources, and due to the potential for prehistoric and/or historic-period archaeological resources to be encountered during project-related earth-disturbing activities, a Cultural Resources Monitoring Plan (CRMP) was prepared. The CRMP includes the provision of archaeological monitoring for initial project-related earth-disturbing activities in order to identify any buried archaeological resources that may be present. Implementation of the CRMP during construction will ensure no adverse effects to buried cultural resources, if present. **Native American Contacts** The project involves 'significant ground disturbance (digging)' during excavation for building foundation construction and other improvements. Therefore there is a potential for accidental discovery of buried Native American cultural resources or remains. AEM Consulting sent a Sacred Lands inventory request to the Native American Heritage Commission (NAHC) on July 19, 2019 to determine if there are any Sacred Lands or other Tribal resources located within or near to the project site, and to obtain a list of Native American tribes who may have additional information about Sacred Lands within or near the project site. A search of the Sacred Lands file conducted by the NAHC on July 24, 2019 was negative, meaning that it did not indicate the presence of any Native American Sacred Lands within or in the immediate vicinity of the project site. The City of Oakland sent a letter to Federally recognized Tribe of Alameda County, California Valley Miwok on July 19, 2019 to request further information about Native American traditional cultural resources within or near the project site that could be

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		affected by the project, and to initiate consultation, as required by the Section 106 process. No response has been received to date. **Evaluation** The subject property buildings do not appear eligible for listing on the National Register of Historic Places. Buildings in the Area of Potential Effects of the undertaking will not be adversely affected by the undertaking. Due to the moderate to high potential for accidental discovery of buried cultural resources during construction, a Cultural Resources Management Plan will be in place during ground-disturbing activities that include an archaeological monitor, to prevent any adverse effects to buried cultural resources, if present. **Finding** For purposes of Section 106 Review of the undertaking, AEM Consulting recommended that the Agency Official for HUD (City of Oakland) concur with the Area of Potential Effects and determine that no historic properties will be adversely affected by the undertaking. Further, that a Cultural Resources Management Plan be followed at all times during construction. **Consultation** Upon reviewing the Historic and Cultural Resources Evaluation, the Agency Official (City of Oakland) concurred with the description of the undertaking and its Area of Potential Effects. Further, that the undertaking will not adversely effect historic properties as defined for Section 106, i.e., eligible for the National Register of Historic Places. Consultation with the Office of Historic Preservation with a letter and evaluation materials was initiated on October 11, 2019. On November 17, 2019, 30 days elapsed and the State Office of Historic Preservation did not object to the determination of no historic properties adversely affected by the undertaking. *Mitigations Required:*

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		CR1. The Cultural Resource Monitoring Plan prepared for the proposed Project by Evans & De Shazo, Inc. and dated September 18, 2019 shall be followed at all times. The City has adopted Uniformly Applied Development Standards imposed as Standard Conditions of Approval that apply to the potential discovery of archeological and paleontological resources as well as human remains on-site. Application of these standards would ensure that the Project would have a less than significant impact with respect to archeological and paleontological resources as well as human remains. *Standard Condition of Approval Required:* CR2. Archaeological and Paleontological Resources - Discovery During Construction Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense. In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant. **CR3. Human Remains – Discovery During Construction** Pursuant to CEQA Guidelines section 15064.5(e)(l), in the event that human skeletal remains are uncovered at the

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant. Source Documentation: (1) (16) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (Appendix F)
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☒ No ☐	As a residential housing project, community noise levels will not be significantly affected by the development. The only noise anticipated is from the normal automobile traffic generated from the project and construction noise. Both are addressed in turn. **Traffic Study** TJKM Transportation Consultants prepared a *Trip Generation Study* for the proposed project in July 2019. A summary follows. The proposed project would be located near to the MacArthur BART station. Based on the project site plan dated December 2018, the project would consist of the following: • 77 affordable family housing units • Approximately 2,052 square feet of first floor retail space

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		The project would also include 39 automobile parking spaces, including two accessible spaces in garage accessible via a driveway on MacArthur Boulevard. The project will also provide a total of 50 bicycle spaces. The analysis included trip generation for the proposed project.

Trip Generation

Trip generation is the process of estimating the number of vehicles that would likely access the project on any given day. The table below summarizes the trip generation for the proposed project.

Table 6 Trip Generation Rates

Land Use Code	Trips per Weekday	Peak AM Trips	Peak PM Trips
Multifamily Housing (Mid-Rise) (ITE Code 221)	419	28	34
Shopping Center (ITE Code 820)	77	2	8
Sub Total	496	30	42
Reduction of 47% - BART Station	-233	-14	-20
Total Net Trips	263	16	22

ITE rates are primarily based on data collected at single-use suburban sites where the automobile is often the only travel mode. However, the project site is located in a moderately dense area with streets generally laid out in a grid and sidewalks on most streets. It is located near some existing neighborhood-serving retail and industrial uses, and several projects are proposed in the area that would increase residential and employment densities and provide neighborhood-serving retail uses. Additionally, the project is located within two miles of Downtown Oakland, a dense employment

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		center. Thus, many trips generated by the project may be walking, bicycling, or transit trips. Since the project is near to the MacArthur BART station, this analysis reduces the ITE-based trip generation by about 47 percent to account for non-automobile trips. This reduction is consistent with the City of Oakland Transportation Impact review Guidelines (TIRG) and is based on US Census commute data for Alameda County from the 2014 5-Year estimates of the American Community Survey (ACS), which shows that the non-automobile mode share for areas less than 0.5 miles from a BART Station is about 47 percent. The estimated trip generation for the new 77-unit affordable family housing development is 16 a.m. peak hour trips and 22 p.m. peak hour trips. The City of Oakland requires a traffic study for projects that generate 50 or more peak hour trips during the week. The project did not rise to that level. A significant, audible impact to ambient noise in the vicinity would result if the project caused a doubling of traffic in the area. The project would generate an estimated 263 tips per day and therefore would not cause a doubling of traffic. There are no adverse impacts to noise anticipated as a result of the project. **Operational Noise** As a residential housing project, operations are not expected to generate noise levels that would be considered substantial in terms of existing or future noise levels in the area. Future noise levels in the project vicinity will continue to result from local transportation related noise sources. Occasionally audible noises from the proposed residential land uses will not measurably contribute to daily average noise. **Construction Noise** Noise generated during construction activities on the site could cause a substantial temporary increase in noise levels at

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		surrounding land uses. Hours of construction are restricted to between the hours of 7:00 AM and 7:00 PM Monday through Friday. **Conclusion** Community noise levels will not be significantly affected by the development. The only contribution of the project to long-term noise levels would be from the normal automobile traffic generated from the project which will contribute to less than 1 dBA increase. The proposed project would temporarily generate noise during demolition and construction activities. Construction noise will be subject to Section 17.120 of City of Oakland Planning Code and Section 8.18 of the Municipal Code. The City has adopted Uniformly Applied Development Standards imposed as Standard Conditions of Approval that apply to potential construction noise. Application of these standards would ensure that the project would have a less than significant impact with respect to construction noise impacts. *Standard Conditions of Approval Required:* N1. **Construction Days/Hours** a) Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier driving and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. b) Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday. c) No construction is allowed on Sunday or federal holidays.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City of Oakland, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice. N2. Construction Noise The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following: a) Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. b) Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		and avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. c) Application shall use temporary power poles instead of generators where feasible. d) Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction. e) The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented. N3. **Extreme Construction Noise** ***a. Construction Noise Management Plan Required*** Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		construction. Potential attenuation measures include, but are not limited to, the following: i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; ii. Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions; iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site; iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and v. Monitor the effectiveness of noise attenuation measures by taking noise measurements. *b. Public Notification Required* The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		N4. **Construction Noise Complaints** The project applicant shall submit to the City of Oakland for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include: a) Designation of an on-site construction complaint and enforcement manager for the project; b) A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit; c) Protocols for receiving, responding to, and tracking received complaints; and d) Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request. N5. **Project-Specific Construction Noise Reduction Measures** The project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site specific noise attenuation measures to further reduce construction noise impacts on nearby residential properties. The project applicant shall implement the approved Plan during construction. N6. **Operational Noise** Noise levels at the project site after completion of the project (i.e. during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
		reduction measures have been installed and compliance verified by the City. Source Documentation: (8) (16) (43) (Appendix G)
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	The project activities do not affect a sole source aquifer, as there are no aquifers subject to a MOU between EPA and HUD in Alameda County. Source Documentation: (44)
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	The site does not appear on the National Wetlands Inventory database. The site does not contain any on-site wetlands or jurisdictional waters. No further consultations are required. Source Documentation: (8) (26) (Appendix C)
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	No wild and scenic rivers are located within Alameda County. Source Documentation: (45) (46)
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	The project will not raise environmental justice issues and has no potential for new or continued disproportionately high and adverse human health and environmental effects on minority or low-income populations. The project is suitable for its proposed use. Source Documentation: (8) (47) (Appendix H)

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27]

Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. ***All conditions, attenuation or mitigation measures have been clearly identified.***

Impact Codes: Use an impact code from the following list to make the determination of impact for each factor.

(1) Minor beneficial impact
(2) No impact anticipated
(3) Minor Adverse Impact – May require mitigation
(4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
LAND DEVELOPMENT		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	3	**Comprehensive Plans** The subject site is in the Neighborhood Center Mixed Use classification of the Land Use and Transportation Element (LUTE) of the General Plan. This classification is intended to create, maintain, and enhance mixed use neighborhood commercial centers. These centers are typically characterized by smaller scale pedestrian- oriented, continuous street frontage with a mix of retail, housing, office, active open space, eating, and drinking places, personal and business services, and smaller scale educational, cultural, or entertainment uses. Neighborhood Center Mixed Use area permits one unit for every 375 square feet of lot area and would allow a maximum of 57 residential units for the subject 21,250 square foot parcel. The proposed project requested a 35% bonus density in exchange for 100% affordable housing units to increase maximum density to 77 residential units. The project will be 100% affordable housing and qualifies under the State law (Government Code Section 65915) for a density bonus due to occupancy by low-income households. These Planning Code and State law provisions are intended to encourage construction of affordable housing by offering incentives and/or concessions/waivers to a developer of a housing development that constructs a specified percentage of affordable units. Pursuant to Section 17.107.090, the Project qualifies for three (3) waivers. Specifically, the Project includes the following incentive/concession/waivers:

Environmental Assessment Factor	Impact Code	Impact Evaluation
		a) To increase the maximum permitted building height from 60 feet, to a roof height of 64' and 73' tall at the parapet wall. (OMC Section 17 .107.080.A.3, Gov't Code Section 65915(d)(l)(C)(2).) This increased height is necessary to accommodate the full range of affordable housing and mixed-use program proposed. The concession includes modifications to requirements of the Oakland Planning Code that would otherwise be required. Based on substantial evidence in the record, the height concession would result in identifiable, actual cost reductions to provide for affordable housing (Gov' t Code Section 65915(d)(l)(A)). Specifically, the building height, if not increased, would otherwise physically preclude construction of the 77 units as the units could not physically fit into a building with a 60' height limit. (Gov't Code Section 65915(e)(l)). The maximum allowed building height will be exceeded by approximately 4' at building roof height and 13' at the parapet wall. The concession and development standard reduction are consistent with and enabled under the City's Planning Code and the State Law to encourage and facilitate the construction of affordable housing. b) To waive require group open space on ground floor and provide most of open space requirement on the roof/podium. Approximately 4,600 square feet of group open space is proposed on the roof deck, where 11,550 sq. ft. of group open space is required by Planning Code Section 17.126.030.B.Roof top open space is limited to 25% of the total required. As designed 75% of open space is provided on the roof/podium. A waiver is needed to have more than 25% of the required open space located on the roof deck. The project would physically prelude the development at the bonus density given the need to include ground floor parking area and commercial retail space. These development standard reductions are consistent with and enabled under the City's Planning Code and the State Law to encourage and facilitate the construction of affordable housing. c) To waive the required rear setback transition height when located adjacent to the RM-2 Zone. The project will include a portion of the building adjacent to the RM-2 Zone which is limited to 30' in building height by Planning Code Section 17.33.04.2. and where 64' tall at the roof line and 73' to the parapet wall is proposed. (OMC Section

***Impact Codes:* (1)** *Minor beneficial impact;* **(2)** *No impact anticipated;* **(3)** *Minor Adverse Impact – May require mitigation;*
(4) *Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement*

Environmental Assessment Factor	Impact Code	Impact Evaluation
		17.107.080.A.3, Gov't Code Section 65915(d)(l)(C)(2).) This increased height is necessary to accommodate the full range of affordable housing and mixed-use program proposed. The project would physically prelude the development at the bonus density if the required rear yard setback from property line is met. These development standard reductions are consistent with and enabled under the City's Planning Code and the State Law to encourage and facilitate the construction of affordable housing. The proposed project was found consistent with the intent of the City of Oakland's General Plan as well as the following objectives and policies: **Policy N1.1** Concentrating Commercial Development. Commercial development in the neighborhoods should be concentrated in areas that are economically viable and provide opportunities for smaller scale, neighborhood-oriented retail. **Policy N1.8** Making Compatible Development. The height and bulk of commercial development in "Neighborhood Mixed-Use Center " areas should be compatible with that which is allowed for residential development. **Policy N3.1** Facilitating Housing Construction - Facilitating the construction of housing units should be considered a high priority for the City of Oakland . **Policy N3.2** Encourage In-fill Development - In order to facilitate the construction of needed housing units, in-fill development that is consistent with the General Plan should take place throughout the City of Oakland . **Objective N3** To encourage the construction, conservation, and enhancement of housing resources in order to meet the current and future needs of the Oakland community . The proposal provides 77 affordable residential units and one commercial units for the Oakland community. **Objective N6** Encourage a mix of housing costs, unit sizes, types and ownership structures . The proposal provides a mix of one, two bed rooms residential units and affordable units. The proposal has achieved the entitlements necessary to execute the project. **Zoning** The zoning of the site is in the Neighborhood Center Mixed Use -3 Zone (CN-3). The CN-3 zoning regulations state that every lot shall have a minimum lot area

***Impact Codes:* (1)** *Minor beneficial impact;* **(2)** *No impact anticipated;* **(3)** *Minor Adverse Impact – May require mitigation;*
(4) *Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement*

Environmental Assessment Factor	Impact Code	Impact Evaluation
		of four thousand (4,000) square feet and a minimum lot width and frontage of 25 feet. The subject property is 21,250 square feet. The lot is flat. The proposed lot width would be 170' which exceed minimum lot width requirement in CN-3 Zone. The purpose of the lot merger is to combine four parcels into one parcel to construct a mixed-use affordable housing project and meet building code requirements. Therefore, the Parcel Map Waiver to merge four parcels into one parcel meets with the intent of the zoning requirements for lot size and lot width in respect to impact on the adjacent neighbors and health and safety. **Urban Design** the area has no consistent setting, height, bulk, materials, or architectural style. The area contains commercial, residential and civic uses. As such, the proposed mixed-use building, with affordable units, which will replace the existing dilapidated buildings and will enhance the neighborhood's desirable characteristics. The proposal's ground floor commercial space should attract patrons to the business as well as retail and general food sales businesses on M. L. King Jr. Way and W. Macarthur Boulevard. The proposed exterior will blend in well with the surrounding buildings and relate to the recent approved new mixed-use project by providing a strong visual element on M. L. King Jr. Way and W. Macarthur Blvd between Apgar Street and 37th Street as seen from the street. The project design – plans and drawings – have been approved. The design has been deemed appropriate and compliant with City standards. The project has been granted a Tentative Parcel Map Subdivision to merge four parcels into one parcel. The project is consistent with plans, land use, zoning and urban design. The project is transit-oriented by design, providing a benefit to the community. The City has required details related to graffiti and final design review as part of the approval that apply. Application of these standards and implementation of these measures and plans would ensure that impacts to land use are *less than significant.* *Mitigations Required:* **LU1. Ground Floor Building Materials Graffiti-Resistant**

Impact Codes:* *(1) *Minor beneficial impact;* ***(2)*** *No impact anticipated;* ***(3)*** *Minor Adverse Impact – May require mitigation;*
(4) *Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement*

Environmental Assessment Factor	Impact Code	Impact Evaluation
		The project applicant shall ensure that materials used on the ground floor are graffiti-resistant and exterior façade will stand the test of time by ensuring that dust and roadway grim are easily cleanable. LU2. **Final Design Review** *a. Prior to issuance of building permit.* As the design of the building is further detailed, the design elements listed below shall be revised and shall be submitted for review and approval by the Planning Director or designee prior to issuance of the building permit. Only high-quality materials will be approved. The Planning Director or designee may exercise his/her standard authority to refer the design revisions to the DRC or to the Planning Commission. (a) Final review of all exterior materials and colors. (b) More information regarding window details and installation specifications (framing material, glass, and mullions) and also of the window system and assembly, to confirm adequate thickness of components, overall quality, and recess from the outside wall. Window mullions shall be a minimum of 2" thick and the window surfaces shall be recessed a minimum of 1 ¾ to 2" from the building façade. (c) The proposed white color vinyl windows shall be revised to dark color. (d) The Project applicant shall ensure that the lighting fixtures within the garage are shielded to a point below the light bulb and reflector consistent with the lighting condition. Source Documentation: (8) (16) (Appendix G)
Soil Suitability/ Slope/ Erosion/	3	**Soil Suitability** A Geotechnical Investigation was prepared for the project by Rockridge Geotechnical in December 2019. A summary follows.

***Impact Codes:* (1)** *Minor beneficial impact;* **(2)** *No impact anticipated;* **(3)** *Minor Adverse Impact – May require mitigation;*
(4) *Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement*

Environmental Assessment Factor	Impact Code	Impact Evaluation
Drainage/ Storm Water Runoff		**Geotechnical Investigation** A regional geologic map prepared by Graymer (2000) indicates the site vicinity is underlain by Holocene-age alluvial fan and fluvial deposits (Qhaf). Alluvial fan and fluvial deposits are generated when sediments are transported and deposited by rivers and streams. These types of deposits can be relatively uniform, but are often composed of different layers of different particle mixtures of gravelly, sandy and clayey soils. The results of borings and cone penetration tests (CPTs) indicate the site is underlain by up to about two feet of fill in localized areas. The fill consists of medium dense sand and silty sand. The fill, or ground surface where fill is not present, is underlain by alluvium. Where explored, the alluvium consists of interbedded layers of stiff to hard clay with varying sand and gravel content and medium dense to very dense sand and gravel with varying clay and silt content that extends to the maximum depth explored of 50 feet bgs. Atterberg limits tests performed on samples of the near-surface clay and sandy clay indicate the dark brown clay with sand encountered at a depth of 2 feet bgs in Boring B-1 is highly expansive1 with a plasticity index (PI) of 35 and the yellow-brown sandy clay at a depth of 3.5 feet bgs in Boring B-2 has low to moderate expansion potential with a PI of 15. Groundwater was measured in the borings at depths of approximately 13 to 16 feet bgs during drilling. The groundwater levels may not have been fully stabilized at the time of these measurements. Rockridge reviewed the report Seismic Hazard Zone Report (2003) prepared by the California Geological Survey (CGS) for the Oakland West 7.5-Minute Quadrangle. The report indicates a historic high groundwater level in the site vicinity of about 8 feet bgs. The depth to groundwater is expected to vary several feet seasonally, depending on rainfall amounts. **Conclusion** From a geotechnical standpoint, the site can be developed as planned, provided the recommendations presented in the geotechnical report are incorporated into the project plans and specifications and implemented during construction. The primary geotechnical issues affecting the proposed development include: 1) the presence of moderately to highly expansive near-surface soil, and 2) providing adequate foundation support. The proposed building may be supported on individual spread footings at interior column locations and

Impact Codes: ***(1)*** *Minor beneficial impact;* ***(2)*** *No impact anticipated;* ***(3)*** *Minor Adverse Impact – May require mitigation;*
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Environmental Assessment Factor	Impact Code	Impact Evaluation
		continuous, deepened perimeter footings. The perimeter footing should be deepened to act as a barrier to reduce the potential for moisture change in the soil beneath the footing and slab-on-grade floors. Building slab-on-grade be underlain by 18 inches of non-expansive soil (i.e. import select fill or lime-treated onsite soil). **Slope** The site is flat. There are no significant slopes on the site. **Erosion** The site as it exists now is not subject to erosion. However, if not properly managed, erosion could occur during construction of the project. Plans demonstrating the Best Management Practices for erosion control, sedimentation and water quality impacts to the maximum extent practicable must be submitted for review and approval by the City o f Oakland's Planning and Zoning Division and Building Services Division. At a minimum, appropriate filter materials shall be provided at nearby catch basins to prevent debris and dirt from flowing into the City's storm drain system and creeks. **Drainage/Storm Water Runoff** Redevelopment of the site could affect drainage patterns and increase the overall amount of impervious surfaces, thus creating changes to stormwater flows and water quality. Increasing the total area of impervious surfaces can result in a greater potential to introduce pollutants to receiving waters. Urban runoff can carry a variety of pollutants, such as oil and grease, metals, sediments, and pesticide residues from roadways, parking lots, rooftops, landscaped areas and deposit them into an adjacent waterway via the storm drain system. New construction could also result in the degradation of water quality with the clearing and grading of sites, releasing sediment, oil and greases, and other chemicals to nearby water bodies. The project will result in a net increase in impervious surface. The City of Oakland imposes Best Management Practices to minimize the generation, discharge and runoff of stormwater pollution during construction of projects in the City.

Environmental Assessment Factor	Impact Code	Impact Evaluation
		Post-construction stormwater management on the site will be required to comply with the requirements of Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) permit issued to the Alameda Countywide Clean Water Program. A stormwater management plan will be developed to manage stormwater run-off and limit discharge of pollutants in stormwater after construction of the project. The plan will include hydromodification measures, if required, and stormwater treatment measures to remove pollutants and hydraulic sizing for treatment measures proposed. The project will be required to fund any repairs or infrastructure improvements to the surrounding stormwater system. The City has adopted Uniformly Applied Development Standards imposed as Standard Conditions of Approval that apply to stormwater control, run-off, the storm-drain system and water quality. Application of these standards and implementation of these measures and plans would ensure that impacts to stormwater and water quality are *less than significant.* SW1. **Erosion and Sedimentation Control Measures for Construction** The project applicant shall implement Best Management Practices (BMPs) to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable. At a minimum, the project applicant shall provide filter materials deemed acceptable to the City at nearby catch basins to prevent any debris and dirt from flowing into the City's storm drain system and creeks. SW2. **NPDES C.3 Stormwater Requirements for Regulated Projects** ***a) Post-Construction Stormwater Management Plan Required*** The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following:

***Impact Codes: (1)** Minor beneficial impact; **(2)** No impact anticipated; **(3)** Minor Adverse Impact – May require mitigation;*
***(4)** Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement*

Environmental Assessment Factor	Impact Code	Impact Evaluation
		i. Location and size of new and replaced impervious surface; ii. Directional surface flow of stormwater runoff; iii. Location of proposed on-site storm drain lines; iv. Site design measures to reduce the amount of impervious surface area; v. Source control measures to limit stormwater pollution; vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff. *b) Maintenance Agreement Required* The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following: i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.

Impact Codes:* *(1) *Minor beneficial impact;* ***(2)*** *No impact anticipated;* ***(3)*** *Minor Adverse Impact – May require mitigation;*
(4) *Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement*

Environmental Assessment Factor	Impact Code	Impact Evaluation
		SW3. **Storm Drain System** The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition. Source Documentation: (8) (16) (48) (49) (50) (51) (Appendix H)
Hazards and Nuisances including Site Safety and Noise	3	**Site Safety** The project will not create a risk of explosion, release of hazardous substances or other dangers to public health. The project is not located near any hazardous operations. The project will provide a safe place for residents. **Regional Seismicity** A Geotechnical Investigation was prepared for the project by Rockridge Geotechnical in December 2019. A summary follows. The site is located in the Coast Ranges geomorphic province that is characterized by northwest-southeast trending valleys and ridges. These are controlled by folds and faults that resulted from the collision of the Farallon and North American plates and subsequent shearing along the San Andreas Fault system. Movements along this plate boundary in the Northern California region occur along right-lateral strike-slip faults of the San Andreas Fault system. The major active faults in the area are the Hayward, San Andreas, Mount Diablo and Calaveras faults. These and other known Quaternary-ages faults that are believed to be sources of major earthquakes (i.e. Magnitude>6.0) in the region are shown on the Regional Fault Map below.

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Figure 9 Regional Fault Map

For these and other active faults within a 50-kilometer radius of the site, the distance from the site and estimated mean characteristic Moment magnitude2 [2007 Working Group on California Earthquake Probabilities (WGCEP) (USGS 2008) and Cao et al. (2003)] are summarized in the table below.

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Table 7 Regional Faults and Seismicity

Fault Segment	Approximate Distance from Site (km)	Direction from Site	Mean Characteristic Moment Magnitude
Total Hayward	4.1	East	7.00
Total Hayward-Rodgers Creek	4.1	East	7.33
Mount Diablo Thrust	21	East	6.70
Total Calaveras	23	East	7.03
N. San Andreas - Peninsula	25	West	7.23
N. San Andreas (1906 event)	25	West	8.05
Green Valley Connected	26	East	6.80
N. San Andreas - North Coast	27	West	7.51
San Gregorio Connected	31	West	7.50
Rodgers Creek	32	Northwest	7.07
West Napa	38	North	6.70
Greenville Connected	39	East	7.00
Great Valley 5, Pittsburg Kirby Hills	43	East	6.70

The U.S. Geological Survey's 2014 Working Group on California Earthquake Probabilities has compiled the earthquake fault research for the San Francisco Bay area in order to estimate the probability of fault segment rupture. They have determined that the overall probability of moment magnitude 6.7 or greater earthquake occurring in the San Francisco Bay Region during the next 30 years (starting from 2014) is 72 percent. The highest probabilities are assigned to the Hayward Fault, Calaveras Fault, and the northern segment of the San Andreas Fault. These probabilities are 14.3, 7.4, and 6.4 percent, respectively.

Seismic Hazards

Because the site is in a seismically active region, we evaluated the potential for earthquake-induced geologic hazards including ground shaking, ground surface rupture, liquefaction, lateral spreading and cyclic densification. Rockridge used the results of field investigation to evaluate the potential of these phenomena occurring at the project site.

		Ground Shaking The ground shaking intensity felt at the project site will depend on: 1) the size of the earthquake (magnitude), 2) the distance from the site to the fault source, 3) the directivity (focusing of earthquake energy along the fault in the direction of the rupture), and 4) subsurface conditions. The site is less than five kilometers from the Hayward Fault. Therefore, the potential exists for a large earthquake to induce strong to very strong ground shaking at the site during the life of the project. **Fault Rupture** Historically, ground surface displacements closely follow the trace of geologically young faults. The site is not within an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults exist on the site. the risk of fault offset at the site from a known active fault is very low. In a seismically active area, the remote possibility exists for future faulting in areas where no faults previously existed; however, the risk of surface faulting and consequent secondary ground failure from previously unknown faults is also very low. **Liquefaction and Associated Hazards** Liquefaction is a phenomenon in which saturated soil temporarily loses strength from the buildup of excess pore water pressure, especially during earthquake-induced cyclic loading. Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Flow failure, lateral spreading, differential settlement, loss of bearing strength, ground fissures and sand boils are evidence of excess pore pressure generation and liquefaction. The site has been mapped inside a zone of liquefaction potential on the map titled State of California, Seismic Hazard Zones, Oakland West Quadrangle, Official Map, prepared by the California Geological Survey (CGS), dated February 14, 2003.

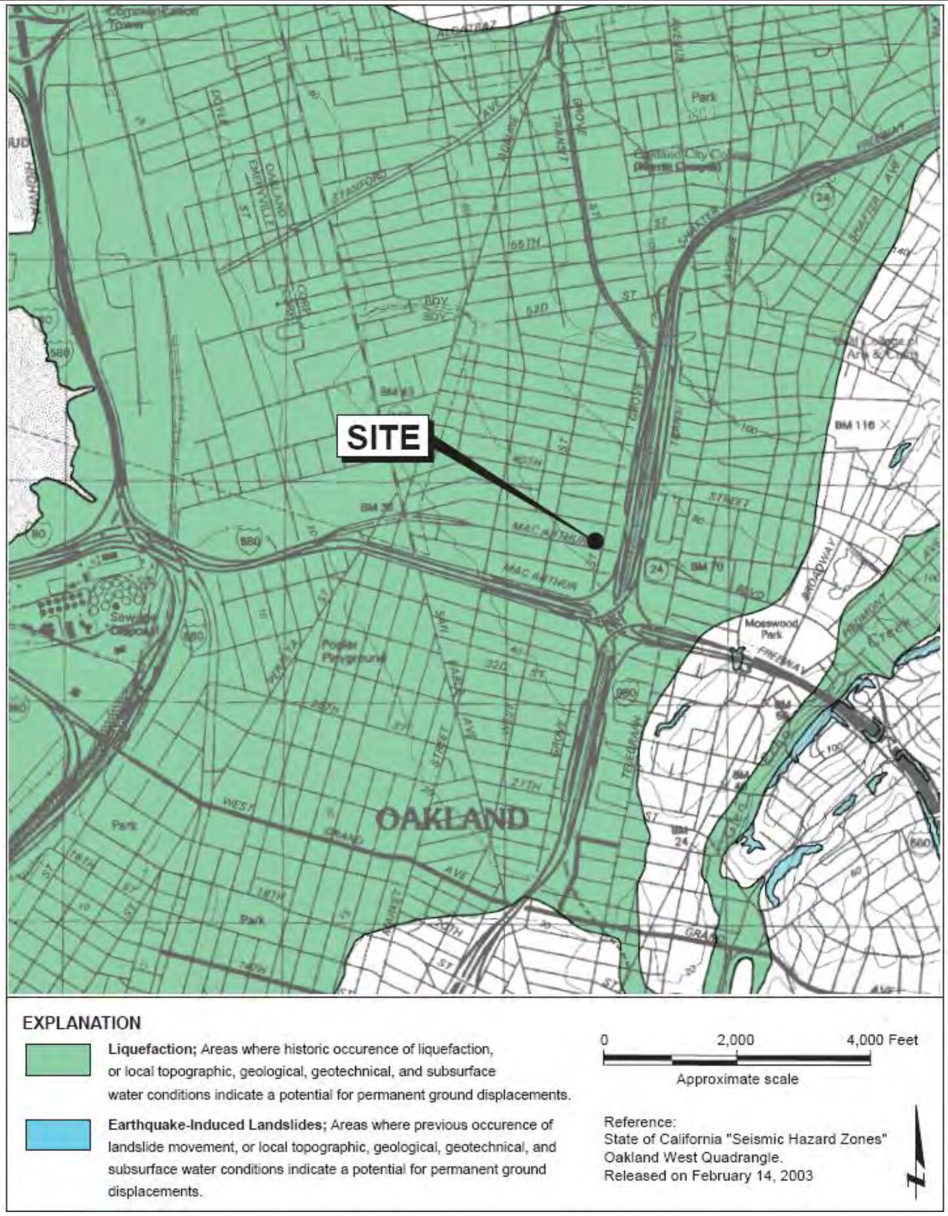

Figure 10 Seismic Hazards Zone Map

The California Geological Survey (CGS) has provided recommendations for procedures and report content for site investigations performed within seismic hazard zones in Special Publication 117 (SP-117), titled Guidelines for Evaluating and Mitigating Seismic Hazard Zones in California, dated September 11, 2008. SP-117 recommends subsurface investigations in mapped liquefaction hazard zones be performed using rotary-wash borings and/or CPTs to a depth of at least 50 feet bgs.

Environmental Assessment Factor	Impact Code	Impact Evaluation
		Rockridge evaluated the liquefaction potential at the site using data collected from their CPTs, with consideration of laboratory testing performed on soil samples from the borings. Liquefaction susceptibility was assessed using the software CLiq v3.0 (GeoLogismiki, 2019). CLiq uses measured field CPT data and assesses liquefaction potential, including post-earthquake vertical settlement, given a user-defined earthquake magnitude and peak ground acceleration (PGA). Analyses were performed using the approximate in-situ groundwater depths measured in the CPTs and a “during earthquake” groundwater depth of 8 feet bgs. In accordance with the 2019 CBC, a peak ground acceleration of 0.87 times gravity (g) was used in the liquefaction evaluation; this peak ground acceleration is consistent with the Maximum Considered Earthquake Geometric Mean (MCEG) peak ground acceleration adjusted for site effects (PGAM). A moment magnitude 7.33 earthquake was used, which is consistent with the mean characteristic moment magnitude for the Hayward Fault, as presented in the table above. Liquefaction analyses indicate there are several thin layers of medium dense sand between depths of about 8 and 32 feet bgs that are potentially liquefiable. The potentially liquefiable layers are generally less than 2 feet thick. Total free-field ground settlement associated with liquefaction (referred to as post-liquefaction reconsolidation) was estimated at the site after the above-defined MCE event will be less than 3/4 inch and differential settlement will be less than 1/4 inch over a horizontal distance of 30 feet. Ishihara (1985) presented an empirical relationship that provides criteria that can be used to evaluate whether liquefaction-induced ground failure, such as sand boils, would be expected to occur under a given level of shaking for a liquefiable later of given thickness overlain by a resistant, or protective, surficial layer. Our analysis indicated the non-liquefiable soil overlying the potentially liquefiable soil layers is sufficiently thick and the potentially liquefiable layers are sufficiently thin such that the potential for surface manifestations of liquefaction, such as sand boils, are very low. Considering the site topography is relatively flat and the potentially liquefiable layers are not continuous, we conclude the risk of lateral spreading is very low.

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		Cyclic Densification Cyclic densification (also referred to as differential compaction) of non-saturated sand (sand above groundwater table) can occur during an earthquake, resulting in settlement of the ground surface and overlying improvements. The soil encountered above the groundwater table is not susceptible to cyclic densification due to its cohesion. Therefore, the potential for cyclic densification to occur at the site is very low. **Conclusion** From a geotechnical standpoint, the site can be developed as planned, provided the recommendations presented in the geotechnical report are incorporated into the project plans and specifications and implemented during construction. The primary geotechnical issues affecting the proposed development include: 1) the presence of moderately to highly expansive near-surface soil, and 2) providing adequate foundation support. The proposed building may be supported on individual spread footings at interior column locations and continuous, deepened perimeter footings. The perimeter footing should be deepened to act as a barrier to reduce the potential for moisture change in the soil beneath the footing and slab-on-grade floors. Building slab-on-grade be underlain by 18 inches of non-expansive soil (i.e. import select fill or lime-treated onsite soil). The City has adopted Uniformly Applied Development Standards imposed as Standard Conditions of Approval that apply to geology and soils. Application of these standards and implementation of these measures, reports and recommendations, would ensure that impacts to geology and soils are less than significant. **G1. Construction-Related Permit(s)** The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction. **G2. Seismic Hazards Zone (Landslide/Liquefaction)** The project applicant shall submit a site-specific geotechnical report, consistent with California Geological Survey Special Publication 117 (as amended), prepared by a registered geotechnical engineer for City review and approval containing at a minimum a description of

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Environmental Assessment Factor	Impact Code	Impact Evaluation
		the geological and geotechnical conditions at the site, an evaluation of site-specific seismic hazards based on geological and geotechnical conditions, and recommended measures to reduce potential impacts related to liquefaction and/or slope stability hazards. The project applicant shall implement the recommendations contained in the approved report during project design and construction. NEPA Noise Assessment The proposed project involves exposure of sensitive receptors (residents) to noise and new construction of residential housing. A *NEPA Noise Assessment* was conducted for the project by Illingworth & Rodkin, Inc. in August 2019 to quantify the existing and future noise environment at the site. Thresholds of Significance The applicable noise standards governing the project site include HUD standards for new housing construction and standards found in the City of Oakland's Noise Element of the General Plan. City of Oakland General Plan The Noise Element of the City's General Plan was established to protect the quality of life and physical and mental well-being of the City's residents by mitigating noise incompatibilities among land uses. According to the City's land use compatibility matrix for residential uses, noise levels up to 70 dBA Ldn (or CNEL) would be conditionally acceptable. This standard would be applicable to residential buildings. Noise levels below 65 dBA are normally acceptable. Conditionally acceptable noise levels require detailed noise analysis and additional noise reduction requirements for new development. Department for Housing and Urban Development The U.S. Department of Housing and Urban Development (HUD) environmental noise regulations are set forth in 24CFR Part 51B (Code of Federal Regulations). The following exterior noise standards for new housing construction would be applicable to this project: • Of 65 dBA Ldn or less are considered acceptable to new housing development. • Exceeding 65 Ldn but not exceeding 75 dBA Ldn is considered normally unacceptable. Appropriate sound attenuation measures must be

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		provided. A 5 dBA attenuation above the attenuation provided by standard construction is required in zones exposed to ambient noise levels ranging from 65 dBA to 70 dBA Ldn; a 10 dBA reduction in additional attenuation is required in zones exposed to ambient noise levels ranging from 70 dBA to 75 dBA Ldn. • Exceeding 75 dBA Ldn are considered unacceptable. These noise standards also apply, "… at a location 2 meters from the building housing noise sensitive activities in the direction of the predominant noise source…" and "…at other locations where it is determined that quiet outdoor space is required in an area ancillary to the principal use on the site." A goal of 45 dBA DNL is set forth for interior noise levels and attenuation requirements are geared toward achieving that goal. It is assumed that with standard construction any building will provide sufficient attenuation to achieve an interior level of 45 dBA DNL or less if the exterior level is 65 dBA DNL or less. Where exterior noise levels range from 65 dBA DNL to 70 dBA DNL, the project must provide a minimum of 25 decibels of attenuation, and a minimum of 30 decibels of attenuation is required in the 70 dBA DNL to 75 dBA DNL zone. Where exterior noise levels range from 75 dBA DNL to 80 dBA DNL, the project must provide a minimum of 35 decibels of attenuation to achieve an interior level of 45 dBA DNL or less. **Existing Noise Environment** The project site is located north of the Interstate 580 / State Route 24 interchange in Oakland, California. The site's southernmost boundary is formed by W. MacArthur Boulevard, and Martin Luther King Jr. Way forms the site's easternmost boundary. A noise monitoring survey was made to quantify existing ambient noise levels at the project site between Wednesday, July 10, 2019 and Friday, July 12, 2019. The noise monitoring survey included two long-term noise measurements (LT-1 and LT-2) and two short-term measurements (ST-1 and ST-2), as shown in the figure below.

Figure 11 Noise Measurement Locations

The results of the noise measurements indicated that vehicle traffic along W. MacArthur Boulevard and Martin Luther King Jr. Way are the predominant sources of environmental noise at the site, and that traffic along Interstate 580 and State Route 24 contribute to the background noise environment at the site. Trains passing by on BART tracks to the east of the project site would be audible occasionally, but do not significantly contribute to the noise environment above ambient noise levels.

Table 8 Summary of Short-Term Noise Measurement Data

Noise Measurement Location	L_{max}	L_{eq}	DNL
ST-1a: 5-feet above the ground	72	58	63
ST-1b: 24-feet above the ground	77	62	67
ST-2a: 5-feet above the ground	70	62	68
ST-2b: 24-feet above the ground	73	66	72

Long-term noise measurement LT-1 was located just southwest of the site in front of a residence at 663 W. MacArthur Boulevard, and placed approximately 45 feet south of the centerline of W. MacArthur Boulevard. A review of the noise data collected at LT-1 showed that hourly average noise levels typically ranged from 62 to 70 dBA Leq during the day and from 57 to 67 dBA Leq at

Environmental Assessment Factor	Impact Code	Impact Evaluation
		night. The calculated day-night average noise level at this location was 72 dBA DNL on Thursday, July 10, 2019. Long-term noise measurement LT-2 was located approximately 35 feet east of the Martin Luther King Jr. Way centerline, just northeast of the project site in front of a residence at 3848 Martin Luther King Jr. Way. Hourly average noise levels at LT-2 were similar to the hourly average noise levels documented at LT-1, and typically ranged from 65 to 70 dBA Leq during the day and from 58 to 68 dBA Leq at night. The calculated day-night average noise level at this location was 71 dBA DNL on Thursday, July 10, 2019. **Significance Criteria** An adverse effect would result if noise levels at the project site would exceed HUD Guidelines for acceptability. Exterior noise levels exceeding 65 dBA DNL or interior noise levels exceeding 45 dBA DNL would exceed HUD's noise compatibility criteria. **Future Exterior Noise Environment** The future noise environment at the project site would continue to result primarily from vehicular traffic along Martin Luther King Jr. Way, W. MacArthur Boulevard, and distant traffic along State Route 24 and Interstate 580. Trains passing by on BART tracks to the east of the project site would be audible occasionally, but do not significantly contribute to the noise environment above ambient noise levels. Pursuant to the HUD Guidelines, the noise exposure at least 10 years in the future must be considered in addition to the existing noise exposure. The future exterior noise environment at the project site was calculated by adjusting the measured noise data to account for future traffic conditions anticipated by 2030. The future traffic noise level increase was estimated based a review of data contained in the City of Oakland's Noise Element Update1. From these data, traffic noise levels on the surrounding roadways are anticipated to measurably increase by 1 dBA by the year 2025. For projections beyond 2025, the same traffic rates were applied, and traffic noise levels from the surrounding roadways are anticipated to increase by up to 1 dBA by 2035. Based on a review of the project's trip generation study, the project is not anticipated to increase noise levels on the surrounding roadways. Therefore, future exterior noise levels at the proposed setback of the eastern façade from Martin Luther King Junior Way, are calculated to range from 71 dBA DNL at

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		ground level (assuming a receptor height of 5 feet) to 75 dBA DNL at a height of 25 feet and above. Future exterior noise levels at the proposed setback of the southern façade from W. MacArthur Boulevard are calculated to range from 72 dBA DNL at ground level to 76 dBA DNL at a height of 25 feet and above. Proposed outdoor activity areas would include a courtyard along the western portion of the building, on the second floor (podium level). The courtyard is surrounded by the proposed buildings to the north, east, and south, and includes a play structure, dining and seating areas, and built-in barbecue appliances. Receptors utilizing the podium courtyard would be shielded from traffic noise by the building itself, and future noise levels are calculated to be less than 65 dBA DNL when accounting for the acoustical attenuation provided by the intervening structure. Performance of the building to shield noise was calculated to result in predicted future noise level of 51 to 64 DNL. Exterior noise levels at these proposed common use areas (51-64 dBA DNL) would meet HUD's "acceptable" threshold for at outdoor spaces (64 dBA DNL which or less). No additional noise controls would be required to achieve HUD's "acceptable" threshold. **Future Interior Noise Environment** The HUD requirement for interior noise levels is 45 dBA DNL or less for residential land uses. Unit plans and elevations dated from July 16, 2019, were reviewed and calculations were made to quantify the transmission loss provided by the proposed building elements and to estimate interior noise levels resulting from exterior noise sources. The relative areas of the building elements (walls, windows, and doors) were then input into an acoustical model to calculate interior noise levels within individual rooms. Proposed residential units adjacent to W. MacArthur Boulevard would be exposed to future exterior noise levels of up to 76 dBA DNL and residential units adjacent to Martin Luther King Jr. Way would be exposed to future exterior noise levels of up to 75 dBA DNL. The predicted exterior noise level would exceed HUD's "acceptable" threshold of 65 dBA DNL by up to 11 dBA DNL. The results of the calculations showed that windows of residential units adjacent to W. MacArthur Boulevard and Martin Luther King Jr. Way should have minimum Sound Transmission Class ratings of STC 36. This would achieve an outdoor-to-indoor composite noise reduction ranging from 35 to 39 dBA and would maintain interior noise levels below 45 dBA DNL with an adequate

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		margin of safety. Exterior noise levels at the westernmost and northernmost building façades would range from 65 to 72 dBA DNL. A standard stucco exterior wall and STC 28 to 33 windows/doors would maintain interior noise levels below 45 dBA DNL with an adequate margin of safety. The figures below summarize the above noise control recommendations.  Figure 12 Preliminary Recommendations for Noise Insulation – MLK Jr. Way

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MacArthur Boulevard Elevations

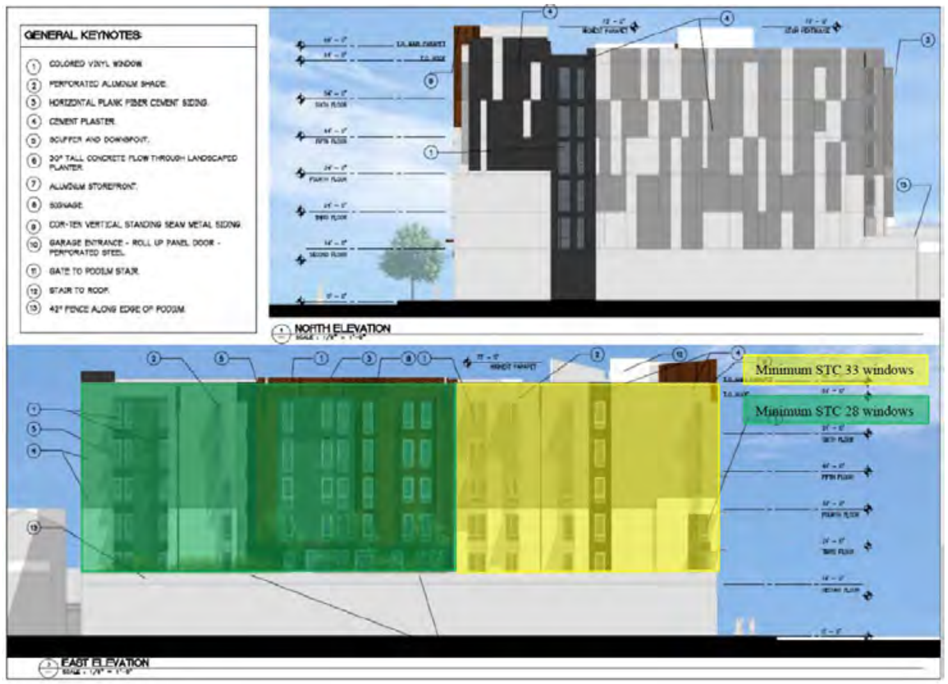

Figure 13 Preliminary Recommendations for Noise Insulation – North and East Elevations

To maintain a habitable interior environment, all units should be mechanically ventilated so that windows and doors can be kept closed at the occupant's discretion to control noise intrusion indoors. (HUD's Figure 19 is included in the Noise Study found in Appendix G).

Conclusion

The above described noise insulation features would adequately reduce interior noise levels in all units to 45 dBA L_{dn} or less, satisfying the interior noise level requirements of HUD. Outdoor space meets both HUD and City of Oakland requirements.

A Noise Waiver is required

Mitigations Required:

Interior Noise

N7. Follow all recommendations for noise attenuation architectural features as described in the *Noise Waiver* (see Appendix G).

Source Documentation: (8) (16) (52) (53) (54) (55) (56) (Appendix G and H)

Environmental Assessment Factor	Impact Code	Impact Evaluation
Energy Consumption	3	The City of Oakland has imposed Green Building conditions of approval on all projects pursuant to Oakland Municipal Code Chapter 18.02, the *Green Building Ordinance*. The applicant is required to comply with California Green Building Standards (CALGreen) and score a minimum of 50 points on the GreenPoint Rated checklist and be certified by *Build It Green*. Although the project will incrementally consume more energy and resources over current conditions, the project features will ensure that resources are used efficiently and without waste. The City has adopted Uniformly Applied Development Standards imposed as Standard Conditions of Approval that apply to green building, energy efficiency and water conservation. Application of these standards and implementation of these measures would further ensure that impacts to sustainability are less than significant. *Standard Condition of Approval Required:* **EC1. Green Building Requirements** ***a. Compliance with Green Building Requirements During Plan-Check*** The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code). i. The following information shall be submitted to the City for review and approval with the application for a building permit: a. Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards. b. Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit.

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		c. Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit. d. Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below. e. Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance. f. Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. g. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. ii. The set of plans in subsection (i) shall demonstrate compliance with the following: a. CALGreen mandatory measures. b. All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable Hardship Exemption granted during the review of the Planning and Zoning permit. c. per the appropriate checklist approved during the Planning entitlement process.

Environmental Assessment Factor	Impact Code	Impact Evaluation
		d. All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted. e. The required green building point minimums in the appropriate credit categories. *b. Compliance with Green Building Requirements During Construction* The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project. The following information shall be submitted to the City for review and approval: i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit. ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance. iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. *c. Compliance with Green Building Requirements* Within sixty (60) days of the final inspection of the building permit for the project, the Green Building Certifier shall submit the appropriate documentation to Green Building Certification Institute and attain the minimum required certification/point level. Within one year of the final inspection of the building permit for the project, the applicant shall submit to the Bureau of Planning the Certificate from the organization listed above demonstrating

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Environmental Assessment Factor	Impact Code	Impact Evaluation
		certification and compliance with the minimum point/certification level noted above. *d. Compliance with Green Building Requirements During Construction* The project applicant shall comply with the applicable requirements of CALGreen and the Green Building Ordinance during construction. The following information shall be submitted to the City for review and approval: i. Completed copy of the green building checklists approved during review of the Planning and Zoning permit and during the review of the Building permit. ii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. EC2. Plug-In Electric Vehicle (PEV) Charging Infrastructure *a. PEV-Ready Parking Spaces* The applicant shall submit , for review and approval of the Building Official and the Zoning Manager, plans that show the location of parking spaces equipped with full electrical circuits designated for future PEV charging (i.e. "PEV-Ready) per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-Ready parking spaces. *b. PEV-Capable Parking Spaces* The applicant shall submit, for review and approval of the Building Official, plans that show the location of inaccessible conduit to supply PEV-capable parking spaces per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-capable parking spaces. *c. ADA-Accessible Spaces* The applicant shall submit, for review and approval of the Building Official, plans that show the location of future accessible EV

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		parking spaces as required under Title 24 Chapter 11B Table l lB-228.3.2.1, and specify plans to construct all future accessible EV parking spaces with appropriate grade, vertical clearance, and accessible path of travel to allow installation of accessible EV charging station(s). Source Documentation: (8) (16) (57)
SOCIOECONOMIC		
Employment and Income Patterns	2	The project is transit-oriented by design and will provide affordable housing for individuals and families. The project itself will construct 2,590 square feet of ground-floor retail space. At 77 units, impacts to employment and income patterns are expected to be less than significant. Source Documentation: (8)
Demographic Character Changes, Displacement	2	**Demographic Character Changes** At 77 units, it is not anticipated to induce substantial growth in population in the area. The project will help to address the need for housing projected in the *Regional Housing Needs Allocation.* Based on guidelines provided by HUD, the maximum number of residents appropriate to multi-family unit dwellings is two persons per bedroom, plus one per unit. Thus, at most there would be seven persons in a three-bedroom apartment, and five persons in a two-bedroom unit. The proposed project would provide 33 one-bedroom units, 19 two-bedroom units and 25 three-bedroom units. To consider the maximum number of persons the project could accommodate, HUD guidelines for the maximum number of residents will be used. Carrying the math forward, we see that (33 x 3) = 99 plus (19 x 5) = 95 and (25 x 7) = 175 for a total of 369. So, the proposed project would provide housing for at most 369 people. However, it is not expected that three persons will occupy a one-bedroom unit. Nevertheless, for the purposes of this analysis, a population of 369 people is assumed. The population of the City of Oakland was 397,011 in 2010, so the additional 396 people would represent 0.0009% of that population. *Less than significant* impact is expected to result from the proposed project, as it would not create a significant change to the demographics of the area.

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		Displacement The Uniform Relocation Act (URA), passed by Congress in 1970, establishes minimum standards for federally-funded programs and projects that require the acquisition of real property (real estate) or displace persons from their homes, businesses, or farms. The Uniform Act's protections and assistance apply to the acquisition, rehabilitation, or demolition of real property for federal or federally-funded projects. Section 205 of the URA requires that, "Programs or projects undertaken by a federal agency or with federal financial assistance shall be planned in a manner that (1) recognizes, at an early stage in the planning of such programs or projects and before the commencement of any actions which will cause displacements, the problems associated with the displacement of individuals, families, businesses, and farm operations, and (2) provides for the resolution of such problems in order to minimize adverse impacts on displaced persons and to expedite program or project advancement and completion." The site and it is unoccupied. No tenants lease the buildings that would require relocation prior to construction. A relocation plan is not required. Source Documentation: (3) (8) (58) (59)
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	2	**Educational Facilities** The project by its definition is to provide affordable housing for individuals and families, with at most a population of 396 people. School aged children will likely be housed by the project. School-age children would likely attend the nearest schools, which include Hoover Elementary School at 890 Brockhurst Street, approximately 0.6 miles south or Emerson Elementary School located at 4803 Lawton Avenue, one mile northeast or a five minute drive. For middle school children, Claremont Middle School is located at 5750 College Avenue, a ten minute drive north and 1.8 miles away. For high school aged youth, Oakland International High School is located at 4521 Webster Street, 0.9 miles northeast or a five minute drive. Impacts to educational facilities are considered *less than significant.*

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		Cultural Facilities The proposed project is within two miles of downtown Oakland, a major metropolitan city and cultural center. Public transit and BART are conveniently located near the project site to visit downtown or other destinations around the San Francisco Bay Area. Temescal Branch Library is located on mile north and Piedmont Avenue Public Library roughly one mile east. The project's location near a major transit hub offers many opportunities for cultural enrichment outside the immediate area. The project represents an incremental demand for cultural facilities. There are no adverse impacts identified. Source Documentation: (8) (9) (60) (61)
Commercial Facilities	2	There are at least 20 markets and full service grocery stores within three miles or a 10 minute drive. Within five miles are ATMs and banks, auto service facilities, gas stations, hotel/motels, night clubs and taverns, post offices, and pharmacies and shopping centers. The additional residents would not constitute a significant adverse impact on the demand for commercial facilities in the area. Source Documentation: (8) (9)
Health Care and Social Services	2	**Health Care** Hospitals with full-service emergency rooms near the project site include Alta Bates Medical Center located at 350 Hawthorne Avenue, 0.7 miles away or a four minute drive. Highland Hospital located at 1411 E 31st Street, approximately four miles away. Highland hospital has a 24-hour emergency room and trauma center. For Kaiser Permanente members, Kaiser Foundation Hospital is located at 3600 Broadway, approximately 0.9 miles east. There are numerous smaller health care facilities including clinics, urgent care and specialty services in the area. There are no adverse impacts to Healthcare facilities or delivery systems anticipated as a result of the proposed project.

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		Social Services The closest Alameda County Social Services Agency office to the project site is located at 1106 Madison Street Suite 324 in Oakland, approximately 4.3 miles away. The Agency provides services for children and families, the elderly, disabled adults, veterans. Services include food assistance, medical and health, employment, training, housing services, and financial assistance. Supportive services provided include child care, transportation, mental health, alcohol and drug addiction treatment and Social Security Insurance advocacy. There are 30 social service providers in the Oakland area, including Family Education and Resource Center, Mental Health Association of Alameda County, St. Vincent de Paul Society, and the American Red Cross, to name a few. The project itself will provide a community room and services office for residents. The project does not represent a significant change to the demographics of the area or on area social services as it serves the existing population. There are no adverse impacts to social services as a result of the project. Source Documentation: (8) (62) (63) (64) (65) (66)
Solid Waste Disposal / Recycling	3	**Operational Waste** Franchise waste hauler Waste Management, Inc. provides solid waste services to the site and vicinity. Waste Management is the largest garbage company in North American with over 21 million customers, 262 active solid waste landfills, 5 hazardous waste landfills, and 43,000 employees as of year-end 2013. Waste Management operates 120 traditional recycling facilities, of which 50 are single stream and 12 are for construction and demolition material recycling. Waste Management also operates five independent power production plants, two of which produce renewable energy; and 17 waste-to-energy plants. Waste Management has been moving operations into green services that extract value from waste rather than the traditional model of isolating waste in disposal sites. Operating more sustainably is a goal for many Waste Management customers. Sustainability goals can be as complex as addressing climate

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		change or as simple as increasing recycling. Waste Management Sustainability Services (WMSS) works closely with customers to create customized solutions that help them reduce waste of resources, water or energy. The City of Oakland has been a partner in these efforts. Chapter 17.118 of the Oakland Municipal Code defines the Recycling Space Allocation Ordinance in an effort to divert solid waste generated by operation of the project from landfills. An Operational Diversion Plan (ODP) must be submitted to the Environmental Services Division of the Public Works Agency for review and approval. The subject and adjacent properties are already served with solid waste disposal service; therefore, the project represents a net increase. However, the increase in demand would not exceed the capacity of or reduce the capability of services in the City of Oakland and would not require the construction of additional solid waste management facilities. There are no adverse impacts identified as a result of the project. Construction Waste Chapter 15.34 of the Oakland Municipal Code outlines requirements for reducing waste and optimizing construction and demolition recycling. The goal is to divert debris waste from landfill disposal. The project proponent is required to submit a Construction & Demolition Waste Reduction and Recycling Plan (WRRP) for review and approval by the Oakland Public Works Agency. In addition, waste generated by demolition and construction will be required to be diverted from landfills to reduce impacts to landfills and encourage the reuse of such materials. Impacts after adherence to Oakland Municipal Code are *less than significant.* The City has adopted Uniformly Applied Development Standards imposed as Standard Conditions of Approval that apply to green building and recycling. Application of these standards and implementation of these measures would reduce impacts to *less than significant.* *Standard Conditions of Approval Required:* RE1. Construction and Demolition Waste Reduction and Recycling The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and

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		Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center. RE2. **Recycling Collection and Storage Space** The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet. Source Documentation: (8) (16) (67) (68)
Waste Water / Sanitary Sewers	3	Waste water (sewage) is collected and treated by the East Bay Municipal Utility District or EBMUD. EBMUD has been operating in the East Bay of the San Francisco Bay Area for over 50 years and services approximately 650,000 people. Waste water is collected from homes and businesses through privately-owned sewer laterals that feed into a network of city sewers. EBMUD's interceptors carry the wastewater to a treatment plant in Oakland. EBMUD treats the waste water, removing solids and cleaning it before it is discharged into San Francisco Bay. Stormwater is collected through a separate community-owned system. Approval of the project's planning application to the City of Oakland is conditioned on the project proponent funding any infrastructure upgrades

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		required to accommodate the project. In the event that an impact analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system. *Standard Conditions of Approval Required:* **SS1. Sanitary Sewer System** The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system. Source Documentation: (8) (16) (69)
Water Supply	3	**Water Supplier** Potable water at the project site will be supplied by the East Bay Municipal Utility District (EBMUD). Ninety percent of EBMUD's water comes from the 577-square mile watershed of the Mokelumne River on the western slope of the Sierra Nevada. This area is mostly national forest, EBMUD-owned lands and other undeveloped lands little affected by human activity. The Mokelumne watershed collects snowmelt from Alpine, Amador and Calaveras counties. The snowmelt flows into Pardee Reservoir near the town of Valley Springs. Three large aqueducts carry water more than 90 miles from Pardee Reservoir to the East Bay and protect it from pesticides, agricultural and urban runoff, municipal sewage and industrial discharges. When water demand is high or during times of operational need, EBMUD also draws water from protected local watersheds.

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		Because of very low rainfall levels and melted snowpack, EBMUD has declared a Stage 4 critical drought and set a community-wide goal to reduce water use 20% compared to 2013. To achieve these savings, EBMUD has adopted new water use rules that affect all customers and must supplement normal water supplies with water from additional sources. A Water Supply Update posted on the EBMUD website (October 20, 2019) shows 'Total System Storage' at 80% full and 'Total East Bay Res.' at 81% of full capacity. EBMUD has prepared a Water Supply Management Plan 2040 to estimate water supply needs over a 30-year planning period and proposes a diverse portfolio of policy initiatives and potential projects to ensure that needs are be met in dry years. The portfolio of solutions includes increased conservation and provision of recycled water, as well as rationing and a mix of possible supplemental supply projects that can be adjusted and implemented in a step-wise manner over the next thirty years as necessary to respond to changes in demand, changes in supplies, and future uncertainties, including the potential for climate change effects on both supply and demand. In addition to including aggressive conservation goals and an increase in the provision of recycled water, a mix of possible supplemental supply projects intended to be pursued in progressive stages is included, with the projects involving the fewest regulatory and institutional challenges undergoing study in order to respond to water need in the short-term, while the other more complex, regional projects to be pursued in the longer-term, beyond 2025, if the demand arises and other short-term projects do not provide sufficient yield to meet dry year needs. **Proposed Project** To reduce usage, the project will implement water-saving features to the extent practicable. Water saving fixtures such as low-flow toilets and water efficient appliances can be used to reduce water demand. Emphasis will be placed on water conservation efforts. **Conclusion** Alameda County is projected to grow its population by 32% by 2040. According to the Association of Bay Area Governments (ABAG), Alameda

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		County Housing Needs Allocation 2014 to 2022, the City of Oakland should add 14,765 new units by 2022 in order to meet the needs for housing. Plans developed by water provider EBMUD will ensure future supplies are adequate to cover dry years. At 77 units, the project will have an incremental adverse impact in the short-term by adding additional demand; however, inclusion of water-conserving measures in the project will contribute to overall water reduction even in wet years. The City of Oakland has imposed Standard Conditions of Approval to reduce project demand for water used for landscaping. *Standard Conditions of Approval Required:* **WS1. Water Efficient Landscape Ordinance (WELO)** The project applicant shall comply with California's Water Efficient Landscape Ordinance (WELO) in order to reduce landscape water usage. For any landscape project with an aggregate (total noncontiguous) landscape area equal to 2,500 sq. ft. or less. The project applicant may implement either the Prescriptive Measures or the Performance Measures, of, and in accordance with the California's Model Water Efficient Landscape Ordinance. For any landscape project with an aggregate (total noncontiguous) landscape area over 2,500 sq. ft., the project applicant shall implement the Performance Measures in accordance with the WELO. Prescriptive Measures: Prior to construction, the project applicant shall submit documentation showing compliance with Appendix D of California's Model Water Efficient Landscape Ordinance (see website below starting on page 23): http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%2 0-%20Official%20CCR%20pages.pdf Performance Measures: Prior to construction, the project applicant shall prepare and submit a Landscape Documentation Package for review and approval, which includes the following a. Project Information: i. Date,

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		ii. Applicant and property owner name, iii. Project address, iv. Total landscape area, v. Project type (new, rehabilitated, cemetery, or home owner installed), vi. Water supply type and water purveyor, vii. Checklist of documents in the package, and viii. Applicant signature and date with the statement: "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package." b. Water Efficient Landscape Worksheet i. Hydrozone Information Table ii. Water Budget Calculations with Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use c. Soil Management Report d. Landscape Design Plan e. Irrigation Design Plan, and f. Grading Plan Upon installation of the landscaping and irrigation systems, the Project applicant shall submit a Certificate of Completion and landscape and irrigation maintenance schedule for review and approval by the City. The Certificate of Compliance shall also be submitted to the local water purveyor and property owner or his or her designee. For the specific requirements within the Water Efficient Landscape Worksheet, Soil Management Report, Landscape Design Plan, Irrigation Design Plan and Grading Plan, see the link below . http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%20-%200fficia1%20CCR%20pages.pdf Source Documentation: (2) (4) (8) (16) (70) (71)

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Public Safety - Police, Fire and Emergency Medical	2	**Police** The Oakland Police Department (OPD) provides police services to the area. For 2014, the OPD reduced murders by 11%, shootings by 13% and robberies by 31%, with a 28% reduction in residential burglaries. The site is located in Beat 6X within Area 1. The nearest station is located at 455 7th Street, 3.4 miles south. Although the demand for police services would incrementally increase, it is not expected that the project would require construction or expansion of law enforcement facilities or the number of sworn officers; therefore, there are no adverse impacts identified. **Fire and Emergency Medical** The Oakland Fire Department provides emergency services to the site and vicinity. The nearest fire station is Station 8, located at 463 51st Street, approximately one mile south. Emergency response starts with the 9-1-1 Dispatch Center. This Accredited Center of Excellence provides the highest level of emergency dispatch; the Fire Prevention Bureau is knowledgeable of the fire code and the vegetation management system; the Public Education Division has built strong partnerships with local schools, libraries, head start programs, and senior and community centers. Emergency preparedness is a core function of the Oakland Fire Department. Communities of Oakland Responding to Emergencies (CORE) teaches self-reliance skills and helps establish response teams to take care of your neighborhood until professional emergency response personnel arrive. Because first responders will be overwhelmed during a catastrophic event such as a major earthquake on the Hayward fault, it is critical that community members are prepared to be self-sufficient for the first 72 hours or longer during an emergency. The Oakland Fire Department is comprised of eight divisions including the Operations Division. The Operations Division responds out of 25 Fire Stations, located throughout the City and the International Airport, operating a fleet of 24 Engines, 7 Trucks, and numerous other special operations, support, and reserve units throughout 3 Battalions. The OFD responds to approximately 60,000 emergency calls annually, with over 80% being emergency medical

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		services calls. The project would have a significant impact if it would exceed the ability of fire and emergency medical providers to adequately serve the existing and future residents and require new or expanded facilities. Planned projects such as this one would incrementally increase service needs but the impact would be *less than significant.* Although the demand for fire and emergency medical services would increase, it would not require the new construction or expansion of Fire or Emergency Medical facilities; therefore, there are no adverse impacts identified. Source Documentation: (8) (9) (16) (72) (73) (74)
Parks, Open Space and Recreation	2	The project site has numerous parks and recreational opportunities nearby. Grove Shafter Park is located two blocks south of the project. Mosswood Park is located approximately ½ mile east of the project site. Lakeside Park is located approximately 1.5 miles to the south and is best known for Lake Merritt which is one of the most accessible parks in Oakland with paved trails to bike or jog, bird watching, boating, lawn bowling, nature center and wildlife sanctuary. The lake serves as the oldest Wildlife Refuge in Northern America. Martin Luther King Jr. Regional Shoreline, Damon Slough Staging Area is part of the East Bay Regional Park District and is located at Doolittle Drive and Swan Way, approximately nine miles south of the project site. The area is next to Oakland International Airport and is 741-acres that include marshland, trails and the Tidewater Boating Center. Activities at the park are picnicking, birdwatching, hiking, biking, fishing and boating. The City of Oakland's Parks and Recreation Department is over 105 years old. They have 140 parks maintained by Public Works; 66 ball fields; 44 tennis courts; 28 recreation centers – three of which specialize in arts, music and dance; 14 rental venues; five swimming pools; 17 community gardens; three golf courses; a digital arts and culinary center; two boating centers; an inclusionary center; a host of programs designed for tiny tots to seniors, collectively serving over 95,000 enrolled participants and over a million drop-in users annually. The project itself will provide 4,609 square feet of open space. The podium will contain a courtyard with children's play structure, a built-in barbeque,

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		and outdoor seating and dining area. There are no adverse impacts to recreational facilities anticipated as a result of the project. Source Documentation: (8) (9) (16) (75) (76) (77)
Transportation and Accessibility	3	**Transportation** Transportation impacts caused by the proposed project to traffic vary depending upon the number of personal vehicle trips the project will generate, the availability of public transit, the bicycle network, and the completeness of the nearby pedestrian network. Close amenities serve to further reduce the impacts to traffic. <u>Pedestrian</u> The proposed project site and vicinity are walkable and the sidewalk network is complete. <u>Bicycle</u> The City of Oakland is a bicycle-friendly City and has an extensive bicycle network for access throughout the City. The City requires that projects comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). Secure bicycle parking spaces will be provided onsite. There will be 50 long term and four (or 10% minimum) short term bicycle parking spaces provided. <u>Public Transit</u> Bay Area Rapid Transit or BART, is a heavy-rail and subway system that connects San Francisco with cities in the East Bay and suburbs in northern San Mateo County. BART's rapid transit system operates five routes in 104 miles of line with 44 stations in four counties. The project is transit-oriented by design and lies one block west of the MacArthur BART Station. AmTrak and Capitol Corridor trains can be caught at the Oakland Coliseum/Airport Station (OAC) accessible from the MacArthur BART Station. AmTrak provides state-wide and country-wide train service. Capitol Corridor trains provide regional and commuter services between Auburn, Sacramento, Emeryville, Oakland and San Jose. Directly in front of the project at the corner of MacArthur Blvd. and Martin

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		Luther King, Jr. Way are AC Transit bus stops served by routes 31 and 18 . Just south of the project site at E 12th Street and 23rd Avenue is another AC Transit bus stop served by route 62. The site's location will afford residents with many options to meet their transportation needs with public transit. Personal Vehicles According to the Trip Generation Memo provided for the project by TJKM Engineers, the project will generate less than 50 peak hour trips during weekdays. The estimated trip generation for the new 77-unit affordable family housing development is 16 a.m. peak hour trips and 22 p.m. peak hour trips. No adverse impacts to traffic are expected as a result of the project. Parking The project will provide 39 parking spaces which represents a parking ratio of 0.51:1. This has been deemed adequate by the City of Oakland. Conclusion The location is convenient to public transit, including its proximity to the MacArthur BART Station. The rate of personal vehicle ownership in affordable housing developments near high-quality transit is lower than market-rate developments. This site affords residents the opportunity to work outside the immediate area, as reliable, convenient and cost-effective public transportation is readily available. Pedestrian, bicycle and transit facilities are expected to adequately serve the proposed project. The project is transit-oriented by design. There are no adverse impacts to traffic as a result of the project. **Accessibility** The proposed new building will provide 77 affordable apartments units. A total of 69 units will be adaptable. Initially, there will be eight units that are Americans with Disabilities Act (ADA) compliant for the mobility-impaired and four for the hearing/visually impaired for a total of 12 units. All common areas and access to units will be ADA compliant for both residents and guests. **Conclusion** The City has adopted Uniformly Applied Development Standards imposed as Standard Conditions of Approval that apply to potential impacts to transportation. Application of City of Oakland's Standard Conditions of

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		Approval to limit impacts to transportation will bring impacts to less than significant levels **TR1. Bicycle Parking** The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements. **TR2. Public Transit incentive** The Applicant shall discuss the possibility of providing Public Transportation Clipper passes for all new residences. The Applicant shall provide a copy of the final outcome of these discussions to Bureau of Planning staff. Source Documentation: (8) (9) (16) (43) (59) (78) (79) (80)
NATURAL FEATURES		
Unique Natural Features, Water Resources	2	There are no unique natural features or water resources on the site. The site is flat, rectangular and roughly half of the site is covered in asphalt paving and buildings. The site contains no unique natural features. There are no water courses, creeks, streams, seasonal wetlands or other water resources on the project site. There are no impacts in this regard. Source Documentation: (8) (9) (16) (26)
Vegetation, Wildlife	3	No special-status plant or animal species have been reported from or are suspected to occur on the site due to the nature of the site and lack of suitable habitat. There are some trees on the site and within the sidewalk that will be affected by the proposed project. Standard conditions of approval set forth by the City of Oakland provide protection for nesting birds during construction. There is no adverse impacts to vegetation and wildlife as a result of the project. There are trees on the site and street trees; therefore mitigation for the protection of nesting and protected migratory birds is required. *Mitigations Required:*

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		ES1. **Tree Removal Permit (T19-00045):** A Tree Removal/Preservation permit application shall be approved by the Tree Services Division for removal or construction within ten feet of all protected trees on the site and adjacent properties. ES2. **Street Trees** The Applicant shall provide one tree per 20' of street frontage in front of the building located on Macarthur Blvd and ML King Jr Way with review and approval of species , size at time of planting, and placement in the right-of-way, subject to review and approval by the Planning and Building Department unless determined infeasible by the RWQB. The City has adopted Uniformly Applied Development Standards imposed as Standard Conditions of Approval for the protection of nesting and migratory birds. Application of these standards would ensure that impacts to birds during construction would have a less than significant impact. *Standard Condition of Approval Required:* ES3. **Tree Removal During Bird Breeding Season** To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February I to August 15 (or during December I 5 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate,

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		depending on the bird species and the level of disturbance anticipated near the nest. ES4. **Tree Permit** ***a) Tree Permit Required*** Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit. ***b) Tree Protection During Construction*** Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist: I. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree. II. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree.

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		III. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree. IV. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration. V. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed. VI. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations. *c) Tree Replacement Plantings* Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual

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(4) *Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement*

Environmental Assessment Factor	Impact Code	Impact Evaluation
		screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria: I. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered. II. Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye), Umbellularia califomica (California Bay Laurel), or other tree species acceptable to the Tree Division. III. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate. IV. Minimum planting areas must be available on site as follows: ▪ For Sequoia sempervirens, three hundred fifteen (315) square feet per tree; ▪ For other species listed, seven hundred (700) square feet per tree. V. In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee in accordance with the City's Master Fee Schedule may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians. VI. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to

***Impact Codes:* (1)** *Minor beneficial impact;* **(2)** *No impact anticipated;* **(3)** *Minor Adverse Impact – May require mitigation;*
(4) *Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement*

Environmental Assessment Factor	Impact Code	Impact Evaluation
		become established within one year of planting shall be replanted at the project applicant's expense. Source Documentation: (8) (16)
Other Factors	1	The project will provide low-income, affordable housing and provide onsite services and programs for residents. The project will provide a safe, clean, and sanitary place for residents in a location convenient to public transportation and other amenities. The proposed project is beneficial to both residents and the community. Source Documentation: (8)

***Impact Codes:* (1)** *Minor beneficial impact;* **(2)** *No impact anticipated;* **(3)** *Minor Adverse Impact – May require mitigation;*
(4) *Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement*

Additional Studies Performed:

See Source Documentation List

Field Inspection (Date and completed by):

September 10, 2019 Site Visit by Cinnamon Crake, Associate, AEM Consulting

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]:

See Source Documentation List

List of Permits Obtained:

The City of Oakland's Planning Commission has approved the project's planning application (September 11, 2019) which includes regular design review, demolition permit, parcel map waiver and CEQA findings. No other permits have been obtained yet, as the moment the use of Federal funds was contemplated, all project actions were halted to conduct this environmental review.

Public Outreach [24 CFR 50.23 & 58.43]:

The project results in a Finding of No Significant Impact (FONSI) which will be published in the newspaper and circulated to public agencies, interested parties, and landowners/occupants of parcels located within the project's Area of Potential Effects (APE). Information about where the public may find the Environmental Review Record pertinent the project will be included in the FONSI Notice.

Cumulative Impact Analysis [24 CFR 58.32]:

This project has been approved by the City of Oakland as to design and use as of September 2019 and thus has been considered as an "approved project" in subsequent cumulative impacts analysis of later projects. No negative cumulative impact is anticipated.

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]

A reduced-density of the project site was considered but deemed infeasible and contrary to state law permitting density bonuses for affordable housing projects. The project would be inconsistent with the planning application approvals already achieved.

No Action Alternative [24 CFR 58.40(e)]:

No change to the site would occur. The impacts discussed in the Environmental Assessment would not occur. The site would continue in its current state. Demolition of the existing building would not occur. Additional affordable housing units would not be created. The site may be sold for residential housing, retail/commercial or other uses. The approvals achieved so far would not be utilized.

Summary of Findings and Conclusions:

The project is suitable from an environmental standpoint. As long as the Standard Conditions of Approval/mitigation measures are adhered to, there is no anticipated significant impact from the project. The project will provide a safe, sanitary, and affordable place for residents.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

***** The Standard Conditions of Approval were initially and formally adopted by the Oakland City Council on November 3, 2008 (Ordinance No. 12899 C.M.S.), pursuant to Public Resources Code section 21083.3 and CEQA Guidelines section 15183 (and now section 15183.3), and incorporate development policies and standards from various adopted plans, policies, and ordinances (such as the Oakland Planning and Municipal Codes, Oakland Creek Protection, Stormwater Management and Discharge Control Ordinance, Oakland Tree Protection Ordinance, Oakland Grading Regulations, National Pollutant Discharge Elimination System (NPDES) requirements, Housing Element and other General Plan Element-related mitigation measures, California Building Code, Uniform Fire Code, Energy and Climate Action Plan, Complete Streets Policy, and Green Building Ordinance, among others), which have been found to substantially mitigate environmental effects.

Where there are peculiar circumstances associated with a project or project site that will result in significant environmental impacts despite implementation of the Standard Conditions of Approval, mitigation measures have been identified to reduce the impact to *less than significant* levels.

**** A Standard Condition of Approval /Mitigation Monitoring and Reporting Program is attached as a separate document.**

Law, Authority, or Factor	Mitigation Measure
Air Quality	AQ1. **Dust Controls - Construction Related** The project applicant shall implement all of the following applicable dust control measures during construction of the project: a) Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible. b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. d) Limit vehicle speeds on unpaved roads to 15 miles per hour.

Law, Authority, or Factor	Mitigation Measure
	e) All demolition activities (if any) shall be suspended when average wind speeds exceed 20 mph. f) All trucks and equipment, including tires, shall be washed off prior to leaving the site. g) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel. AQ2. **Criteria Air Pollutant Controls - Construction Related** The project applicant shall implement all of the following applicable basic control measures for criteria air pollutants during construction of the project as applicable: a) Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points. b) Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations ("California Air Resources Board Off- Road Diesel Regulations"). c) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. Equipment check documentation should be kept at the construction site and be available for review by the City and the Bay Area Air Quality District as needed. d) Portable equipment shall be powered by grid electricity if available. If electricity is not available, propane or natural gas generators shall be used if feasible. Diesel engines shall only be used if grid electricity is not available and propane or natural gas generators cannot meet the electrical demand. e) Low VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings. f) All equipment to be used on the construction site shall comply with the requirements of Title 13, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") and upon

Law, Authority, or Factor	Mitigation Measure
	request by the City (and the Air District if specifically requested), the project applicant shall provide written documentation that fleet requirements have been met.
Contamination & Toxic Substances	HZ1. The project application shall adhere to the Soil Management Plan prepared for the project by Essel Environmental Engineering and Consulting dated November 8, 2019 at all times during construction. HZ2. The developer shall prepare and submit for review and approval a Remedial Action Workplan (RAW) to Department of Toxic Substances Control (DTSC) consistent with the possible measures outlined in the DTSC approved Corrective Action Memo, which may include installation of a vapor barrier and active or passive venting system beneath the future building to mitigate the potential for vapor intrusion health risk, soil remediation, groundwater use restrictions, Land Use Covenant and O&M Plan for maintenance of the vapor barrier as approved by DTSC. HZ3. The applicant shall retain a qualified lead based paint contractor. The contractor shall prepare lead safe work practice guidance to be distributed to all workers or be supervised by a certified abatement supervisor. Caution shall be taken during demolition activities to prevent lead levels in generated airborne dust from painted surfaces (roof window caulking and paint) from exceeding the Permissible Exposure Limit (PEL) as required by California/OSHA, Title 8, CCR Construction Safety Orders for Lead, Section 1532.1. The contractor shall submit a report that all lead was handled as hazardous waste and disposed of at a proper hazardous waste facility. In addition, standard lead abatement treatment should be performed on all surfaces presumed to contain lead hazards. A licensed lead inspector, risk assessor or lead paint sampling technician shall perform a clearance evaluation to ensure that all lead based paint has been removed. If the report indicates that further cleaning is required, the contractor shall reclean and reassess the areas until the clearance report indicates a clean site. **HZ4. Asbestos in Structures** The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request. **HZ5. Hazardous Materials Related to Construction**

Law, Authority, or Factor	Mitigation Measure
	The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following: g. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction; h. Avoid overtopping construction equipment fuel gas tanks; i. During routine maintenance of construction equipment, properly contain and remove grease and oils; j. Properly dispose of discarded containers of fuels and other chemicals; k. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and l. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate. **HZ6. Hazardous Building Materials and Site Contamination** a. Hazardous Building Materials Assessment The project applicant shall submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACMs), lead-based paint, polychlorinated biphenyls (PCBs), and any other building materials or stored materials classified as hazardous materials by State or federal law. If lead-based paint, ACMs, PCBs, or any other building materials or stored materials classified as hazardous materials are present, the project

Law, Authority, or Factor	Mitigation Measure
	applicant shall submit specifications prepared and signed by a qualified environmental professional, for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. b. Environmental Site Assessment Required The project applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. c. Health and Safety Plan Required The project applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan. d. Best Management Practices (BMPs) Required for Contaminated Sites The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following: III. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements. IV. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include

Law, Authority, or Factor	Mitigation Measure
	impermeable barriers to prohibit groundwater and vapor intrusion into the building. **HZ7. Regulatory Permits and Authorizations from Other Agencies** The project applicant shall obtain all necessary regulatory permits and authorizations from applicable resource/regulatory agencies including, but not limited to, the Regional Water Quality Control Board, Bay Area Air Quality Management District, Bay Conservation and Development Commission, California Department of Fish and Wildlife, U. S. Fish and Wildlife Service, and Army Corps of Engineers and shall comply with all requirements and conditions of the permits/authorizations. The project applicant shall submit evidence of the approved permits/authorizations to the City, along with evidence demonstrating compliance with any regulatory permit/authorization conditions of approval.
Endangered Species	ES1. **Tree Removal Permit (T19-00045):** A Tree Removal/Preservation permit application shall be approved by the Tree Services Division for removal or construction within ten feet of all protected trees on the site and adjacent properties. ES2. **Street Trees** The Applicant shall provide one tree per 20' of street frontage in front of the building located on Macarthur Blvd and ML King Jr Way with review and approval of species , size at time of planting, and placement in the right-of-way, subject to review and approval by the Planning and Building Department unless determined infeasible by the RWQB. ES3. **Tree Removal During Bird Breeding Season** To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February I to August 15 (or during December I 5 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent

Law, Authority, or Factor	Mitigation Measure
	on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest. ES4. **Tree Permit** ***a) Tree Permit Required*** Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit. ***b) Tree Protection During Construction*** Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist: I. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree. II. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree. III. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of

Law, Authority, or Factor	Mitigation Measure
	any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree. IV. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration. V. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed. VI. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations. *c) Tree Replacement Plantings* Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria: I. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered. II. Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye), Umbellularia califomica (California Bay Laurel), or other tree species acceptable to the Tree Division.

Law, Authority, or Factor	Mitigation Measure
	III. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate. IV. Minimum planting areas must be available on site as follows: ▪ For Sequoia sempervirens, three hundred fifteen (315) square feet per tree; ▪ For other species listed, seven hundred (700) square feet per tree. V. In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee in accordance with the City's Master Fee Schedule may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians. VI. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to become established within one year of planting shall be replanted at the project applicant's expense.
Energy Consumption	EC1. Green Building Requirements *a. Compliance with Green Building Requirements During Plan-Check* The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code). i. The following information shall be submitted to the City for review and approval with the application for a building permit: a. Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards. b. Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit. c. Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit.

Law, Authority, or Factor	Mitigation Measure
	d. Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below. e. Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance. f. Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. g. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. ii. The set of plans in subsection (i) shall demonstrate compliance with the following: a. CALGreen mandatory measures. b. All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable Hardship Exemption granted during the review of the Planning and Zoning permit. c. per the appropriate checklist approved during the Planning entitlement process. d. All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted. e. The required green building point minimums in the appropriate credit categories. *b. Compliance with Green Building Requirements During Construction*

Law, Authority, or Factor	Mitigation Measure
	The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project. The following information shall be submitted to the City for review and approval: i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit. ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance. iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. *c. Compliance with Green Building Requirements* Within sixty (60) days of the final inspection of the building permit for the project, the Green Building Certifier shall submit the appropriate documentation to Green Building Certification Institute and attain the minimum required certification/point level. Within one year of the final inspection of the building permit for the project, the applicant shall submit to the Bureau of Planning the Certificate from the organization listed above demonstrating certification and compliance with the minimum point/certification level noted above. *d. Compliance with Green Building Requirements During Construction* The project applicant shall comply with the applicable requirements of CALGreen and the Green Building Ordinance during construction. The following information shall be submitted to the City for review and approval: i. Completed copy of the green building checklists approved during review of the Planning and Zoning permit and during the review of the Building permit. ii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. EC2. Plug-In Electric Vehicle (PEV) Charging Infrastructure *a. PEV-Ready Parking Spaces* The applicant shall submit , for review and approval of the Building Official and the Zoning Manager, plans that show the location of parking spaces equipped

Law, Authority, or Factor	Mitigation Measure
	with full electrical circuits designated for future PEV charging (i.e. "PEV-Ready) per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-Ready parking spaces. *b. PEV-Capable Parking Spaces* The applicant shall submit, for review and approval of the Building Official, plans that show the location of inaccessible conduit to supply PEV-capable parking spaces per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-capable parking spaces. *c. ADA-Accessible Spaces* The applicant shall submit, for review and approval of the Building Official, plans that show the location of future accessible EV parking spaces as required under Title 24 Chapter 11B Table l lB-228.3.2.1, and specify plans to construct all future accessible EV parking spaces with appropriate grade, vertical clearance, and accessible path of travel to allow installation of accessible EV charging station(s).
Geotechnical	G1. Construction-Related Permit(s) The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction. G1. Seismic Hazards Zone (Landslide/Liquefaction) The project applicant shall submit a site-specific geotechnical report, consistent with California Geological Survey Special Publication 117 (as amended), prepared by a registered geotechnical engineer for City review and approval containing at a minimum a description of the geological and geotechnical conditions at the site, an evaluation of site-specific seismic hazards based on geological and geotechnical conditions, and recommended measures to reduce potential impacts related to liquefaction and/or slope stability hazards. The project applicant shall implement the recommendations contained in the approved report during project design and construction.
Historic Preservation	CR1. **The Cultural Resource Monitoring Plan prepared for the proposed Project by Evans & De Shazo, Inc. and dated September 18, 2019 shall be followed at all times.**

Law, Authority, or Factor	Mitigation Measure
	CR2. **Archaeological and Paleontological Resources - Discovery During Construction** Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented. In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense. In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.

Law, Authority, or Factor	Mitigation Measure
	CR3. **Human Remains – Discovery During Construction** Pursuant to CEQA Guidelines section 15064.5(e)(l), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.
Land Use	**LU1. Ground Floor Building Materials Graffiti-Resistant** The project applicant shall ensure that materials used on the ground floor are graffiti-resistant and exterior façade will stand the test of time by ensuring that dust and roadway grim are easily cleanable. **LU2. Final Design Review** *a. Prior to issuance of building permit.* As the design of the building is further detailed , the design elements listed below shall be revised and shall be submitted for review and approval by the Planning Director or designee prior to issuance of the building permit. Only high-quality materials will be approved. The Planning Director or designee may exercise his/her standard authority to refer the design revisions to the DRC or to the Planning Commission. (e) Final review of all exterior materials and colors. (f) More information regarding window details and installation specifications (framing material, glass, and mullions) and also of the window system and assembly , to confirm adequate thickness of components, overall quality, and recess from the outside wall. Window mullions shall be a minimum of 2" thick and the window surfaces shall be recessed a minimum of 1 ¾ to 2" from the building façade.

Law, Authority, or Factor	Mitigation Measure
	(g) The proposed white color vinyl windows shall be revised to dark color. (h) The Project applicant shall ensure that the lighting fixtures within the garage are shielded to a point below the light bulb and reflector consistent with the lighting condition.
Noise	N1. **Construction Days/Hours** a) Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier driving and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. b) Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday. c) No construction is allowed on Sunday or federal holidays. Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City of Oakland, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice. N2. **Construction Noise** The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following: a) Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake

Law, Authority, or Factor	Mitigation Measure
	silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. b) Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered and avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. c) Application shall use temporary power poles instead of generators where feasible. d) Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction. e) The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented. N3. Extreme Construction Noise ***a. Construction Noise Management Plan Required*** Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following: i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; ii. Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where

Law, Authority, or Factor	Mitigation Measure
	feasible, in consideration of geotechnical and structural requirements and conditions; iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site; iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and v. Monitor the effectiveness of noise attenuation measures by taking noise measurements. ***b. Public Notification Required*** The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented. N4. Construction Noise Complaints The project applicant shall submit to the City of Oakland for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include: a) Designation of an on-site construction complaint and enforcement manager for the project; b) A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit; c) Protocols for receiving, responding to, and tracking received complaints; and d) Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request. N5. Project-Specific Construction Noise Reduction Measures

Law, Authority, or Factor	Mitigation Measure
	The project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site specific noise attenuation measures to further reduce construction noise impacts on nearby residential properties. The project applicant shall implement the approved Plan during construction. N6. **Operational Noise** Noise levels at the project site after completion of the project (i.e. during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City. N7. **Interior Noise** Follow all recommendations for noise attenuation architectural features as described in the *Noise Waiver* (see Appendix G).
Sanitary Sewers	**SS1. Sanitary Sewer System** The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system.
Solid Waste Disposal/Recycling	**RE1. Construction and Demolition Waste Reduction and Recycling** The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource

Law, Authority, or Factor	Mitigation Measure
	Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center. **RE2. Recycling Collection and Storage Space** The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet.
Stormwater	**SW1. Erosion and Sedimentation Control Measures for Construction** The project applicant shall implement Best Management Practices (BMPs) to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable. At a minimum, the project applicant shall provide filter materials deemed acceptable to the City at nearby catch basins to prevent any debris and dirt from flowing into the City's storm drain system and creeks. **SW2. NPDES C.3 Stormwater Requirements for Regulated Projects** *a) Post-Construction Stormwater Management Plan Required* The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following: viii. Location and size of new and replaced impervious surface; ix. Directional surface flow of stormwater runoff; x. Location of proposed on-site storm drain lines; xi. Site design measures to reduce the amount of impervious surface area; xii. Source control measures to limit stormwater pollution; xiii. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and xiv. Hydromodification management measures, if required by

Law, Authority, or Factor	Mitigation Measure
	Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff. *b) Maintenance Agreement Required* The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following: iii. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and iv. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense. SW3. Storm Drain System The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.
Water Supply	WS2. Water Efficient Landscape Ordinance (WELO) The project applicant shall comply with California's Water Efficient Landscape Ordinance (WELO) in order to reduce landscape water usage. For any landscape project with an aggregate (total noncontiguous) landscape area equal to 2,500 sq. ft. or less. The project applicant may implement either the Prescriptive Measures or the Performance Measures, of, and in accordance with the California's Model Water Efficient Landscape Ordinance. For any landscape project with an aggregate (total noncontiguous) landscape area over 2,500 sq. ft., the project applicant shall implement the Performance Measures in accordance with the WELO. Prescriptive Measures: Prior to construction, the project applicant shall submit documentation showing compliance with Appendix D of California's Model Water Efficient Landscape Ordinance (see website below starting on page 23):

Law, Authority, or Factor	Mitigation Measure
	http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023 %20extract%2 0-%20Official%20CCR%20pages.pdf Performance Measures: Prior to construction, the project applicant shall prepare and submit a Landscape Documentation Package for review and approval, which includes the following a. Project Information: i. Date, ii. Applicant and property owner name, iii. Project address, iv. Total landscape area, v. Project type (new, rehabilitated, cemetery, or home owner installed), vi. Water supply type and water purveyor, vii. Checklist of documents in the package, and viii. Applicant signature and date with the statement: "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package." b. Water Efficient Landscape Worksheet i. Hydrozone Information Table ii. Water Budget Calculations with Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use c. Soil Management Report d. Landscape Design Plan e. Irrigation Design Plan, and f. Grading Plan Upon installation of the landscaping and irrigation systems, the Project applicant shall submit a Certificate of Completion and landscape and irrigation maintenance schedule for review and approval by the City. The Certificate of Compliance shall also be submitted to the local water purveyor and property owner or his or her designee. For the specific requirements within the Water Efficient Landscape Worksheet, Soil Management Report, Landscape Design Plan, Irrigation Design

Law, Authority, or Factor	Mitigation Measure
	Plan and Grading Plan, see the link below . http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%20-%200fficia1%20CCR%20pages.pdf
Transportation	**TR3. Bicycle Parking** The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements. **TR4. Public Transit incentive** The Applicant shall discuss the possibility of providing Public Transportation Clipper passes for all new residences. The Applicant shall provide a copy of the final outcome of these discussions to Bureau of Planning staff.

Determination:

☒ **Finding of No Significant Impact** [24 CFR 58.40(g)(1); 40 CFR 1508.27]

The project will not result in a significant impact on the quality of the human environment.

☐ **Finding of Significant Impact** [24 CFR 58.40(g)(2); 40 CFR 1508.27]

The project may significantly affect the quality of the human environment.

Preparer Signature: ______________________ Date: September 16, 2020

Name/Title/Organization: Cinnamon Crake, President, AEM Consulting

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Certifying Officer Signature: ______________________ Date: 09/21/20

Name/Title: William Gilchrist
Director of Planning and Building

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Longfellow Corner Source Documentation

September 2020

1. **HKIT Architects.** *3801 MLK JR. WAY, Oakland, California - Planning Submittal Set.* Oakland, CA : s.n., July 16, 2019. Job No. 30366.

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3. **United States Census Bureau.** American Fact Finder. *2010 Demographic Profile.* [Online] [Cited: April 25, 2017.] http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1.

4. **Association of Bay Area Governments (ABAG).** *Regional Housing Needs Allocation 2014 to 2022.*

5. **City of Oakland.** *General Plan Housing Element 2015-2023.* Adopted December 9, 2014.

6. **Evans & De Shazo, Inc.** *A Historic Property Survey for the Proposed Longfellow Corner project at 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.* Sebastopol, CA : s.n., September 12, 2019.

7. **City of Oakland.** *Consolidated Plan for Housing and Community Development.* s.l. : Community and Economic Development Agency, July 1, 2015 - June 30, 2020; Adopted July 7, 2015.

8. **Crake, Cinnamon.** Associate. *Site visit and personal knowledge.* s.l. : AEM Consulting, September 10, 2019. Report Preparer/ Site Visits.

9. **Alphabet.** *Google Earth Professional.* 2019.

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11. **City/County Association of Governments of San Mateo County.** *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport.* Redwood City, CA : Ricondo & Associates, July 2012. Exhibit IV-7, Safety Compatibility Zones.

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15. **Illingworth & Rodkin, Inc.** *3801 Martin Luther King Jr. Way Residential Project, Community Risk Assessment.* Cotati, CA : s.n., August 7, 2019. I&R Project: 19-118.

16. **Merkamp, Robert D.** *Planning Application Approval - 3801-3829 Martin Luther King Jr. Way, APN: 012-0964-004 & 012-0964-005 & 012-0964-006 & 012-0964-007.* s.l. : City of Oakland, Planning and Building Department, September 11, 2019. PLN19-104.

17. **San Francisco Bay Conservation and Development Commission.** *San Francisco Bay Plan January 2006.* 50 California Street, Suite 2600, San Francisco, CA 94111 Phone: (415) 352-3600 FAX: (415) 352-3606 : s.n.

18. **State of California.** SFBCDC - Activities Requiring Permit Approval. *San Francisco Bay Conservation and Development Commission.* [Online] [Cited: September 25, 2019.] http://www.bcdc.ca.gov/permits/require-permit-approval.html.

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28. **Arjo, Alexandra.** *ASTs and Acceptable Separation Distance Calculator Tools for each AST - Longfellow Corner - 3801-3829 MLK.* s.l. : Resources for Community Development, September 8, 2020.

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33. —. *A Cultural Resource Monitoring Plan for the proposed Longfellow Corner project at 3801 Martin Luther King, Jr. Way, Oakland, Alameda County, California.* Sebastopol, CA : s.n., September 18, 2019.

34. **Crake, Cinnamon.** *Letter to Native American Heritage Commission.* s.l. : AEM Consulting, July 19, 2019.

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38. **Evans & De Shazo, Inc.** *A Cultural Resource Monitoring Plan for the proposed Longfellow Corner project at 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.* Sebastopol, CA : s.n., September 24, 2019.

39. **AEM Consulting.** *Historic & Cultural Resources Evaluation, Historic Resources Evaluation for Section 106 Review: Longfellow Corner.* October 2019.

40. **Marvin, Betty.** *Letter to Julianne Polanco, State Historic Preservation Officer in re: Longfellow Corner, 3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California 94609 - U.S. HUD Funds - Project-Based Section 8 Vouchers.* s.l. : City of Oakland, Department of Plannning and Building, October 11, 2019.

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Appendix A – Project Description

- **HKIT Architects.** *3801 MLK JR. WAY, Oakland, California - Planning Submittal Set.* Oakland, CA : s.n., July 16, 2019. Job No. 30366.

SUMMARY SCOPE OF WORK:

The scope of work includes construction of a 6 story (5 Stories Type III over 1 Story Type I) building to accommodate 77 units of Affordable Family Housing at the corner of MacArthur Boulevard and MLK Jr. Way. The building will consist of parking, office, community, laundry and other support/ amenity spaces. The project also includes outdoor gardening and communal areas, landscape, bicycle parking and other site improvements. MacArthur is a major transit corridor in Oakland and the currently underutilized site has good access to transportation and other important services.

VICINITY MAP

3801 MLK JR. WAY

OAKLAND, CA 94609

APN:
12-964-4, 12-964-5, 12-964-6, 12-964-7

HKIT ARCHITECTS
538 NINTH STREET SUITE 240 • OAKLAND, CA 94607
T 510 625 9800 • F 510 625 9801 • WWW.HKIT.COM

PROJECT INFORMATION - AFFORDABLE HOUSING

APN	12-964-4, 12-964-5, 12-964-6, 12-964-7	
ADDRESS	3801 MLK JR. WAY	(ALSO 3807, 3823, 3829, 3831 MLK WAY)
ZONE		
ZONE	CN-3	
HEIGHT LIMIT AREA	60	
GENERAL PLAN - "NEIGHBORHOOD COMMERCIAL"		
USES PERMITTED - PERMANENT HOUSING (ABOVE FLOOR 1)		
SITE AREA (SOUTH PARCEL + NORTH PARCEL)		
SQUARE FEET	21,250	S.F.
ACRES	0.49	ACRES
MIN. LOT AREA	4,000	S.F.
DENSITY		
RESIDENTIAL		
MAX ALLOWABLE DWELLING: 375 S.F. / UNIT	375	S.F. / UNIT
MAX ALLOWABLE WITH 35% DENSITY BONUS PER 17.107.040	278	S.F. / UNIT
MAX ALLOWABLE UNITS WITH 35% DENSITY BONUS	77	UNITS
PROPOSED NUMBER OF UNITS	**77**	**UNITS**
COMMERCIAL SPACE - MAXIMUM ALLOWED	5,000	S.F.
PROVIDED	1,291	S.F.
HEIGHT		
CONSTRUCTION	1 TYPE I + 5 TYPE III	
MAX. ALLOWABLE HEIGHT	60'	
MAX TOTAL STORIES ABOVE GRADE	5	STORIES
PROPOSED HEIGHT (DENSITY BONUS)	**70'**	
	6	**STORIES**
EXCEPTIONS - CORNER "TOWER", MECH EQUIPMENT	10'	
STAIR, ELEVATOR PENTHOUSES	12'	
YARDS AND COURTS		
FRONT SETBACK (FACING MLK)	0'-10'	
STREET SIDE SETBACK (MACARTHUR)	0	
INTERIOR SIDE SETBACK (FACING EAST AND NORTH)	0	
ADD'L STREET SIDE SETBACK WHEN ABUTS RESIDENTIAL	20' DEEP	1/2 OF ADJ RM FRONT SETBACK
REQ'D REAR SETBACK ADJACENT RM ZONE (NORTHWEST CORNER)	15'	
REQ'D REAR SETBACK ADJACENT RU ZONI	10'	RESIDENTIAL FACILITIES
COURTS		
MIN. DIM - L.R. WINDOWS	16'	"+4'" FOR EVERY STORY
MIN. DIM - B.R. WINDOWS	10'	
PROJECTIONS - BAYS / BALCONIES	3'	INTO FRONT OR REAR
EAVES, AWNINGS, CORNICES	4' 2'	FRONT + REAR COURT + INTERIOR SIDE
BALCONIES	5'	(6' AT REAR YARD)
MAX OVERALL BAY WIDTH	0.5	BUILDING FRONTAGE
MAX INDIVIDUAL BAY WIDTH	15'	
MAX BAY PROJECTION	3' 5'	FRONT AND SIDE STREET REAR YARD
FIRST FLOOR NON-RESIDENTIAL MINIMUM HEIGHT (SEP FROM GRADE TO LIVING UNIT):	12'	
GROUND FLOOR REQUIRED TRANSPARENCY	65%	

OPEN SPACE (S.F.)		
REQUIRED - 150 s.f. / unit per table 17.19.04		
REQUIRED GROUP OPEN SPACE = 150 X 77	**11,550**	**S.F.**
MIN. DIMENSION	15'	
PROVIDED - COMMON		
MAIN COURTYARD (FLOOR 2)	4,609	S.F.
TOTAL PROVIDED	**4,609**	**S.F.**
PROVIDED - PRIVATE	0	S.F.
SUBSTITUTION FOR COMMON OPEN SPACE 2:1	0	
PROVIDED - INDOOR COMMON SPACE COUNTED AS OPEN SPACE		
TOTAL OPEN SPACE PROVIDED (COMMON + 2X PRIVATE)	4,609	S.F.
UNITS		
ONE BEDROOM	33	43%
TWO BEDROOM	19	25%
THREE BEDROOM	25	32%
TOTAL	**77**	**UNITS**
BUILDING AREA (S.F.) - GROSS AREAS		
FLOOR 1 (INCLUDES 2,052 S.F. RETAIL)		
CONDITIONED AREA (OFFICES / LOBBY)	2,613	S.F.
UNCONDITIONED (GARAGE/UTILITY) AREA	15,093	S.F.
FLOOR 2	15,350	S.F.
FLOOR 3	15,350	S.F.
FLOOR 4	15,140	S.F.
FLOOR 5	15,006	S.F.
FLOOR 6	15,006	S.F.
TOTAL GROSS AREA	**93,558**	**S.F.**
TOTAL GROSS AREA - CONDITIONED ONLY	**78,465**	**S.F.**
PARKING		
REQUIRED - RESIDENTIAL		
CN-3 RATIO - BASE	1	
CN-3 RATIO MODIFIED FOR AFFORDABLE: 1/2 STALL / UNIT	0.5	TRANSIT DISTRICT
TOTAL REQUIRED	38.5	STALLS
REQUIRED - RETAIL - LESS THAN 3,000 S.F.	ZERO	STALLS
TOTAL REQUIRED	**39**	**STALLS**
REQUIRED ACCESSIBLE	**2**	**STALLS**
TOTAL PROVIDED	**39**	**STALLS**
MIN. STALL DIMENSIONS (17.116.200)	8' X 18'	
AISLE (Sect. 17.116.210)	21'	
BICYCLES		
SHORT TERM (10% OF PARKING, MIN 4)	10% OF PARKING	(or MIN 4)
LONG TERM (1 PER 4 UNITS) - REQ'D	50	BIKES
LOADING		
REQUIRED FOR RESIDENTIAL USES OVER 50,000 S.F.	N/A	

PROJECT TEAM

DEVELOPER

RESOURCES FOR COMMUNITY DEVELOPMENT
2220 OXFORD STREET
BERKELEY, CA 94704
Phone: 510-841-4410
CONTACT: NICK CRANMER
ncranmer@rcdhousing.org

ARCHITECT

HKIT ARCHITECTS
538 NINTH ST SUITE 240
OAKLAND, CA 94607
Phone: 510-625-9800
CONTACT: PAUL MCELWEE
pmcelwee@hkit.com

CIVIL

BKF ENGINEERS
300 FRANK H. OGAWA PLAZA #380
OAKLAND, CA 94612
Phone: 650-482-6458

LANDSCAPE

VanDorn ABED LANDSCAPE ARCHITECTS
81 14TH STREET
SAN FRANCISCO, CA 94103
Phone: 415-864-1921
CONTACT: SHARI VANDORN
shari@valainc.com

SHEET INDEX

VIEW FACING NORTHEAST ALONG MACARTHUR BLVD

3801 MLK JR. WAY

OAKLAND, CALIFORNIA

JOB NO.	30366
DRAWN	ALR
CHECKED	PM
JOB CAPTAIN	PM
DATE	
12/19/18	PRELIMINARY PLANNING PRE-APP
07/16/19	PLANNING APPLICATION

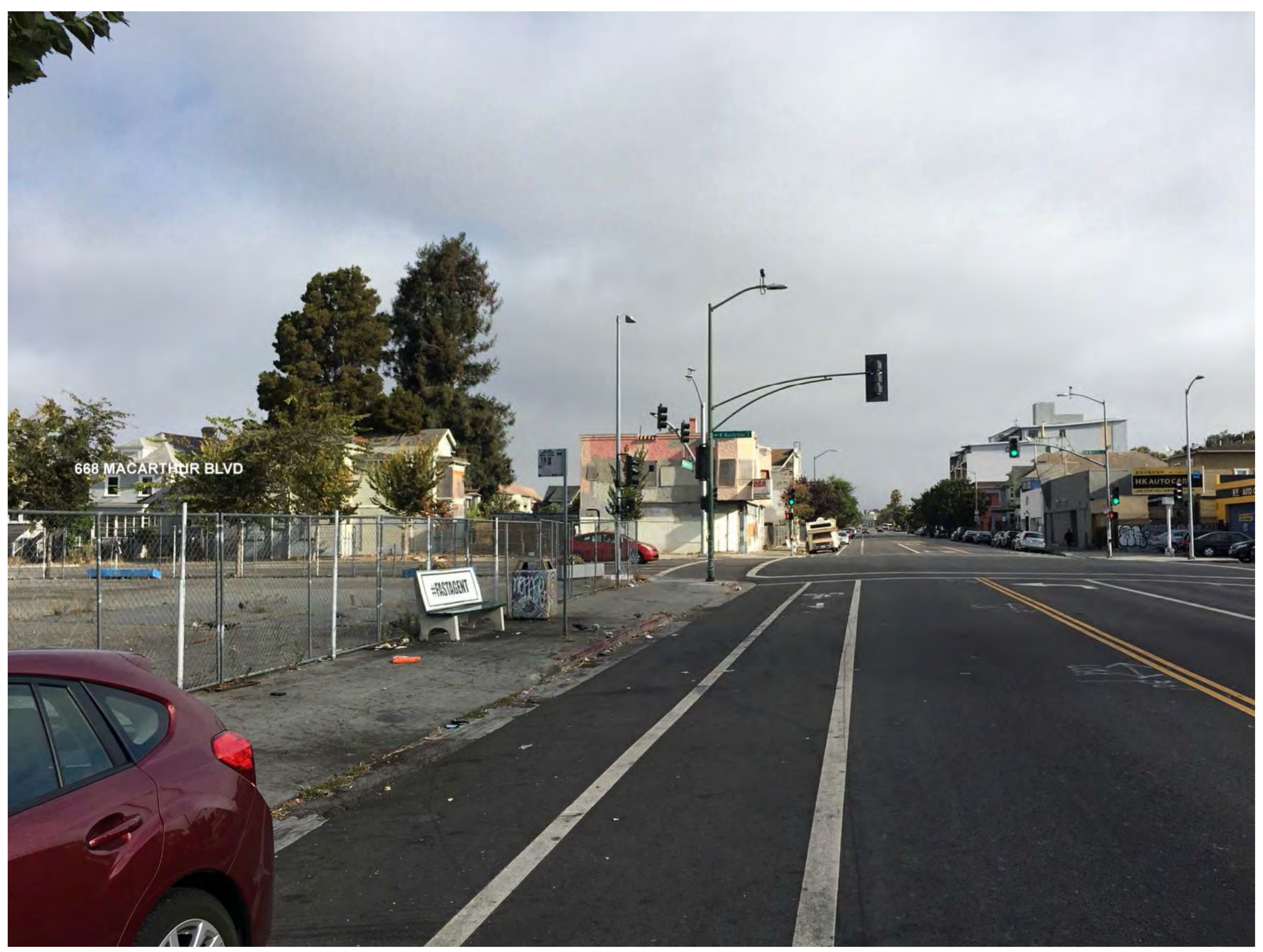
DRAWING TITLE

PROJECT INFORMATION

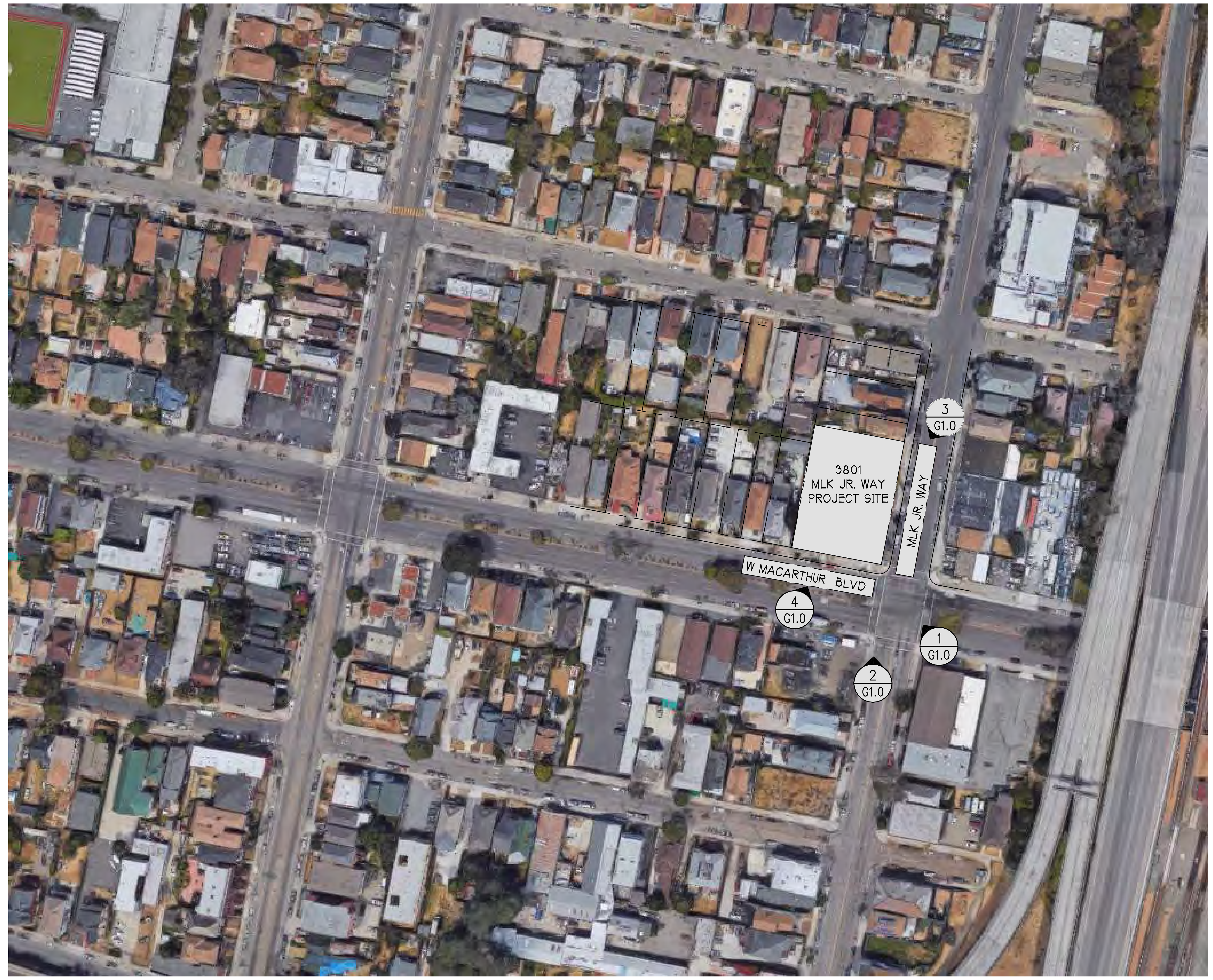
SCALE AS NOTED

G0.0

1 FACING NORTHWEST AT MACARTHUR

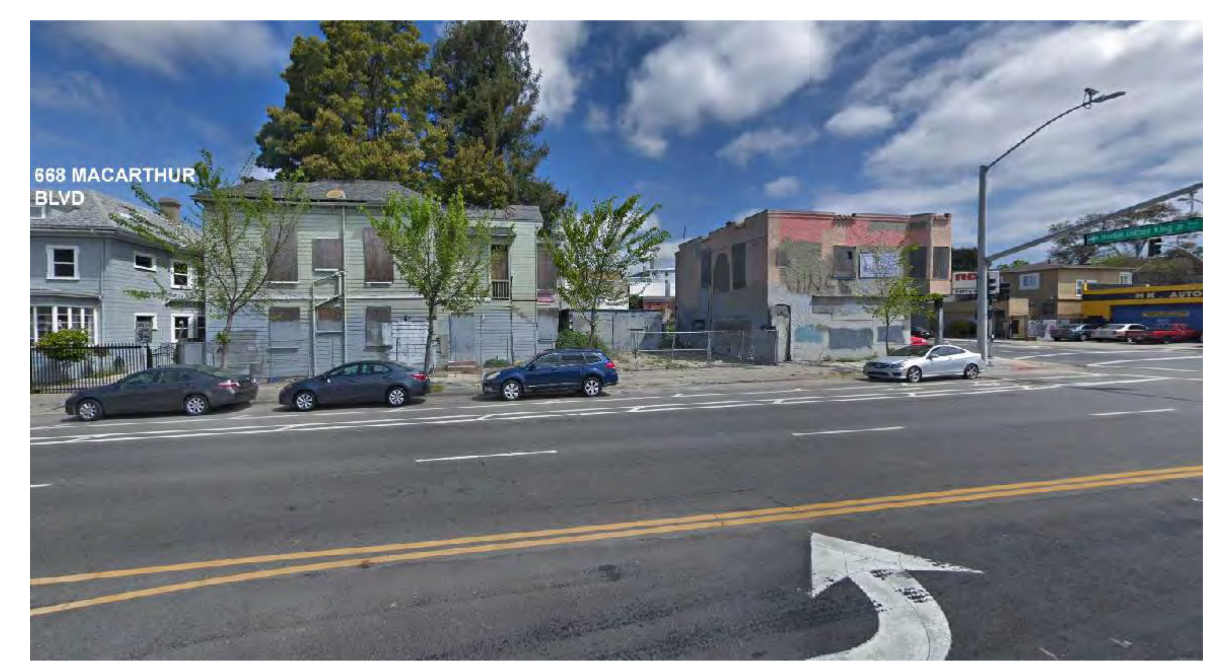


2 FACING NORTH AT MLK JR. WAY



5 AERIAL OF EXISTING CONDITIONS

3 FACING SOUTH FROM MLK JR. WAY



4 FACING NORTH FROM MACARTHUR

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3801 MLK JR. WAY

OAKLAND, CALIFORNIA

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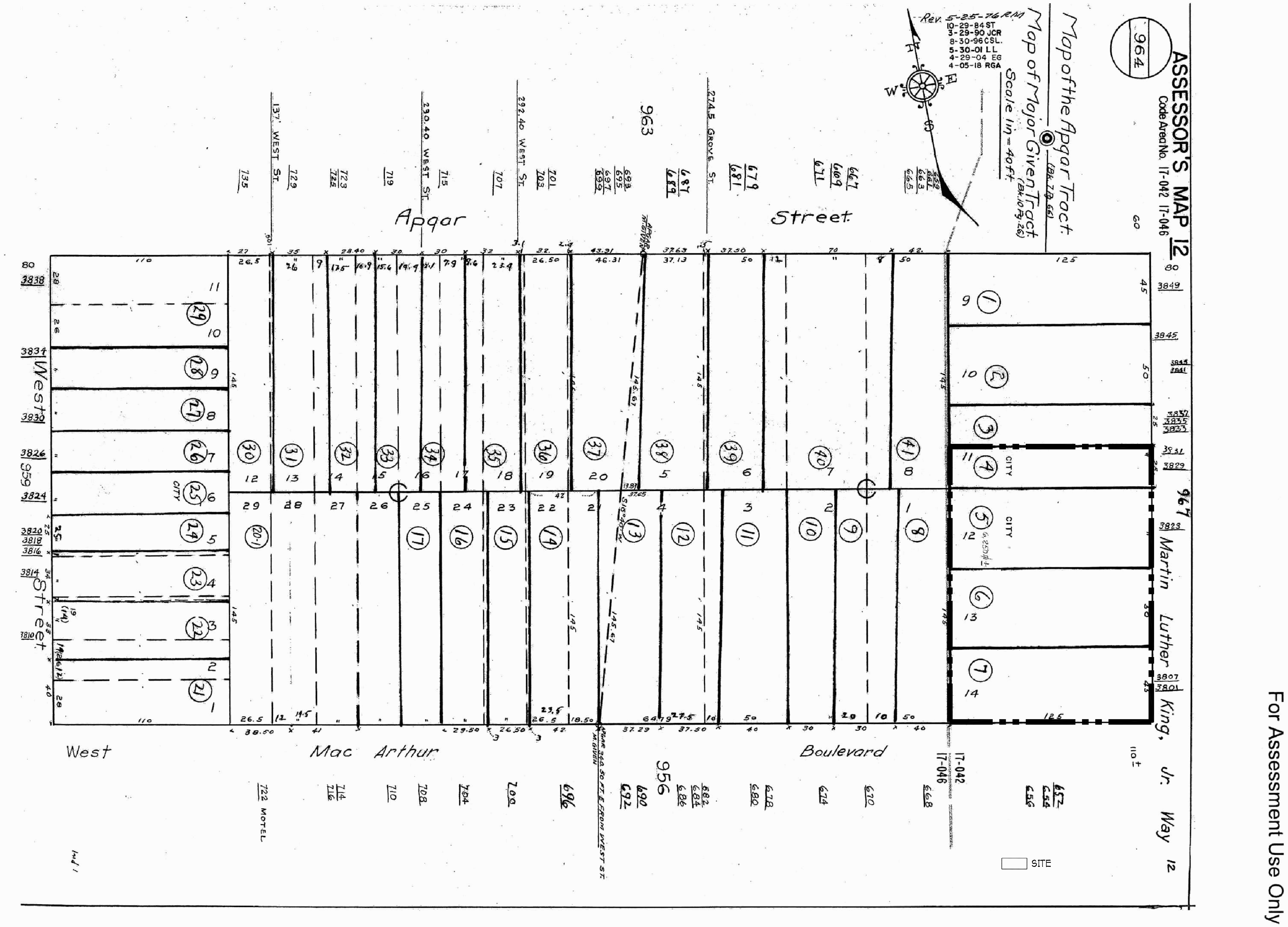
DRAWN	ALR
CHECKED	PM
JOB CAPTAIN	PM
DATE	
12/19/18	PRELIMINARY PLANNING PRE-APP
07/16/19	PLANNING APPLICATION

DRAWING TITLE

EXISTING CONTEXT

SCALE NONE

G1.0



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3801 MLK JR. WAY

OAKLAND, CALIFORNIA

JOB NO.	30366
DRAWN	ALR
CHECKED	PM
JOB CAPTAIN	PM

DATE
12/19/18 PRELIMINARY PLANNING PRE-APP
07/16/19 PLANNING APPLICATION

DRAWING TITLE
ASSESSOR'S MAP

SCALE NONE

G2.0

LEGEND

EXISTING

- PROPERTY LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- COMMUNICATION LINE
- OVERHEAD LINE
- STORM DRAIN LINE
- ELECTRICAL LINE
- CURB AND GUTTER
- CURB LINE
- BUILDING WALL
- METAL BAR FENCE
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE
- STREET LIGHT
- TRAFFIC LIGHT POLE
- CATCH BASIN
- FIRE HYDRANT
- BOLLARD
- GAS VALVE
- UTILITY BOX
- UTILITY POLE
- SITE TREE
- CONCRETE

EXISTING GENERAL NOTES

1. BOUNDARY INFORMATION IS BASED ON RECORD INFORMATION ONLY.
2. TOPOGRAPHY SHOWN HEREON IS DERIVED FROM FIELD SURVEYS DATED JANUARY 17,2019.
3. ASSESSOR'S PARCEL NUMBERS: 12-964-4, 12-964-5, 12-964-6, & 12-964-7.
4. ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS THEREOF.
5. AREA: 21,274 SQUARE FEET, MORE OR LESS.

UTILITY NOTES

THE UTILITY LINES ON THIS SURVEY ARE DERIVED FROM RECORD DATA AND ARE APPROXIMATE. ACTUAL LOCATION AND SIZE, TOGETHER WITH THE PRESENCE OF ANY ADDITIONAL UTILITY LINES NOT SHOWN ON THIS SURVEY SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

10' 0 10' 20'

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SURVEYORS
PLANNERS
1646 N. CALIFORNIA BLVD, SUITE 400
WALNUT CREEK, CA 94596
PH: (925) 940-2200 FAX: (925) 940-2299

3801 MLK JR. WAY

OAKLAND, CALIFORNIA

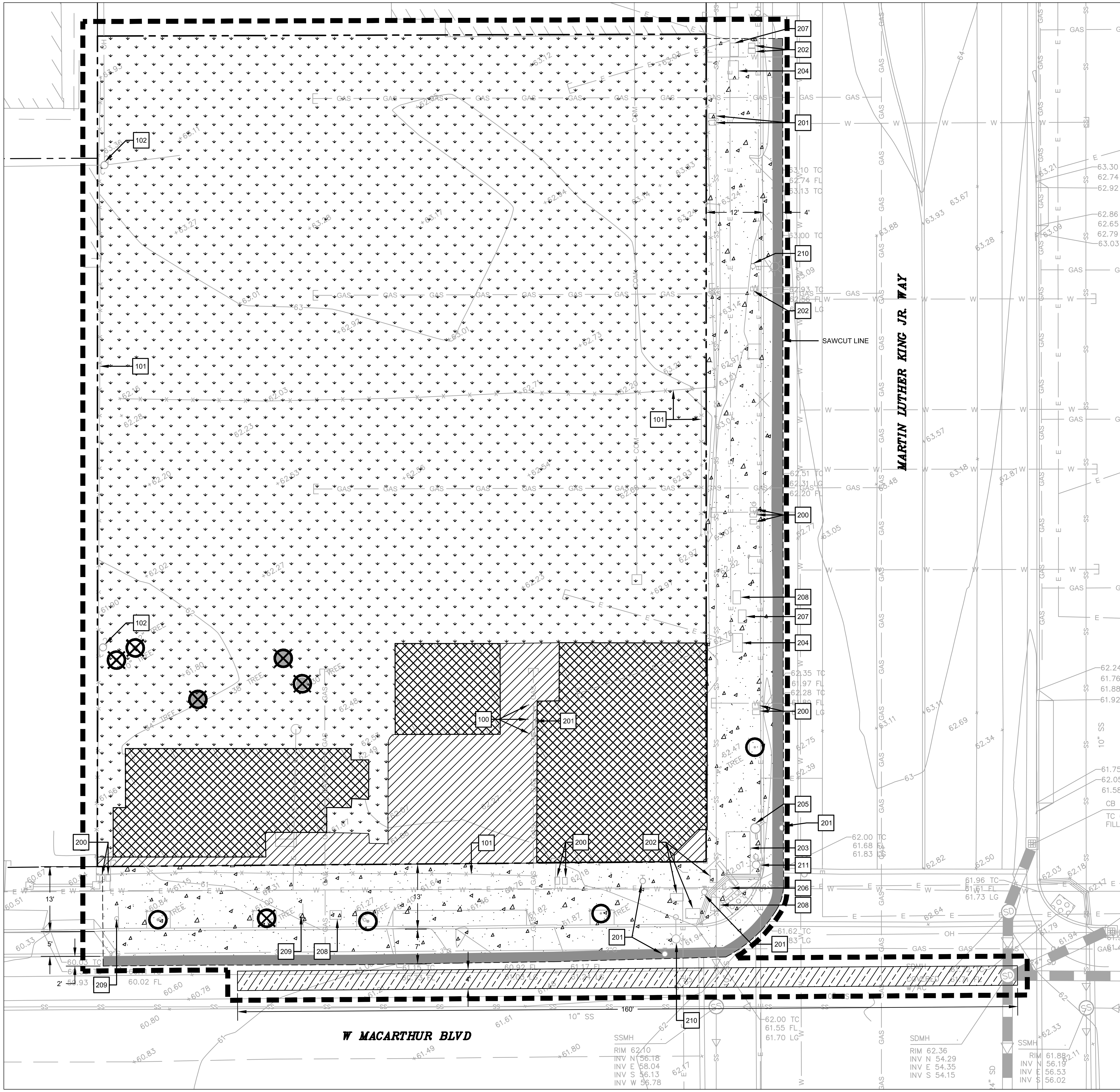
JOB NO.	20181870
DRAWN	FC
CHECKED	JF
JOB CAPTAIN	JW
DATE	JULY 16, 2019 ENTITLEMENT SUBMITTAL

DRAWING TITLE

EXISTING CONDITIONS PLAN

SCALE AS NOTED

C0.00



LEGEND

- APPROXIMATE LIMITS OF DEMOLITION
- SAWCUT
- REMOVE CONCRETE DRIVEWAYS, SIDEWALK, CURB AND GUTTER
- ON-SITE BUILDING DEMOLITION
- ON-SITE CONCRETE DEMOLITION
- ON-SITE CLEAR AND GRUB
- ASPHALT CONCRETE REMOVAL
- UTILITY TRENCH
- PROTECT EXISTING TREE AND GRATE
- REMOVE EXISTING TREE AND GRATE

KEYNOTES

REMOVE

- 100 BOLLARD
- 101 FENCE
- 102 UTILITY POLES

PROTECT

- 200 WATER METER
- 201 GAS VALVE
- 202 UTILITY BOX
- 203 ELECTRIC VAULT
- 204 TELEPHONE BOX
- 205 FIRE HYDRANT
- 206 STREET LIGHT BOX
- 207 TELEVISION BOX
- 208 ELECTRICITY BOX
- 209 SIGN POST
- 210 STREET LIGHT POLE
- 211 TRAFFIC LIGHT POLE

DEMOLITION NOTES

1. THE UTILITIES SHOWN ON THIS PLAN AREA DERIVED FROM RECORD DATA AND/OR SURFACE OBSERVATION AND ARE APPROXIMATE ONLY. ACTUAL LOCATION AND SIZE, TOGETHER WITH THE PRESENCE OF ANY ADDITIONAL UTILITY LINES NOT SHOWN ON THIS PLAN SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO CONSTRUCTION.
2. ALL EXISTING UNDERGROUND IN THE PUBLIC RIGHT OF WAY SHALL BE PROTECTED UNLESS OTHERWISE NOTED.
3. ALL EXISTING UTILITY BOXES, STRUCTURES, MANHOLES AND VALVES WITHIN THE LIMIT OF WORK SHALL BE ADJUSTED TO FINAL GRADE UNLESS OTHERWISE NOTED.
4. ALL SIDEWALK SAWCUTS, CUT AT THE NEAREST EXPANSION JOINT AS APPROVED BY THE CITY INSPECTOR AND / OR APPROVED REPRESENTATIVE.
5. CONTRACTOR IS RESPONSIBLE TO LEGALLY DISPOSE OF ALL REMOVED MATERIAL.

GRAPHIC SCALE
10' 0 10' 20'

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WALNUT CREEK, CA 94596
PH: (925) 940-2200 FAX: (925) 940-2299

3801 MLK JR. WAY

OAKLAND, CALIFORNIA

JOB NO.	20181870
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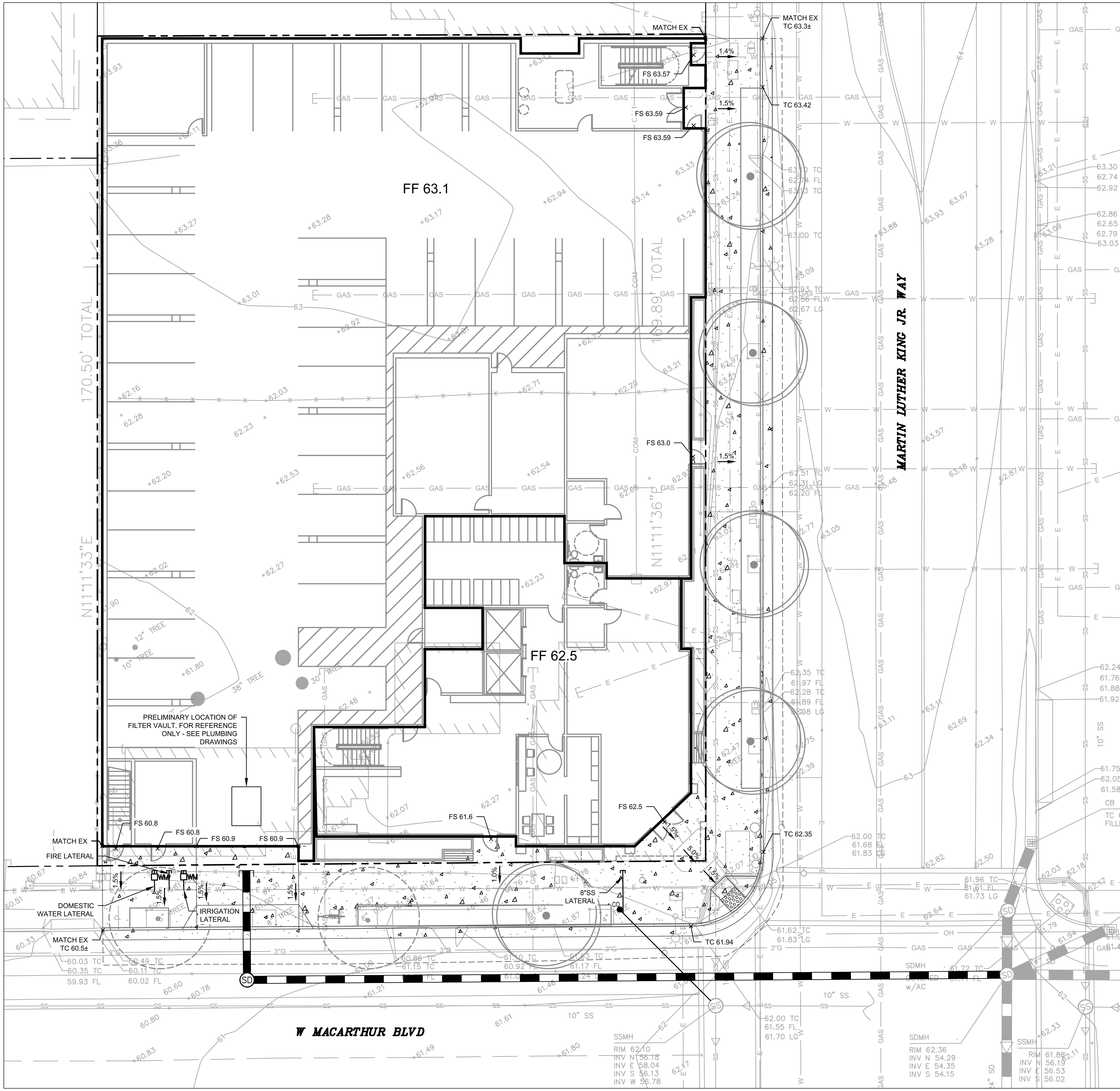
CHECKED	JF
JOB CAPTAIN	JW
DATE	JULY 16, 2019 ENTITLEMENT SUBMITTAL

DRAWING TITLE
DEMOLITION PLAN

SCALE AS NOTED

C1.00



LEGEND

EXISTING

- PROPERTY LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- COMMUNICATION LINE
- OVERHEAD LINE
- STORM DRAIN LINE
- ELECTRICAL LINE
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE
- STREET LIGHT
- TRAFFIC LIGHT
- CATCH BASIN
- FIRE HYDRANT
- BOLLARD
- GAS VALVE
- UTILITY BOX
- UTILITY POLE

PROPOSED

- STORM DRAIN LINE
- SANITARY SEWER LINE
- SANITARY SEWER CLEANOUT
- STORM DRAIN MANHOLE
- CONCRETE SIDEWALK

GRADING GENERAL NOTES

1. GRADING OPERATIONS WILL OCCUR OVER EXISTING UTILITIES. CONTRACTOR SHALL EXERCISE THE NECESSARY CARE TO ENSURE EXISTING UTILITIES ARE NOT DAMAGED OR EXPERIENCE ANY INTERRUPTION IN SERVICE. ANY UTILITIES DAMAGED DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED TO ORIGINAL CONDITION AT THE EXPENSE OF THE CONTRACTOR.
2. ORDER OF WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL BE PHASED SUCH THAT CLOSURE OF PUBLIC FACILITIES ARE MINIMIZED.
3. FINAL PAVING LIMITS ARE TO THE CENTERLINE OF MARTIN LUTHER KING JR. WAY AND TO THE CENTER MEDIAN ALONG WEST MACARTHUR BOULEVARD.

UTILITY GENERAL NOTES

1. ALL EXISTING UTILITIES HAVE BEEN PLOTTED FROM RECORD INFORMATION AND FIELD TOPOGRAPHIC SURVEY. THE TYPES, LOCATIONS, SIZES AND DEPTHS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS MAY VARY AND ADDITIONAL FACILITIES MAY EXIST. THE CONTRACTOR IS CAUTIONED THAT ONLY EXCAVATION WILL REVEAL THE TYPES, EXTEND, SIZES, LOCATIONS, AND DEPTH OF EXISTING UNDERGROUND UTILITIES.
2. UNLESS OTHERWISE NOTED ALL UTILITY LINES AND STRUCTURES SHALL REMAIN AND BE PROTECTED IN PLACE.
3. CONTRACTOR SHALL VERIFY EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF WORK.
4. CONTRACTOR TO POTHOLE AND FIELD VERIFY ALL UTILITY CROSSINGS.
5. CONTRACTOR TO CONTACT USA AT (800)247-2600 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION. UTILITY REMOVAL OR EXCAVATION.
6. LENGTHS OF STORM DRAIN PIPES ARE HORIZONTAL DISTANCES FROM CENTER TO CENTER OF STRUCTURES, ROUNDED TO THE NEAREST FOOT AND ARE SHOWN FOR ENGINEERING CALCULATIONS ONLY. CONTRACTOR SHALL ESTIMATE HIS/HER OWN PIPE LENGTHS PRIOR TO BIDDING.
7. ALL UTILITY LINES (DOMESTIC WATER, IRRIGATION, FIRE WATER, STORM DRAIN AND SANITARY SEWER) SHALL BE STUBBED 5 FT FROM BUILDING. SEE PLUMBING PLAN FOR CONTINUATION INTO BUILDINGS.
8. CONTRACTOR TO INSTALL NPDES MEDALLION AT ALL STORM DRAIN CATCH BASINS PER CITY OF OAKLAND STANDARD DETAIL XX, SHEET XX.
8. OWNER TO RESEARCH AND REVIEW PREVIOUS STREET VACANCY RECORD MAPS. PRIOR TO CONSTRUCTION, OWNER MAY POTENTIALLY HAVE TO NEGOTIATE AGREEMENT WITH ADJACENT PROPERTY OWNER FOR PUBLIC UTILITY EASEMENTS TO ACCOMMODATE PROPOSED STORM DRAIN AND SANITARY SEWER LINES OR PROJECT MAY NEED TO MODIFY PROPOSED UTILITIES TO UTILIZE EXISTING EASEMENTS.
9. CONTECH MEDIA FILTER (LOCATED IN XX) SHALL HAVE BACKUP GENERATOR IN THE EVENT OF A POWER LOSS.
10. ALL UTILITY POINTS OF CONNECTIONS (P.O.C.) WILL BE ACCOMMODATED WITHIN THE BUILDING STRUCTURE AND SHALL BE SUBJECT TO ALL BUILDING PERMIT REQUIREMENTS
11. UTILITY TRENCH REPAIR SHALL BE PER UTILITY AGENCY STANDARD OR CITY STANDARD.

GRAPHIC SCALE
10' 0 10' 20'

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1646 N. CALIFORNIA BLVD, SUITE 400
WALNUT CREEK, CA 94596
PH: (925) 940-2200 FAX: (925) 940-2299

3801 MLK JR. WAY

OAKLAND, CALIFORNIA

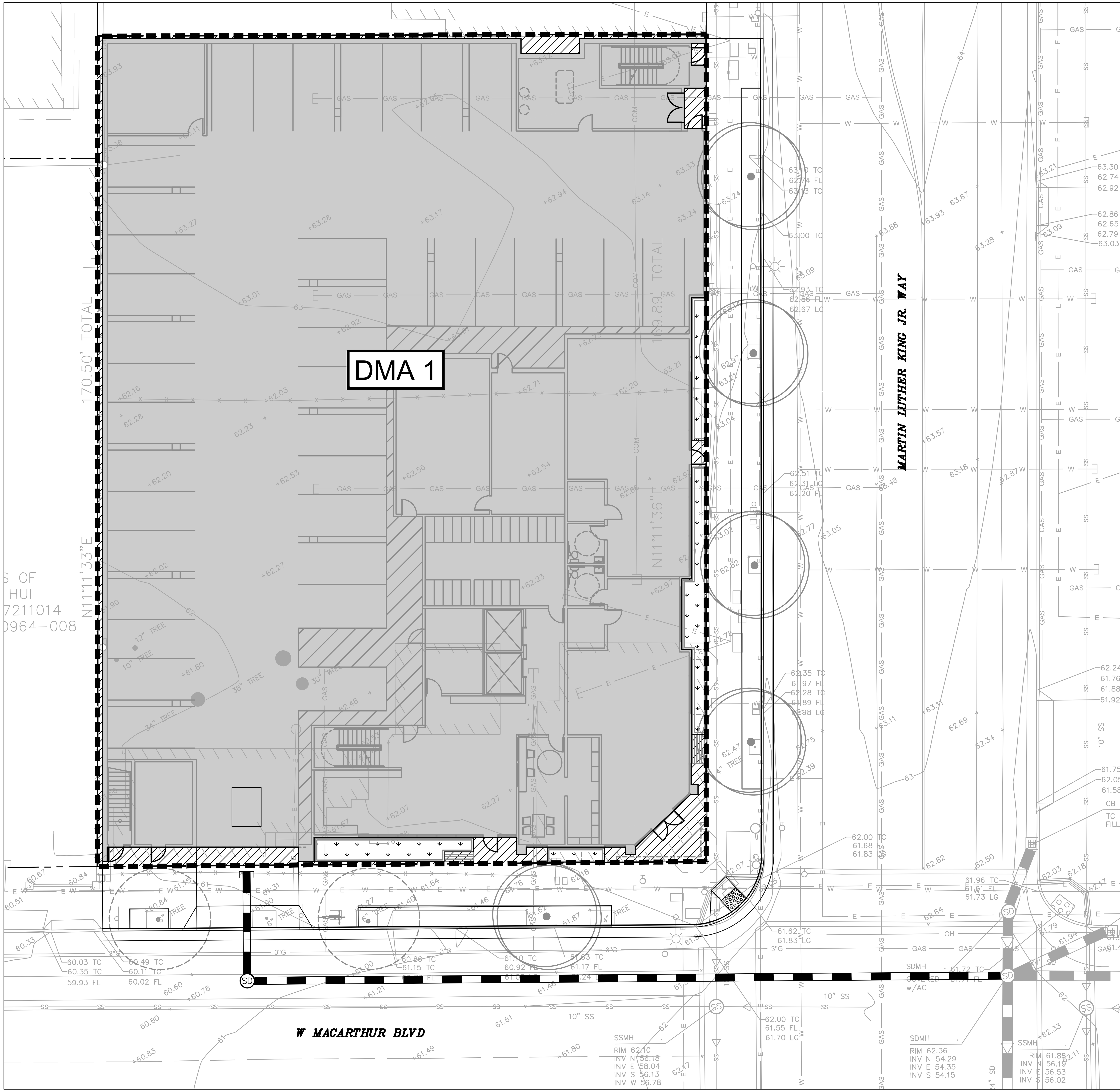
JOB NO.	20181870
DRAWN	FC
CHECKED	JF
JOB CAPTAIN	JW
DATE	
JULY 16, 2019 ENTITLEMENT SUBMITTAL	

DRAWING TITLE

GRADING AND UTILITY PLAN

SCALE AS NOTED

C2.00



LEGEND

- BUILDING AREA (20,003 SF)
- NOT TREATED AREA (834 SF)
- STREET LEVEL PLANTERS SELF TREATING (438 SF)
- PROJECT BOUNDARY

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1646 N. CALIFORNIA BLVD, SUITE 400
WALNUT CREEK, CA 94596
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3801 MLK JR. WAY

OAKLAND, CALIFORNIA

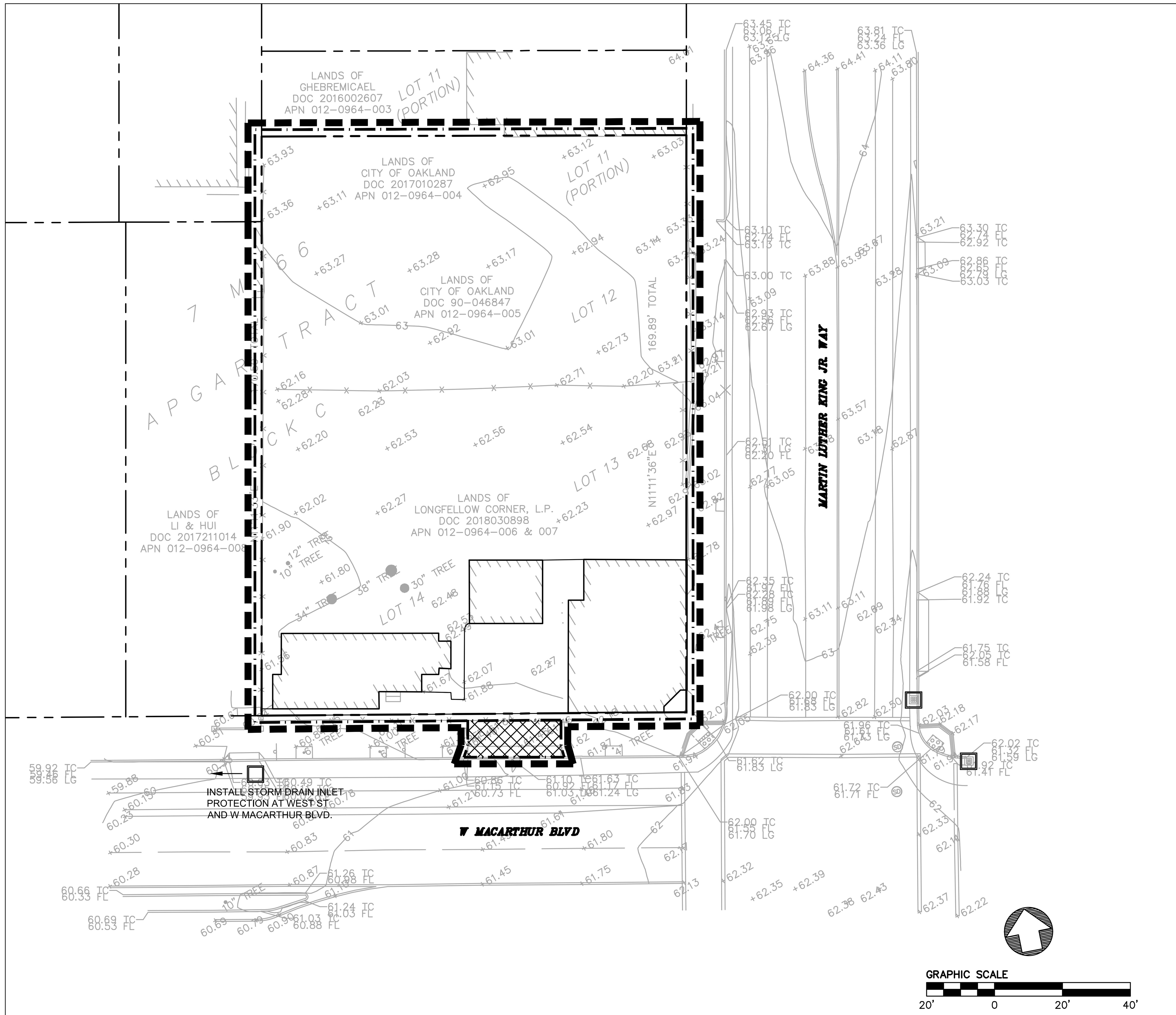
JOB NO.	20181870
DRAWN	FC
CHECKED	JF
JOB CAPTAIN	JW
DATE	JULY 16, 2019 ENTITLEMENT SUBMITTAL

DRAWING TITLE
STORMWATER CONTROL PLAN

811
Know what's below. Call before you dig.

SCALE AS NOTED

C3.00



TEMPORARY MEASURES EFFECTIVE DURING RAINY SEASON (OCTOBER 1 TO APRIL 15)

1. TEMPORARY EROSION CONTROL DEVICES SHOWN ON GRADING PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.

2. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL DEVICES SHOWN ON THE EROSION CONTROL PLAN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON AND MAINTAINED DURING THE RAINY SEASON (OCTOBER 1 TO APRIL 15).

3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF THE ASSOCIATION OF BAY AREA GOVERNMENTS (ABAG) "MANUAL OF STANDARDS FOR EROSION AND SEDIMENT CONTROL MEASURES" UNLESS OTHERWISE STATED WITHIN THESE GENERAL NOTES. CONTROL MEASURES ARE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DIVISION OF THE PUBLIC SERVICES DEPARTMENT. SCHEDULE AN ENGINEERING INSPECTION BY CALLING 925-943-5839 AT LEAST 48 HOURS PRIOR TO THE START OF ANY WORK.

4. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.

5. THE CONTRACTOR SHALL PLACE 3"-4" FRACTURED STONE AGGREGATE AS A GRAVEL ROADWAY (6" MINIMUM THICKNESS FOR THE FULL WIDTH AND 50 FEET LONG) AT EACH ROAD ENTRANCE TO THE SITE. ANY MUD THAT IS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED THE SAME DAY AS REQUIRED BY THE CITY ENGINEER. MINIMUM WIDTH OF GRAVEL ROADWAY IS 10 FEET.

6. A CONCRETE WASHOUT IS REQUIRED FOR ALL CONCRETE WORK. THE WASHOUT SHALL CONSIST OF A CONTAINMENT AREA ENCLOSED BY AN EARTHEN DIKE. PLASTIC TARP, COVERING THE CONTAINMENT AREA AND EARTHEN DIKE, SHALL BE STAKED IN AT OUTSIDE EDGE OF EARTHEN DIKE.

7. ADDITIONAL CONTAINMENT METHODS MUST BE PROVIDED FOR ANY WASTE STORAGE AREA, STOCKPILE/MATERIAL STORAGE AREA AND/OR CONSTRUCTION TOILET AREA.

8. IF THE PROJECT REQUIRES A STORMWATER POLLUTION PREVENTION PLAN (SWPPP), PROVIDE THE FOLLOWING:

   WASTE DISCHARGE IDENTIFICATION NUMBER (WDIN) ____________________

   CONTACT PERSON'S NAME: ____________________

   ADDRESS: ____________________

   TELEPHONE NUMBER: ____________________

9. STAND-BY CREWS SHALL BE ALERTED BY THE PERMITTEE OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS.

10. AFTER OCTOBER 1, ALL EROSION CONTROL MEASURES WILL BE INSPECTED DAILY AND AFTER EACH STORM. AFTER OCTOBER 1, BREACHES IN DIKES AND SWALES WILL BE REPAIRED AT THE CLOSE OF EACH DAY AND WHENEVER RAIN IS FORECAST.

11. AS A PART OF THE EROSION CONTROL MEASURES, UNDERGROUND STORM DRAIN FACILITIES AND CONCRETE SHALL BE INSTALLED COMPLETE AS SHOWN ON THE IMPROVEMENT PLANS.

12. ALL STORM DRAIN INLET STRUCTURES GREATER THAN FOUR FEET IN DEPTH SHALL HAVE STEPS INSTALLED PER THE LATEST ACCEPTED SAFETY STANDARDS. A 6" CONCRETE COVER SLAB SHALL BE INSTALLED OVER PIPE WITH LESS THAN 2.5 FEET OF COVER TO SUBGRADE. ALL PIPE TO BE CLASS III UNLESS OTHERWISE NOTED.

13. ALL GRADED AREAS, INCLUDING, BUT NOT LIMITED TO, CUT AND FILL SLOPES, STREETS, PARKING AREAS,
    AND BUILDING PADS SHALL BE HYDROSEEDED PER ABAG. IN ADDITION TO HYDROSEEDING, APPLICATION OF STRAW WITH A TACKIFIER OR MULCH MAY BE REQUIRED BY THE CITY ENGINEER.

14. IF ANY GRADING OPERATIONS, OTHER THAN LOT FINISH GRADING, ARE TO BE PERFORMED DURING THE RAINY SEASON, OCTOBER 1 THROUGH APRIL 15, AN EROSION CONTROL PLAN MUST BE SUBMITTED BY SEPTEMBER 1 AND THE PLAN MUST BE APPROVED BY THE CITY OF WALNUT CREEK PRIOR TO THE COMMENCEMENT OF ANY SUCH GRADING OPERATIONS.

15. TO MINIMIZE EROSION OF GRADED BANKS, ALL GRADED BANKS STEEPER THAN 2% AND HIGHER THAN 3 FEET, SHALL BE HYDROSEEDED, LANDSCAPED, OR SEALED. IN ADDITION TO HYDROSEEDING, APPLICATION OF STRAW WITH A TACKIFIER OR MULCH MAY BE REQUIRED BY THE CITY ENGINEER. IF THE PERMANENT STORM DRAIN SYSTEM IS NOT INSTALLED BY OCTOBER 1, TEMPORARY DITCHES SHALL BE CONSTRUCTED TO CONTAIN THE STORM WATER AND DIRECT IT, IN A MANNER THAT AVOIDS EROSION OF THE BANKS, TO THE EROSION AND SEDIMENT CONTROL FACILITIES.

16. ALL CUT AND FILL SLOPES ARE TO BE PROTECTED TO PREVENT OVERBANK FLOW USING 4" EARTH BERMS OR SILT FENCES.

17. ALL GRADED AREAS, INCLUDING, BUT NOT LIMITED TO, CUT AND FILL SLOPES, STREETS, PARKING AREAS, AND BUILDING PADS SHALL BE HYDROSEEDED PER CITY'S REQUIREMENT. SUGGESTED MIX DESIGN FOLLOWS:

'BLANDO' BROME	40 LBS/ACRE
ZORRO FESCUE	10 LBS/ACRE
HYKON ROSE CLOVER	9 LBS/ACRE
SUB CLOVER	5 LBS/ACRE
CALIFORNIA NATIVE WILDFLOWER	8 LBS/ACRE
FERTILIZER	300 LBS/ACRE
ORGANIC BINDER	100 LBS/ACRE
STRAW MULCH	4000 LBS/ACRE

18. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE CITY ENGINEER.

19. SANDBAGS, STRAW WATTLES AND/OR STRAW BALES SHALL BE STOCKPILED ON SITE AND PLACED AT INTERVALS SHOWN ON EROSION CONTROL PLANS, WHEN THE RAIN FORECAST IS 40% OR GREATER, OR WHEN DIRECTED BY THE INSPECTOR.

20. SANDBAGS REFERRED TO IN THE PRECEDING ITEMS MUST BE FULL. APPROVED SANDBAG FILL MATERIALS ARE DECOMPOSED GRANITE AND/OR GRAVEL, OR OTHER MATERIALS APPROVED BY THE INSPECTOR.

21. WHEN DIRECTED BY THE INSPECTOR, A 12-INCH BERM SHALL BE MAINTAINED ALONG THE TOP OF THE SLOPE OF THOSE FILLS ON WHICH GRADING IS NOT IN PROGRESS.

22. WHEN PAD ELEVATIONS OF ADJACENT LOTS OR ELEVATIONS BETWEEN THE STREET AND THE LOT ARE SEPARATED BY MORE THAN 6 FEET, A MINIMUM 12" BERM SHALL BE MAINTAINED ALONG THE PROPERTY LINE SEPARATING THE LOTS, AND THE BERM SHALL DIRECT THE WATER TO THE OUTLET. VELOCITY CHECK DAMS SHALL BE INSTALLED BETWEEN THE OUTLET ON THE LOT AND THE STREET.

23. PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED STREETS AT THE INTERVALS INDICATED BELOW IN NOTE #21. VELOCITY CHECK DAMS MAY BE CONSTRUCTED OF STRAW BALES, SANDBAGS OR OTHER EROSION RESISTANT MATERIALS APPROVED BY THE INSPECTOR, AND SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. EARTH DIKES MAY NOT BE USED AS VELOCITY CHECK DAMS.

24. PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED GRADED CHANNELS AT THE INTERVALS INDICATED BELOW:

GRADE OF CHANNEL	INTERVAL
LESS THAN 3%	100 FEET
3% TO 6%	50 FEET
OVER 6%	25 FEET

25. SEWER OR STORM DRAIN TRENCHES THAT ARE OUT THROUGH BASIN DIKES OR BASIN INLET DIKES, SHALL BE PLUGGED WITH SANDBAGS FROM TOP OF PIPE TO TOP OF DIKE. SEWER LINES SHALL FIRST BE ENCASED IN CONCRETE BEFORE SANDBAGS ARE PLACED.

26. ALL OPEN UTILITY TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS FROM THE BOTTOM TO TOP WITH A DOUBLE ROW OF SANDBAGS PRIOR TO BACKFILL. SEWER TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS WITH A DOUBLE ROW OF SANDBAGS EXTENDING DOWNWARD, TWO SANDBAGS FROM THE GRADED SURFACE OF THE STREET. SANDBAGS ARE TO BE PLACED WITH ALTERNATE HEADER AND STRETCHER COURSES. THE INTERVALS PRESCRIBED BETWEEN SANDBAG LOCKING SHALL DEPEND ON THE SLOPE OF THE GROUND SURFACE, BUT NOT EXCEED THE FOLLOWING:

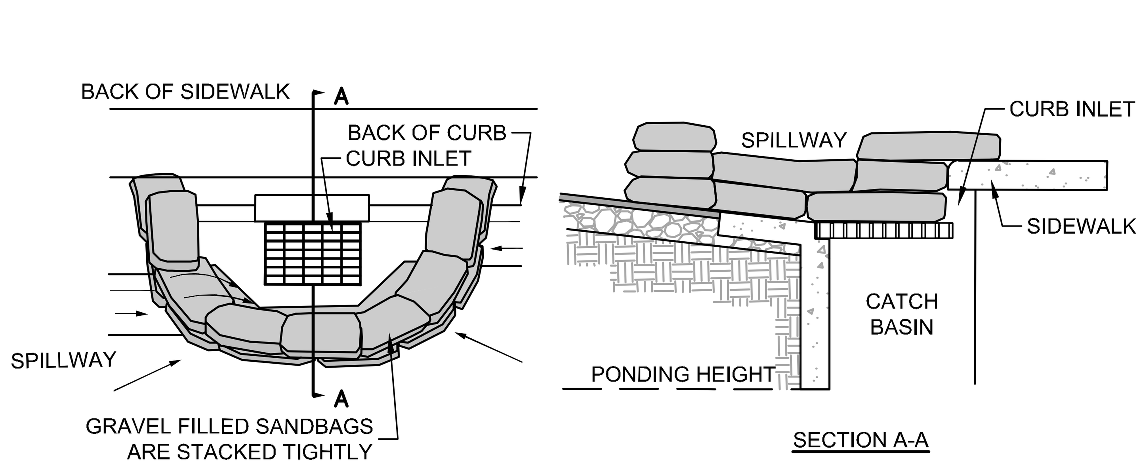
GRADE OF THE STREET	INTERVAL
LESS THAN 2%	AS REQUIRED
2% TO 4%	100 FEET
4% TO 10%	50 FEET
OVER 10%	25 FEET

27. AFTER STORM DRAIN, SANITARY SEWER AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTER LINE OF A CROWNED STREET.

28. SEDIMENT TRAPS SHALL BE CLEANED OUT WHENEVER SEDIMENT REACHES THE SEDIMENT CLEANOUT LEVEL INDICATED ON THE DETAIL ON THIS SHEET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN THE DESILTING BASINS AND THE SEDIMENT TRAPS.

29. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THESE PLANS IN THE FIELD, SUBJECT TO APPROVAL OF THE CITY ENGINEER.

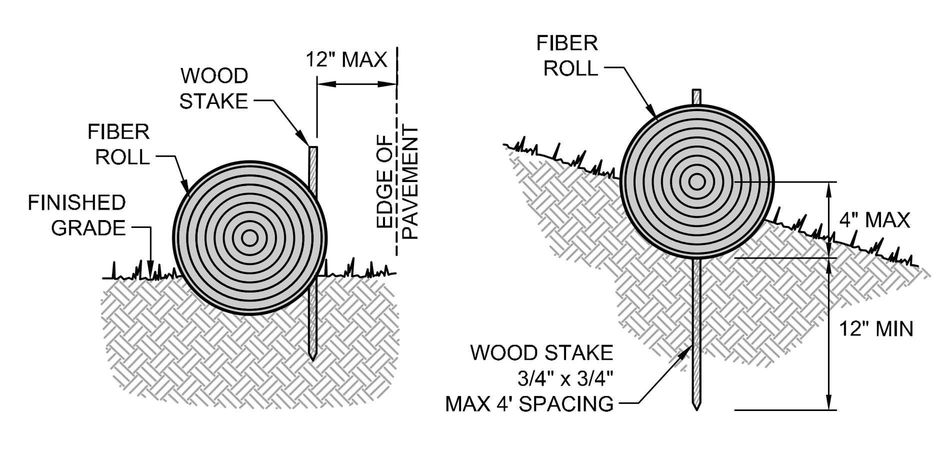
30. EROSION CONTROL STRUCTURES SHALL BE ADJUSTED BY THE CONTRACTOR TO REFLECT ALL CHANGES IN DRAINAGE AS STREETS AND BUILDING PADS ARE BEING INSTALLED.



NOTES:

1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS OF EITHER BURLAP OR WOVEN 'GEOTEXTILE' FABRIC, ARE FILLED WITH GRAVEL LAYERED AND PACKED TIGHTLY.
3. LEAVE A ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

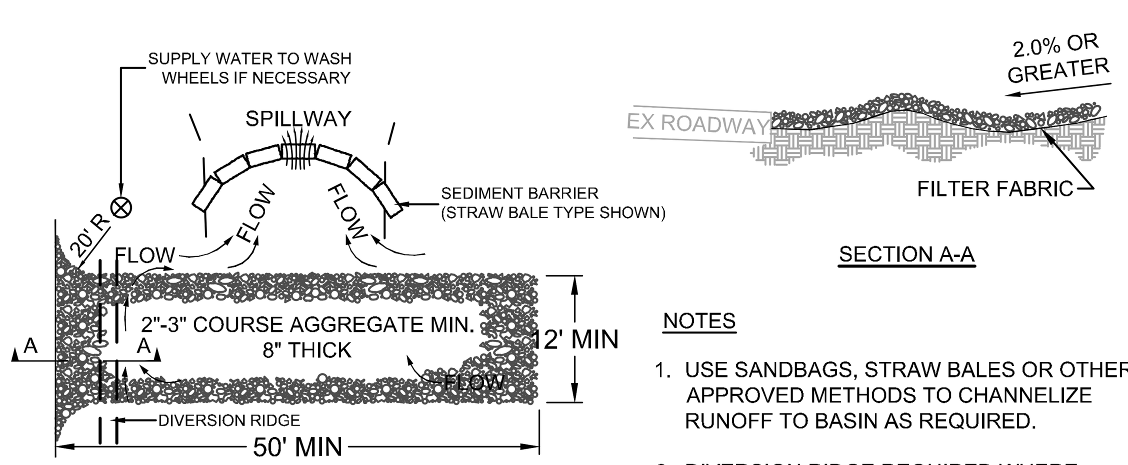
1 / - CURB INLET SEDIMENT BARRIER
NOT TO SCALE



NOTES

1. FIBER ROLLS ARE TUBES MADE FROM POROUS BIODEGRADABLE FIBER STUFFED IN A PHOTO-DEGRADABLE OPEN WEAVE NETTING. THEY ARE APPROXIMATELY 8" DIAMETER.
2. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 2"-4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL. ROLLS SHOULD BE ABUTTED SECURELY TO PROVIDE A TIGHT JOINT, NOT OVERLAPPED.

2 / - FIBER ROLL
NOT TO SCALE



NOTES

1. USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.
2. DIVERSION RIDGE REQUIRED WHERE GRADE EXCEEDS 2.0%

3 / - CONSTRUCTION ENTRANCE
NOT TO SCALE

LEGEND

- APPROXIMATE LIMITS OF WORK
- FIBER ROLLS (2 / -)
- STORM DRAIN INLET PROTECTION (1 / -)
- CONSTRUCTION ENTRANCE (3 / -)

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WALNUT CREEK, CA 94596
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3801 MLK JR. WAY

OAKLAND, CALIFORNIA

JOB NO.	20181870
DRAWN	FC
CHECKED	JF
JOB CAPTAIN	JW
DATE	JULY 16, 2019 ENTITLEMENT SUBMITTAL

DRAWING TITLE

EROSION CONTROL PLAN

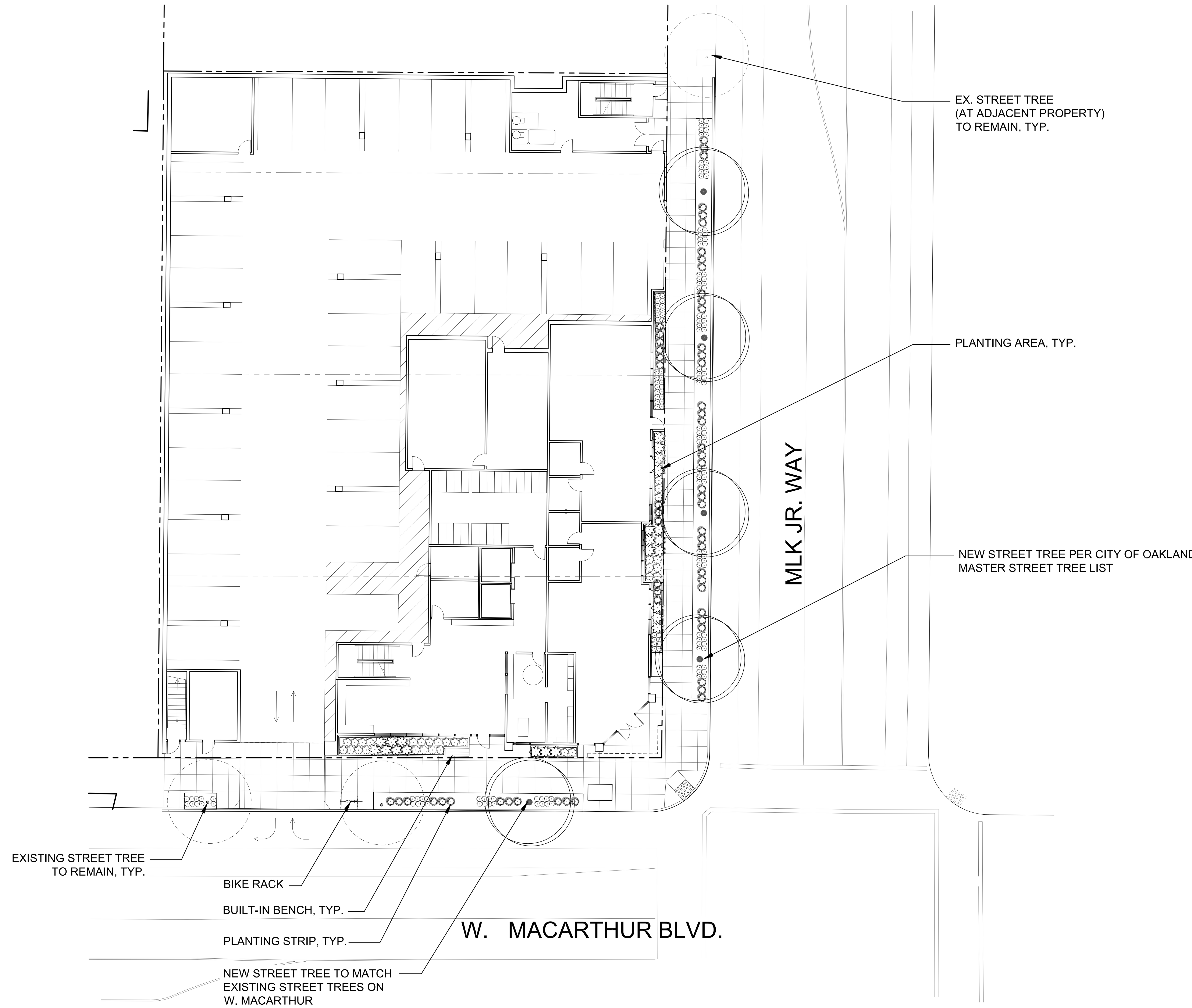
SCALE AS NOTED

C4.00

NOTES

SEE L2.0 FOR SITE AMENITIES

SEE SHEET L3.1 FOR PLANTING LIST, IMAGERY AND PLANTING DESIGN INTENT STATEMENT.



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CONCEPTUAL LANDSCAPE PLAN - STREET LEVEL

SCALE: 1/16" = 1'-0"

DATE: 07.16.2019

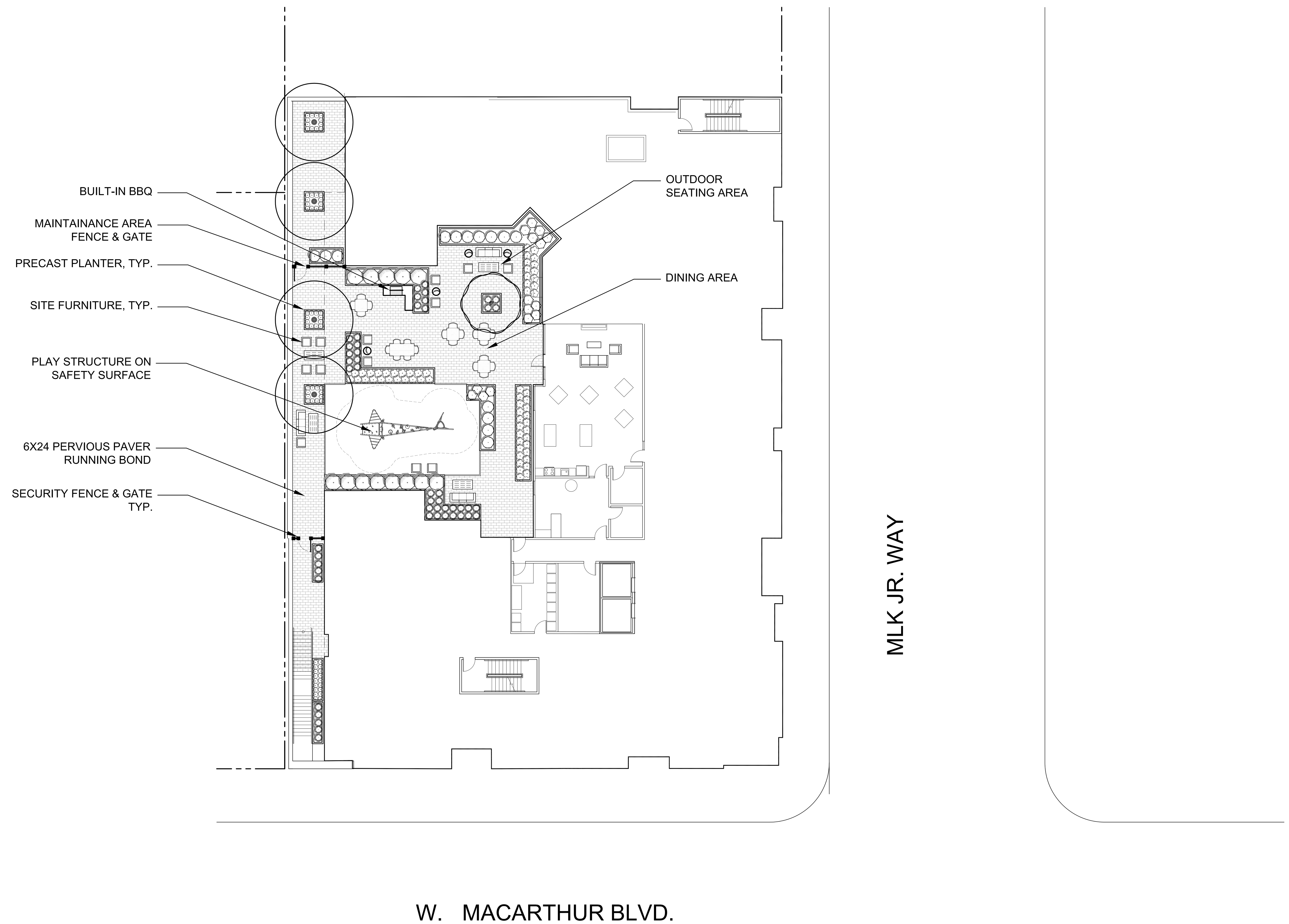
0 8 16 32 48

L1.0

NOTES

SEE L2.0 FOR SITE AMENITIES

SEE SHEET L3.1 FOR PLANTING LIST, IMAGERY AND PLANTING DESIGN INTENT STATEMENT.



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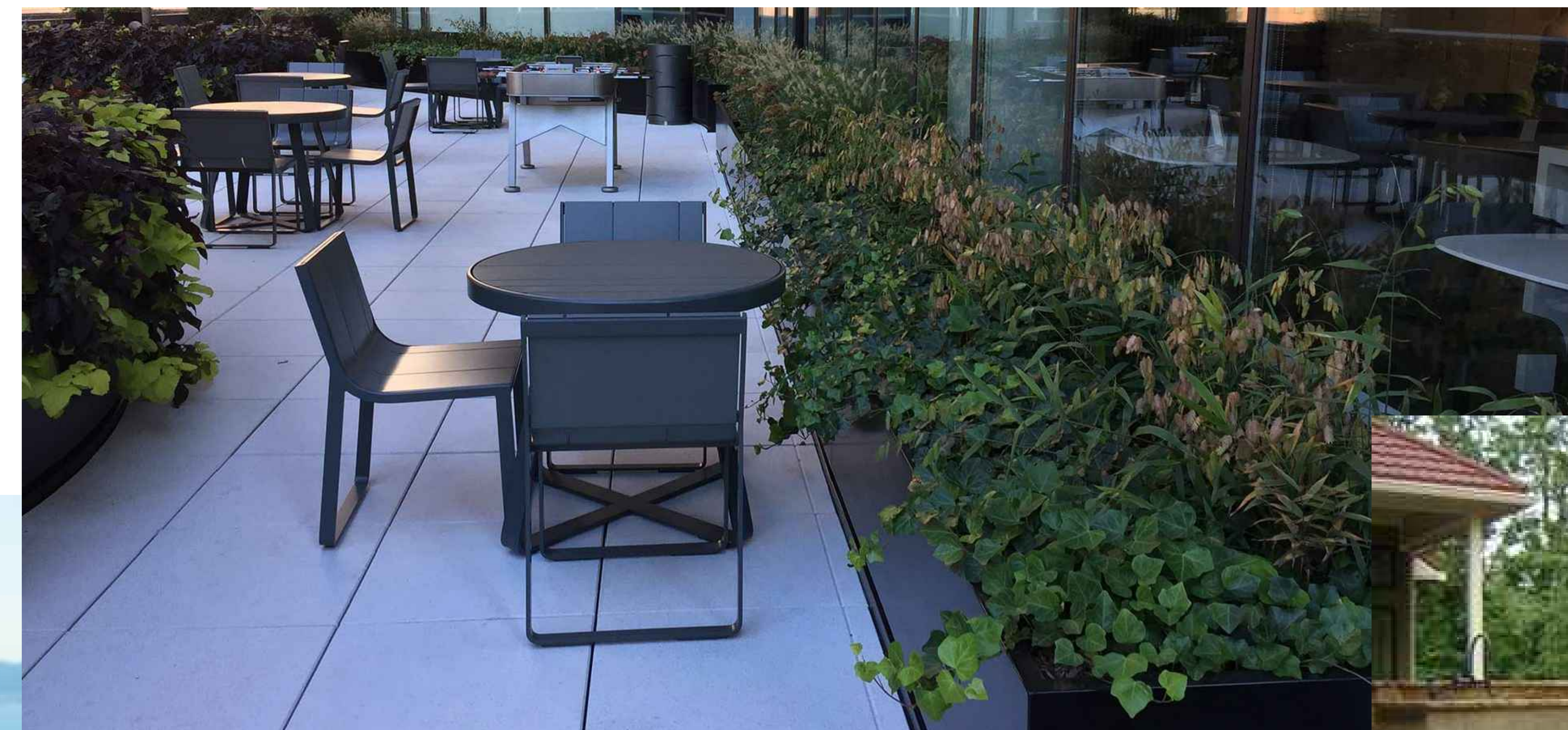
CONCEPTUAL LANDSCAPE PLAN - PODIUM LEVEL

SCALE: 1/16" = 1'-0"

DATE: 07.16.2019

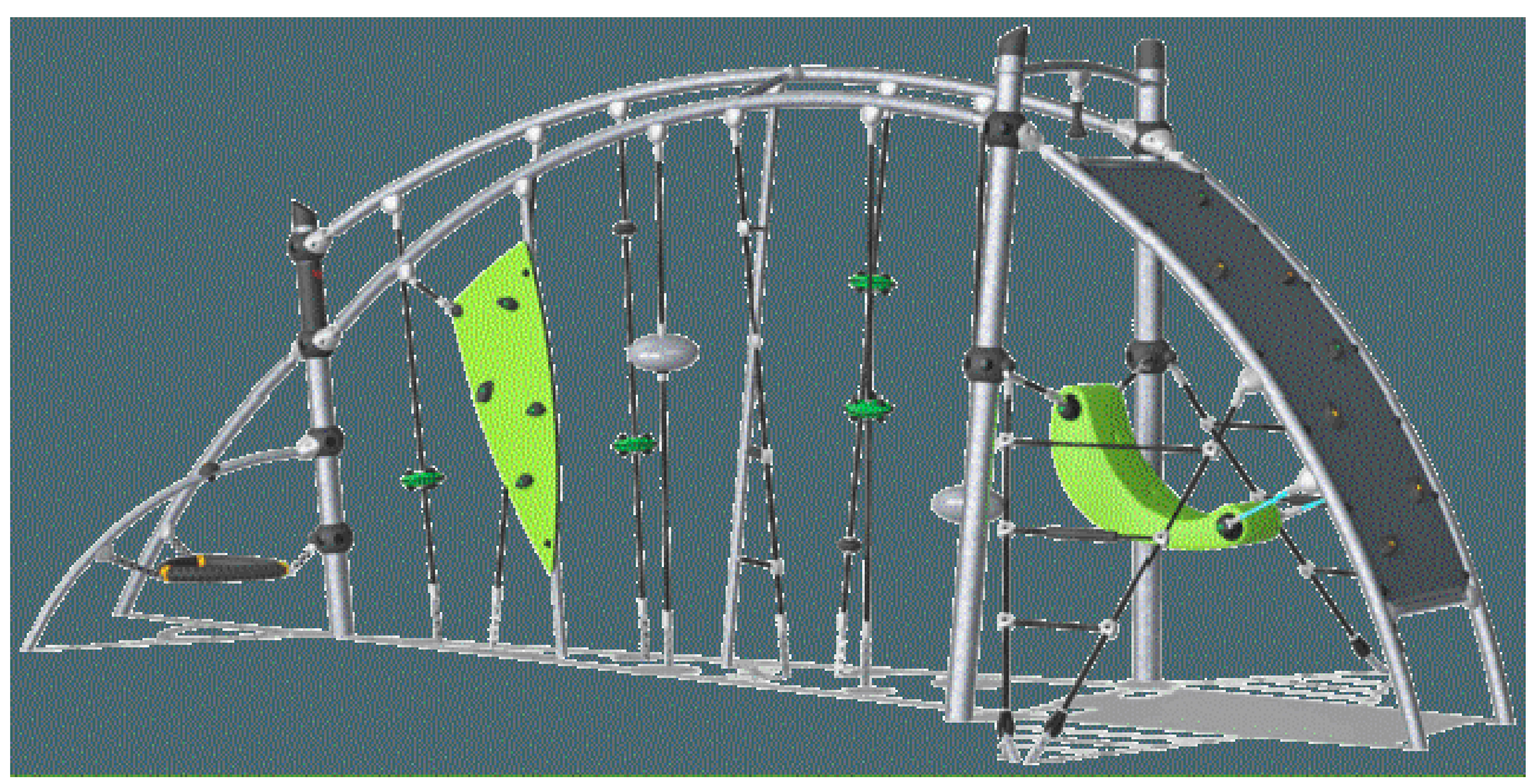
0 8 16 32 48

L1.1



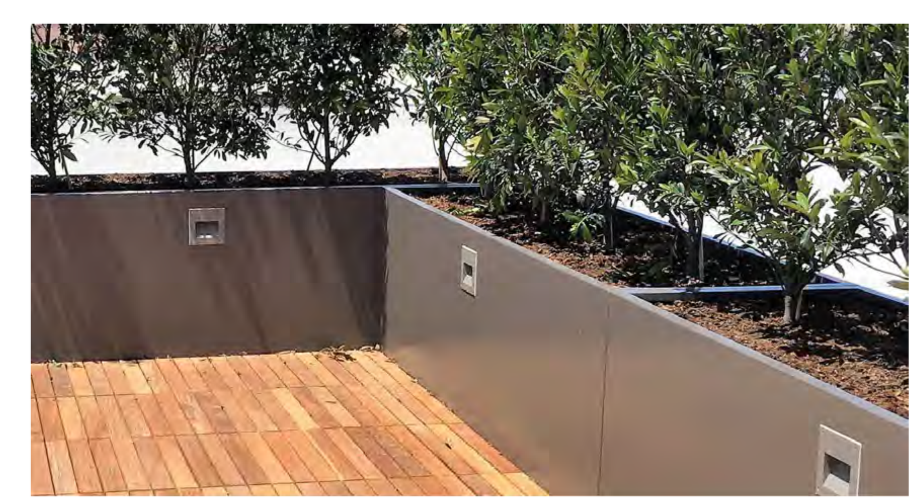
BUILT-IN BBQ w/ COUNTER

SITE FURNITURE



6x24 PERVIOUS PLANK PAVERS RUNNING BOND

PRECAST PLANTERS



PLAY STRUCTURE

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CONCEPTUAL LANDSCAPE IMAGERY

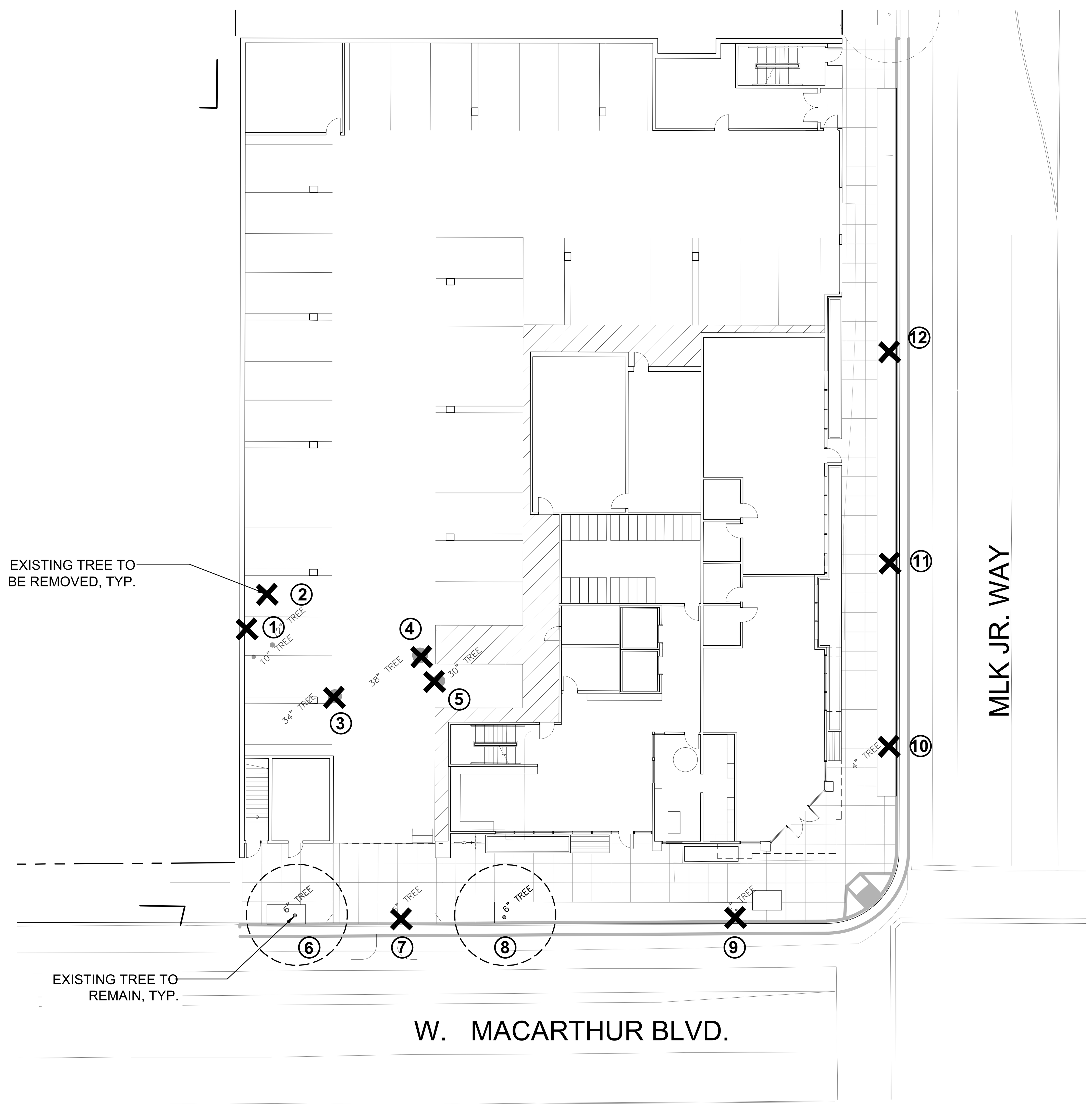
SCALE: NTS

DATE: 07.16.2019

L2.0

TREE INVENTORY TABLE

NUMBER	BOTANICAL NAME	DBH	PROTECTED TREE	REMOVE
1	WALNUT	10"	YES	YES
2	WALNUT	12"	YES	YES
3	BLACK ACACIA	34"	YES	YES
4	SEQUOIA	38"	YES	YES
5	SEQUOIA	30"	YES	YES
6	ELM	7"	STREET TREE	NO
7	ELM	6"	STREET TREE	YES
8	ELM	6"	STREET TREE	NO
9	ELM	4"	STREET TREE	YES
10	CHINESE TALLOW	4"	STREET TREE	YES
11	PRUNUS	4"	STREET TREE	YES
12	CHINESE TALLOW	4"	STREET TREE	YES



NOTES

1. TOTAL PROTECTED TREES TO BE REMOVED: 5
2. STREET TREES TO BE REMOVED: 5
3. TOTAL TREES TO REMAIN: 2
4. TREE INVENTORY PROVIDED BY VAN DORN ABED LANDSCAPE ARCHITECTS. EDIT: INVENTORY REVISED BY CITY OF OAKLAND ARBORICULTURAL INSPECTOR ON 6/12/2019
5. PROTECTED TREE AS DEFINED BY CITY OF OAKLAND TREE PRESERVATION ORDINANCE.
6. STREET TREES TO BE REMOVED ARE TO BE REPLACED PER "CITY OF OAKLAND MASTER STREET TREE LIST"

LEGEND

EXISTING TREE TO REMAIN

X EXISTING TREE TO BE REMOVED

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TREE DISPOSTION PLAN

SCALE: 1/16" = 1'-0"

DATE: 07.16.2019

0 8 16 32 48

L3.0

TREE IMAGERY


PISTACIA CHINENSIS


GINKGO BILOBA


LAGERSTROEMIA MUSKOGEE


RHUS LANCEA


TRISTANIA LAURINA

PLANTING AND WATER USE DESIGN INTENT STATEMENT

THE PLANTING DESIGN INCORPORATES PRINCIPLES INCLUDED IN THE "BAY FRIENDLY LANDSCAPE GUIDELINES".

PLANTS ARE GROUPED BY HYDROZONE, EXPOSURE & LOCAL CLIMATIC CONDITIONS. THE PLANTING DESIGN ALLOWS FOR THE PLANTS TO REACH THEIR NATURAL, FULL-GROWN SIZE AND ELIMINATES THE NEED FOR EXCESSIVE PRUNING OR HEDGING.

THE PLANTS HAVE BEEN SELECTED UTILIZING THE STATE OF CALIFORNIA'S MODEL WATER EFFICIENT LANDSCAPE ORDINANCE PLANT LIST.

NO PLANTS ARE USED THAT ARE CONSIDERED INVASIVE IN THE THE REGION AS LISTED BY THE CAL-IPC.

THE IRRIGATION SYSTEMS WILL UTILIZE A COMBINATION OF PRESSURE COMPENSATING LOW VOLUME DRIP EMITTERS & TREE BUBBLERS.

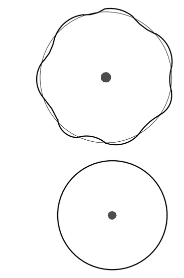
PLANT WILL BE IRRIGATED BY HYDROZONE ON SEPARATE HYDROZONE VALVE CIRCUITS. ALL NEW TREES WILL BE IRRIGATED WITH BUBBLERS ON A SEPARATE DEDICATED CIRCUIT.

SMART E.T. WEATHER-BASED IRRIGATION CONTROLLERS SHALL BE UTILIZED TO OPTIMIZE EFFICIENT WATER APPLICATION. SMART CONTROLLERS AUTOMATICALLY ADJUST THEIR DAILY WATER SCHEDULE PROGRAMMING BASED UPON THE LOCAL CLIMATE AT THE PROJECT SITE. SMART CONTROLLERS RECEIVE WIRELESS DATA DAILY FROM THE IRRIGATION MANUFACTURERS WEATHER DATA SERVICE. A RAIN SWITCH WILL BE INSTALLED TO PREVENT IRRIGATION DURING RAINY PERIODS.

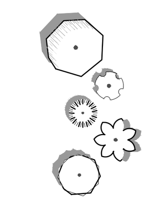
THE REMOTE CONTROL VALVES WILL HAVE INTEGRAL PRESSURE REGULATORS TO PREVENT FLUCTUATIONS AND ENSURE CONSTANT APPLICATION RATES TO MINIMIZE OVER OR UNDER WATERING.

A FLOW SENSOR AND MASTER VALVE WILL BE CONNECTED TO THE SMART CONTROLLER TO ALLOW AUTOMATIC SHUT OFF OF ANY VALVE CIRCUIT OR MAIN LINE IN THE EVENT OF A PIPE BRAKE TO PREVENT WATER WASTE.

PLANT LIST



TREES	CODE	BOTANICAL NAME	COMMON NAME	CONT	REMARKS
	ULM FRO	ULMUS x 'FRONTIER'	FRONTIER ELM	24" BOX	L
	LAG MUS	LAGERSTROMIA MUSKOGEE	CRAPE MYRTLE	24" BOX	L
	GIN BIL	GINKGO BILOBA	GINKGO	24" BOX	M
	PIS CHI	PISTACIA CHINENSIS	CHINESE PISTACHE	24"BOX	L
	RHU LAN	RHUS LANCEA	AFRICAN SUMAC	24" BOX	L
	TRI LAU	TRISTANIA LAURINA	WATER GUM	24" BOX	L



SHRUBS	CODE	BOTANICAL NAME	COMMON NAME	CONT.	REMARKS
	ABE KAL	ABELIA KALEIDOSCOPE	ABELIA	5 GAL	M
	ANI SPE	ANIGOZANTHOS SPECIES	KANGAROO PAW	5 GAL	L
	ARC MAN	ARCTOSTAPHYLOS X `EMERALD CARPET`	EMERALD CARPET MANZANITA	5 GAL	M
	ASP DEN	ASPARAGUS DENSIFLORUS `MYERS`	MYERS ASPARAGUS	5 GAL	M
	CAL LIT	CALLISTEMON LITTLE JOHN	DWARF BOTTLE BRUSH	5 GAL	L
	CAR TES	CAREX TESTACEA	CAREX	1 GAL	M
	CHO TEC	CHONDROPETALUM TECTORUM	CAPE RUSH	5 GAL	L
	COL SUN	COLEONEMA SUNSET SPREADER	BREATH OF HEAVEN	5 GAL	L
	COR DU2	CORREA X `DUSKY BELLS`	AUSTALIAN FUCHSIA	5 GAL	L
	ERI KAR	ERIGERON KARVINSKIANUS	FLEABANE	1 GAL	L
	ERY WEN	ERYSIMUM LINIFOLIUM `WENLOCK BEAUTY`	WALLFLOWER	5 GAL	L
	FES MAI	FESTUCA MAIREI	ATLAS FESCUE	5 GAL	L
	GRE NOE	GREVILLEA X `NOELLII`	GREVILLEA	5 GAL	L
	JUN PAT	JUNCUS PATENS	CALIFORNIA GRAY RUSH	5 GAL	L
	LAN LEM	LANTANA LEMON SWIRL	LANTANA	1 GAL	L
	PEN SPP	PENNISETUM BUNNY EARS	FOUNTAIN GRASS	5 GAL	L
	PHO SPE	PHORMIUM SPECIES	NEW ZEALAND FLAX	5 GAL	L
	PHO DUE	PHORMIUM X `DUET`	NEW ZEALAND FLAX	5 GAL	L
	SAL LEU	SALVIA LEUCANTHA 'SANTA BARBARA'	SANTA BARBARA SAGE	5 GAL	L
	SAN VIR	SANTOLINA VIRENS	LAVENDER COTTON	5 GAL	L

SHURBS, GRASSES, GROUNDCOVERS


ANIGOZANTHOS 'BIG RED'


ARCTOSTAPHYLOS 'EMERALD CARPET'


ABELIA KALEIDOSCOPE


ASPARAGUS DENS. 'MEYERS'


CAREX TESTACEA


CHONDROPETALUM TECTORUM


CORREA 'DUSTY BELLS'


CALLISTEMON LITTLE JOHN


COLEONEMA


ERIGERON KARVINSKIANUS


ERYSIMUM 'WENLOCK BEAUTY'


FESTUCA MAIREI


GREVILLEA 'NOELLII'


JUNCUS PATENS


LANTANA


PENNISETUM BUNNY EARS


PHORMIUM 'DUET'


SANTOLINA


SALVIA LEUCANTHA

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CONCEPTUAL PLANT LIST, IMAGERY & DESIGN INTENT STATEMENT

SCALE: NTS

DATE: 07.16.2019

L3.1

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OAKLAND, CALIFORNIA

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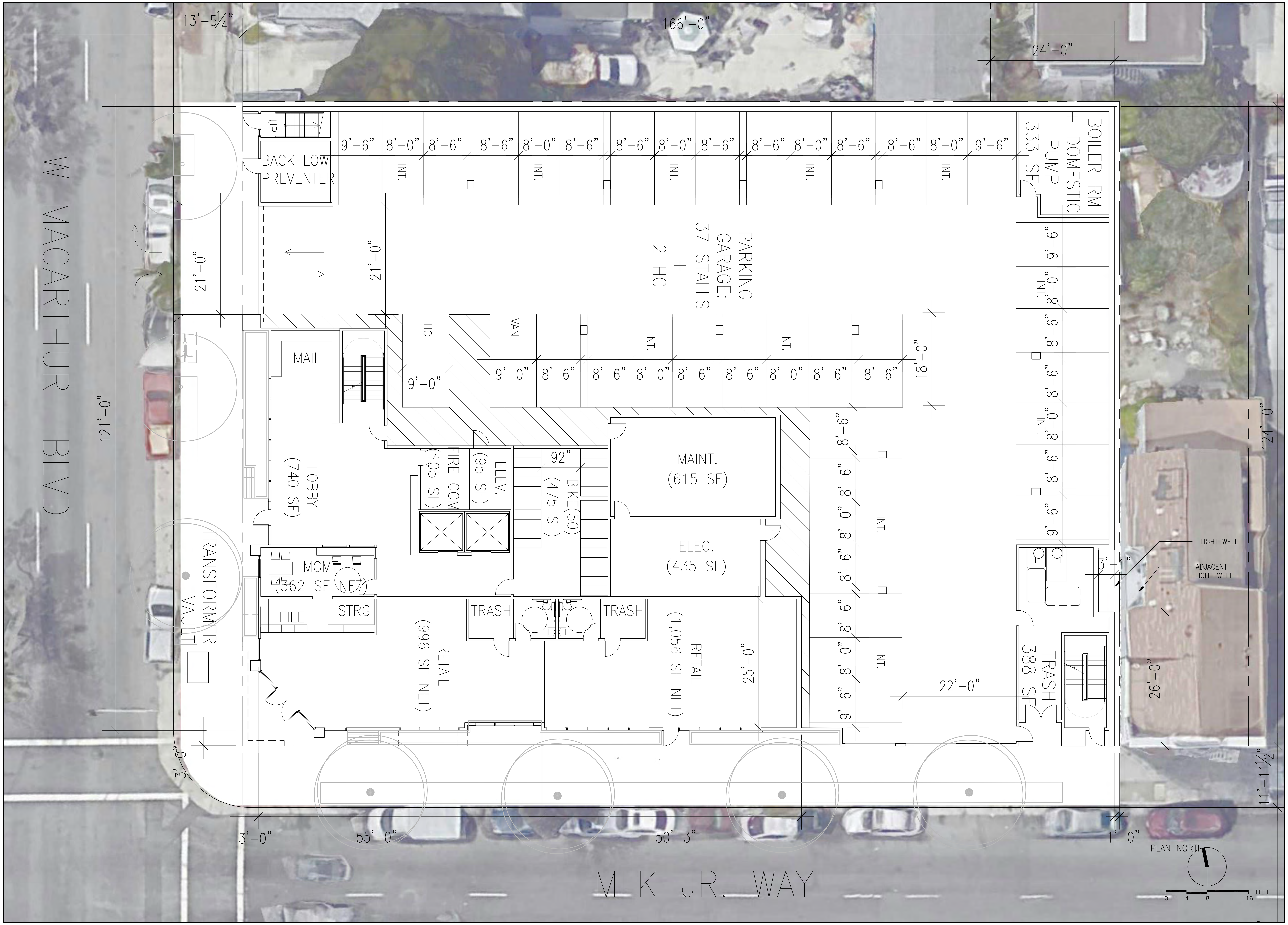
DRAWN	ALR
CHECKED	PM
JOB CAPTAIN	PM
DATE	
12/19/18	PRELIMINARY PLANNING PRE-APP
07/16/19	PLANNING APPLICATION

DRAWING TITLE

SITE PLAN

SCALE 1/16" = 1' - 0"

A1.0



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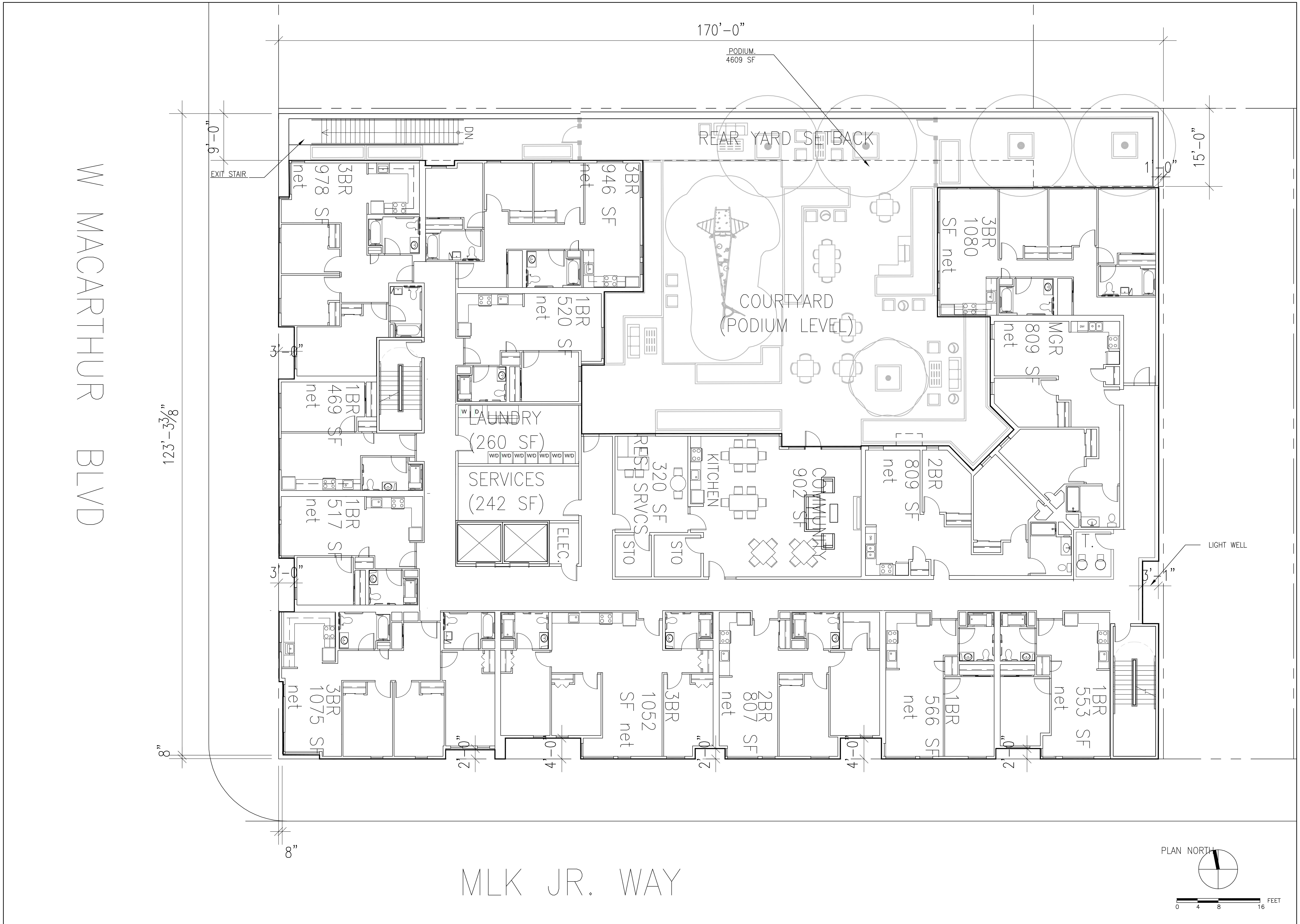
DRAWING TITLE
1ST FLOOR PLAN

SCALE 1/8" = 1' – 0"

A2.1



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DRAWING TITLE

PODIUM LEVEL FLOOR PLAN

SCALE 1/8" = 1' - 0"

A2.2

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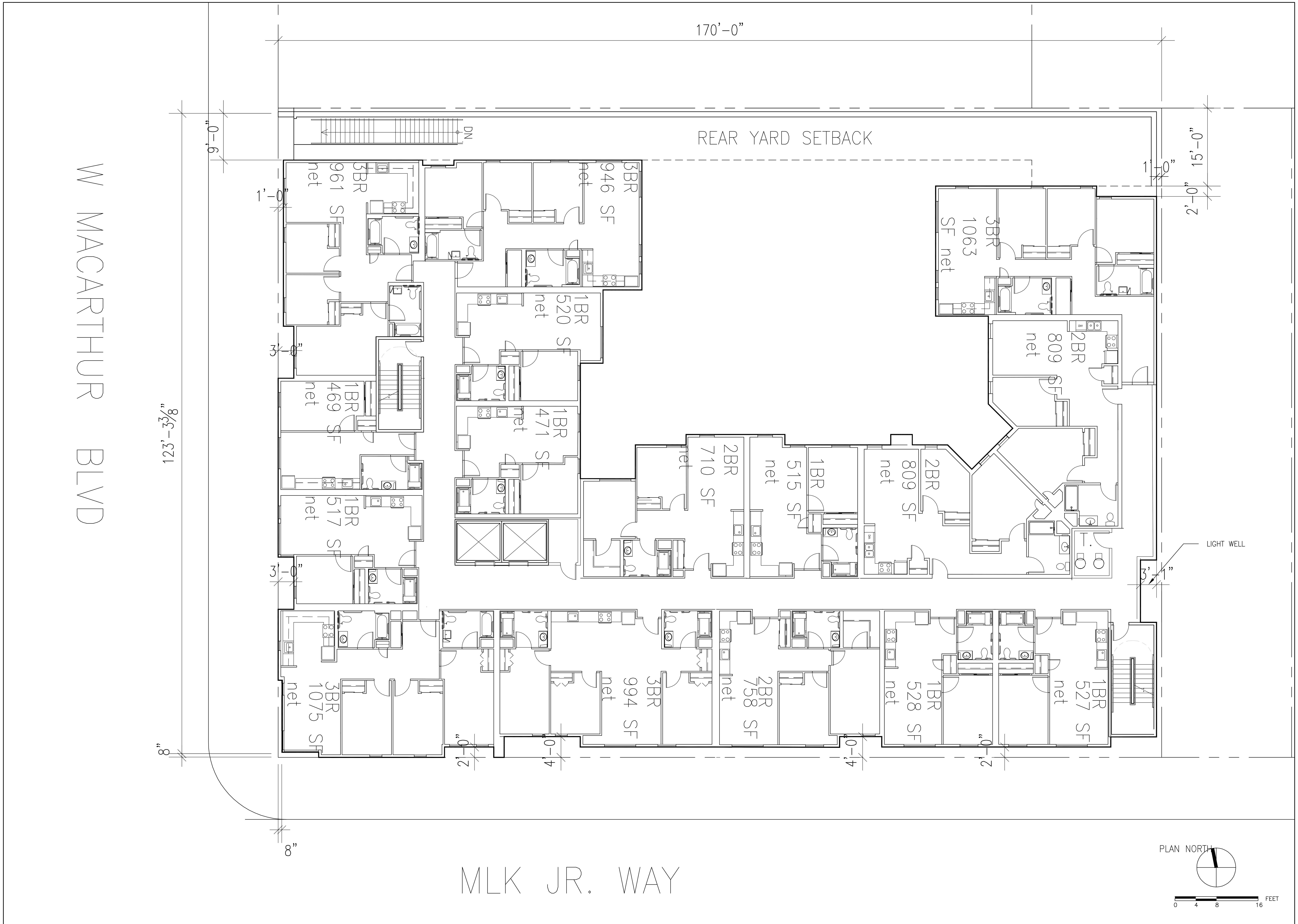
07/16/19	PLANNING APPLICATION

DRAWING TITLE

3RD & 4TH FLOOR PLAN

SCALE 1/8" = 1' - 0"

A2.3



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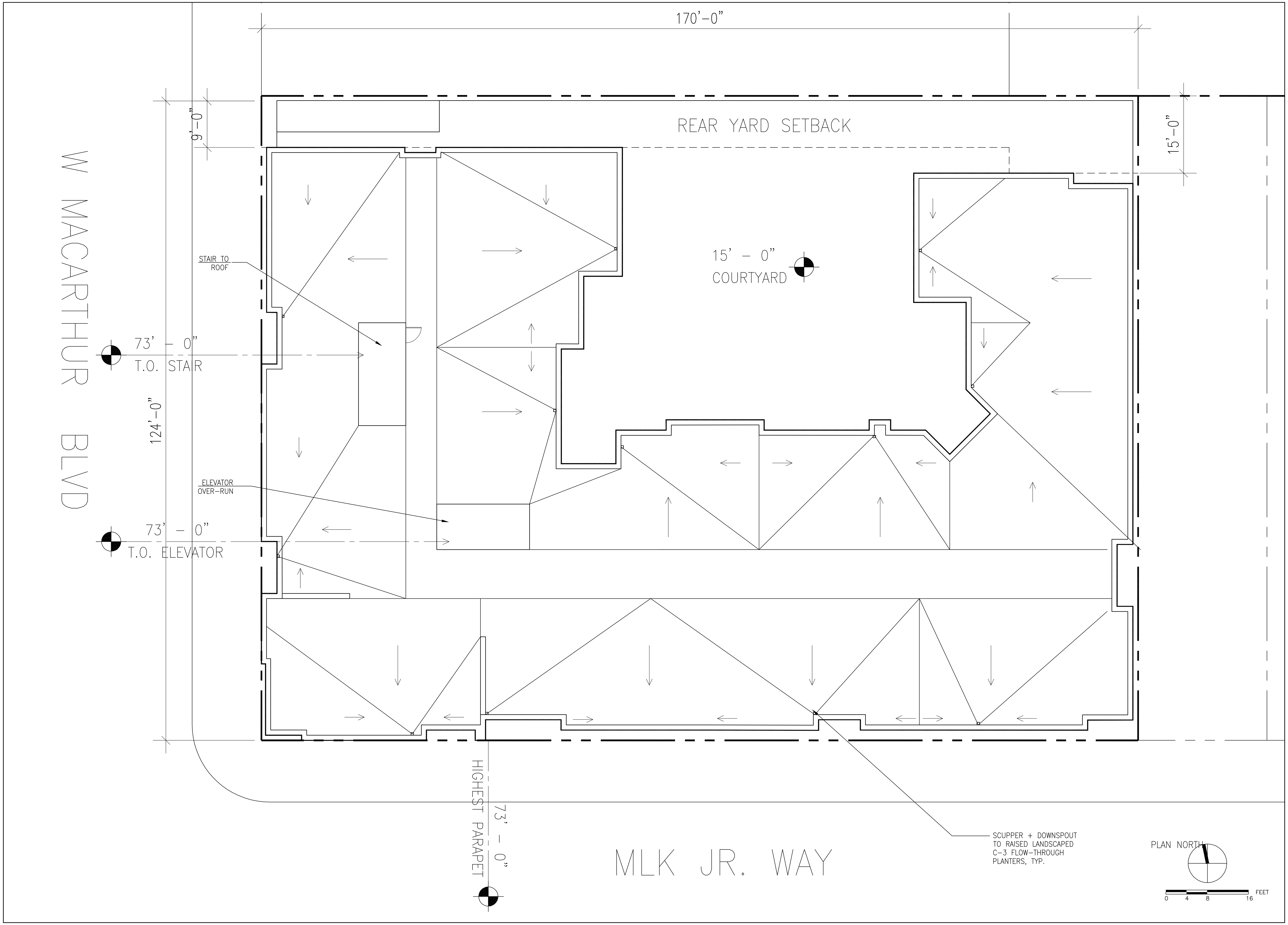
DRAWING TITLE

5TH & 6TH FLOOR PLAN

SCALE 1/8" = 1' - 0"

A2.4



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12/19/18	PRELIMINARY PLANNING PRE-APP
07/16/19	PLANNING APPLICATION

DRAWING TITLE

ROOF PLAN

SCALE 1/8" = 1' - 0"

A2.5

1 MLK JR. WAY ELEVATION
SCALE : 1/8" = 1'-0"

GENERAL KEYNOTES:

1. COLORED VINYL WINDOW.
2. PERFORATED ALUMINUM SHADE.
3. HORIZONTAL PLANK FIBER CEMENT SIDING.
4. CEMENT PLASTER.
5. SCUPPER AND DOWNSPOUT.
6. 30" TALL CONCRETE FLOW THROUGH LANDSCAPED PLANTER.
7. ALUMINUM STOREFRONT.
8. SIGNAGE.
9. COR-TEN VERTICAL STANDING SEAM METAL SIDING.
10. GARAGE ENTRANCE - ROLL UP PANEL DOOR - PERFORATED STEEL.
11. GATE TO PODIUM STAIR.
12. STAIR TO ROOF.
13. 42" FENCE ALONG EDGE OF PODIUM.

2 MACARTHUR BLVD ELEVATION
SCALE : 1/8" = 1'-0"

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CHECKED		PM
JOB CAPTAIN		PM
DATE		
12/19/18	PRELIMINARY PLANNING PRE-APP	
07/16/19	PLANNING APPLICATION	

DRAWING TITLE

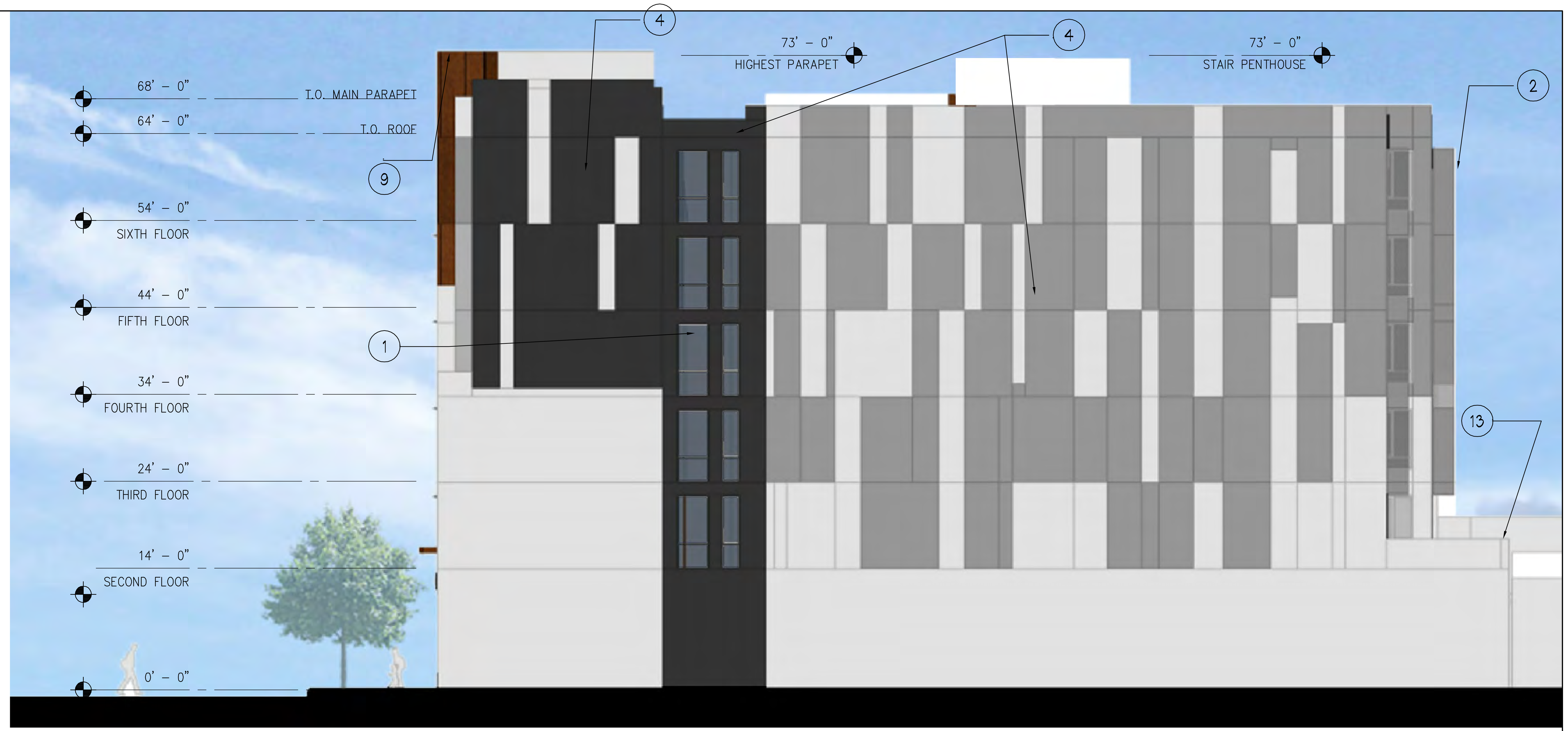
EXTERIOR ELEVATIONS

SCALE 1/8" = 1' - 0"

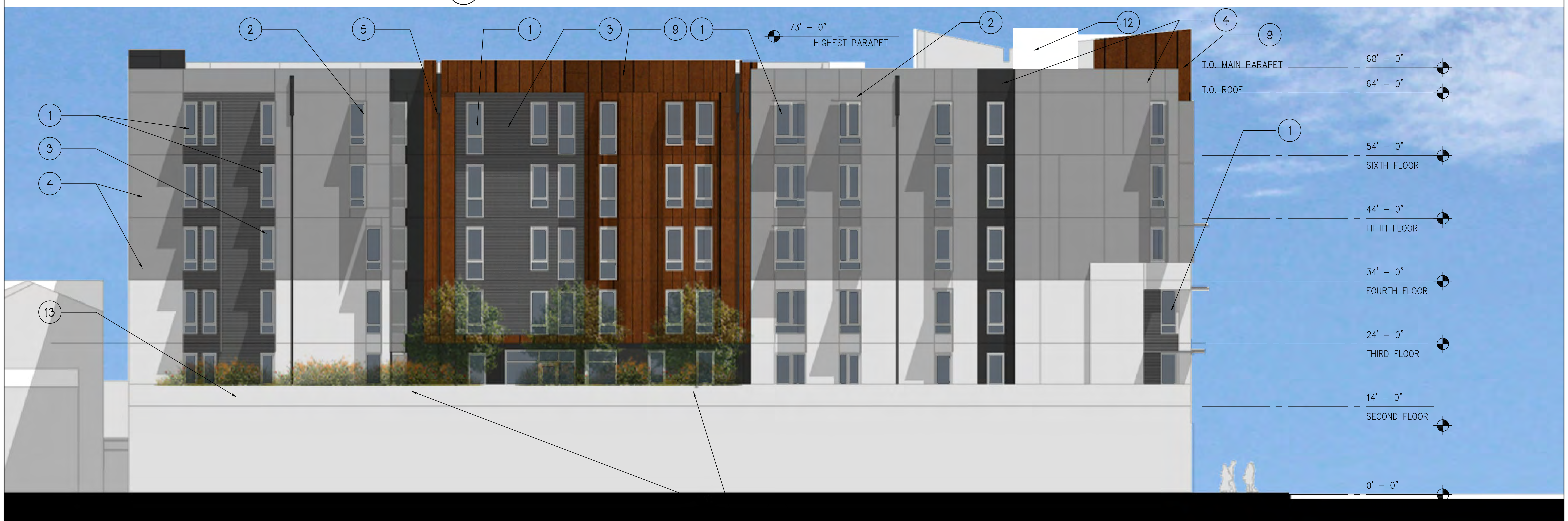
A3.1

GENERAL KEYNOTES:

1. COLORED VINYL WINDOW.
2. PERFORATED ALUMINUM SHADE.
3. HORIZONTAL PLANK FIBER CEMENT SIDING.
4. CEMENT PLASTER.
5. SCUPPER AND DOWNSPOUT.
6. 30" TALL CONCRETE FLOW THROUGH LANDSCAPED PLANTER.
7. ALUMINUM STOREFRONT.
8. SIGNAGE.
9. COR-TEN VERTICAL STANDING SEAM METAL SIDING.
10. GARAGE ENTRANCE - ROLL UP PANEL DOOR - PERFORATED STEEL.
11. GATE TO PODIUM STAIR.
12. STAIR TO ROOF.
13. 42" FENCE ALONG EDGE OF PODIUM.



4 NORTH ELEVATION
SCALE : 1/8" = 1'-0"



3 EAST ELEVATION
SCALE : 1/8" = 1'-0"

HKIT ARCHITECTS
538 NINTH STREET SUITE 240 • OAKLAND, CA 94607
T 510 625 9800 • F 510 625 9801 • WWW.HKIT.COM

3801 MLK JR. WAY

OAKLAND, CALIFORNIA

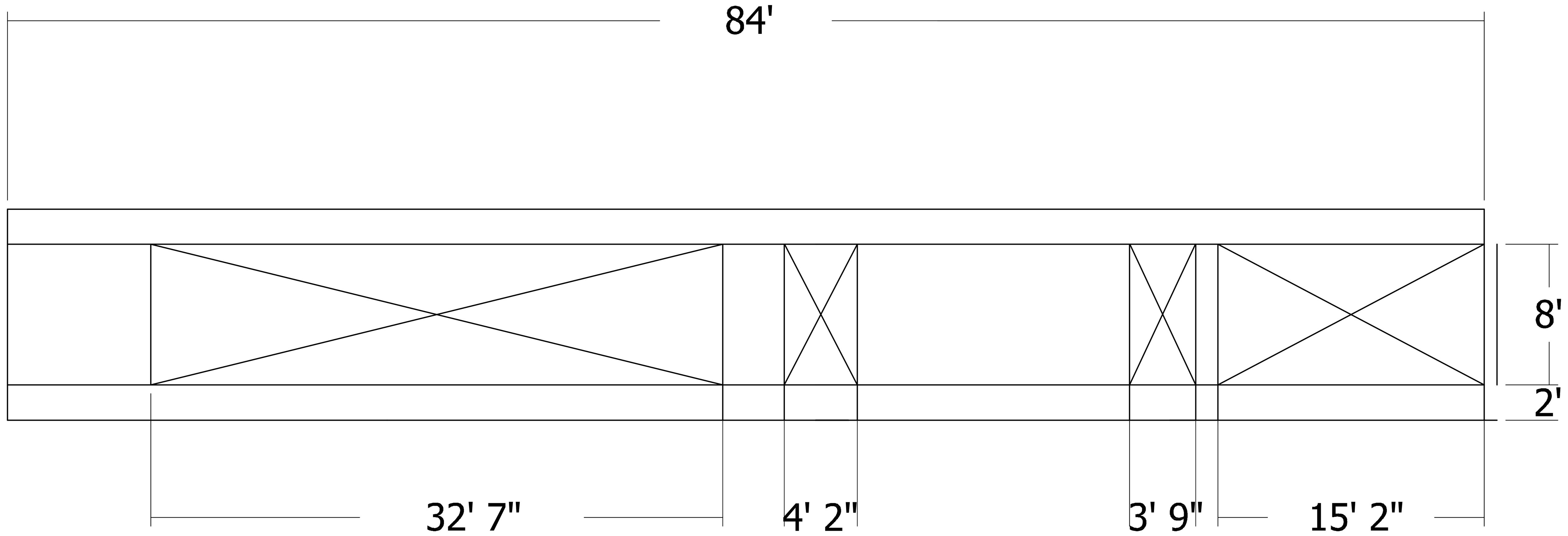
JOB NO.	30366
DRAWN	ALR
CHECKED	PM
JOB CAPTAIN	PM
DATE	
12/19/18	PRELIMINARY PLANNING PRE-APP
07/16/19	PLANNING APPLICATION

DRAWING TITLE

EXTERIOR ELEVATIONS

SCALE 1/8" = 1' - 0"

A3.2

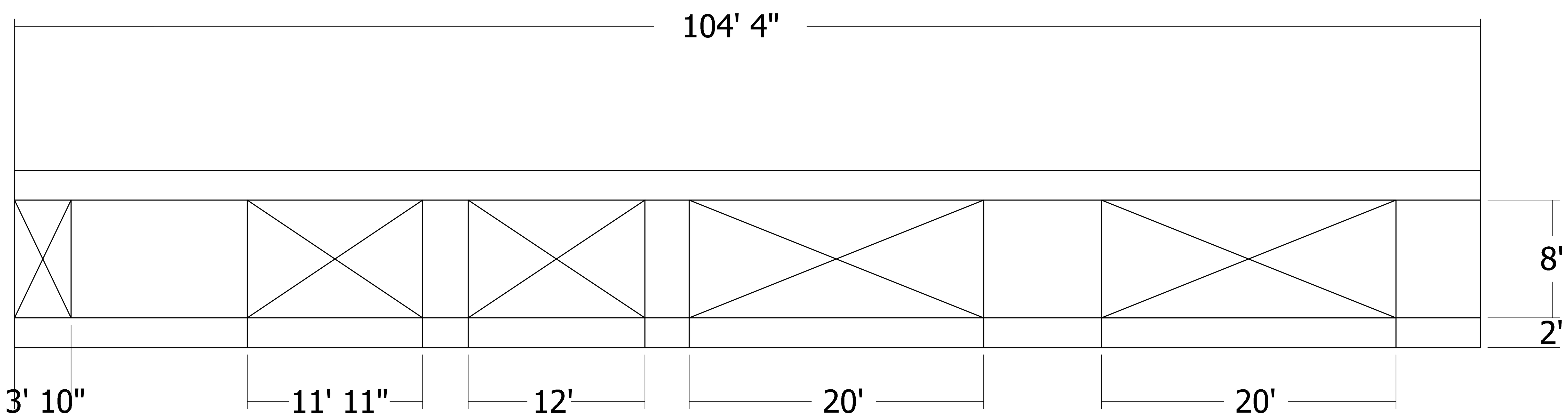


AREA OF REQ'D TRANSPARENCY = TOTAL AREA OF GLAZING / AREA OF NON-RESIDENTI FACADE (BETWEEN 2' -8

AREA OF REQ'D TRANSPARENCY = 445 SF / 672 SF

66% TRANSPARENCY

1 MACARTHUR BLVD TRANSPARENCY DIAGRAM
SCALE : 3/16" = 1'-0"



AREA OF REQ'D TRANSPARENCY = 542 SF / 834 SF

65% TRANSPARENCY

2 MLK JR. WAY TRANSPARENCY DIAGRAM
SCALE : 3/16" = 1'-0"

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3801 MLK JR. WAY

OAKLAND, CALIFORNIA

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JOB CAPTAIN	PM
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12/19/18	PRELIMINARY PLANNING PRE-APP
07/16/19	PLANNING APPLICATION

DRAWING TITLE
TRANSPARENCY DIAGRAMS

SCALE AS NOTED

A3.3

VIEW FACING NORTHWEST ALONG MACARTHUR BLVD

VIEW FACING COURTYARD

VIEW FACING NORTHEAST ALONG MACARTHUR BLVD

VIEW FACING SOUTHWEST ALONG MLK JR. WAY

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538 NINTH STREET SUITE 240 • OAKLAND, CA 94607
T 510 625 9800 • F 510 625 9801 • WWW.HKIT.COM

3801 MLK JR. WAY

OAKLAND, CALIFORNIA

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JOB CAPTAIN	PM
DATE	
12/19/18	PRELIMINARY PLANNING PRE-APP
07/16/19	PLANNING APPLICATION

DRAWING TITLE

PERSPECTIVES

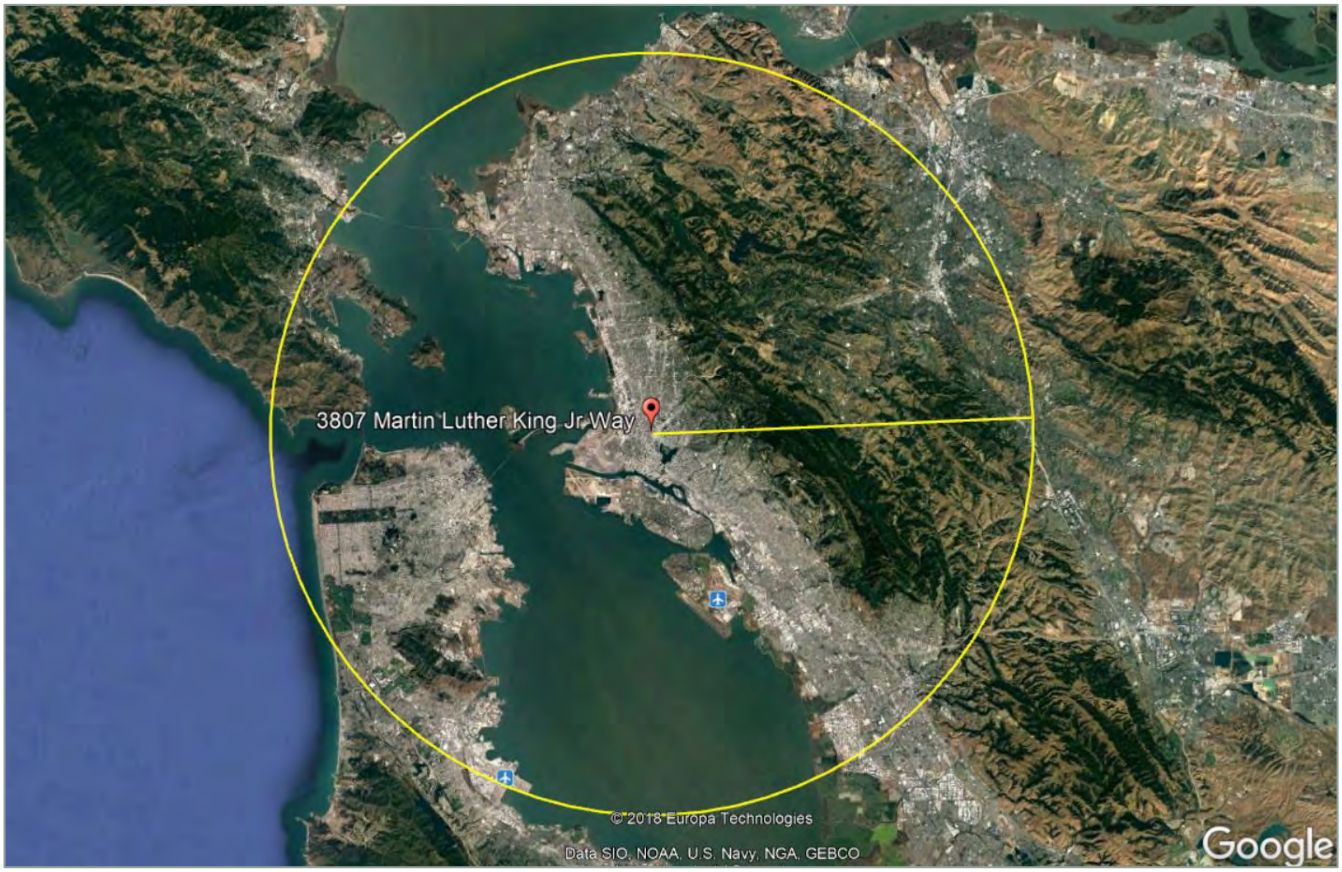
SCALE AS NOTED

A3.4

Appendix B – Airport Clear Zones

Longfellow Corner
3801-3829 Martin Luther King, Jr. Way
Oakland, CA 94609

Airports within 15 miles of the subject site.



Airport type	Name	Distance from subject (Miles)	Airport Clear Zone
Major Airport	Oakland International Airport	7.12 miles south	No
Major Airport	San Francisco International Airport	15 miles south	No
Minor Airport	Hayward Executive Airport	13.43 miles south	No

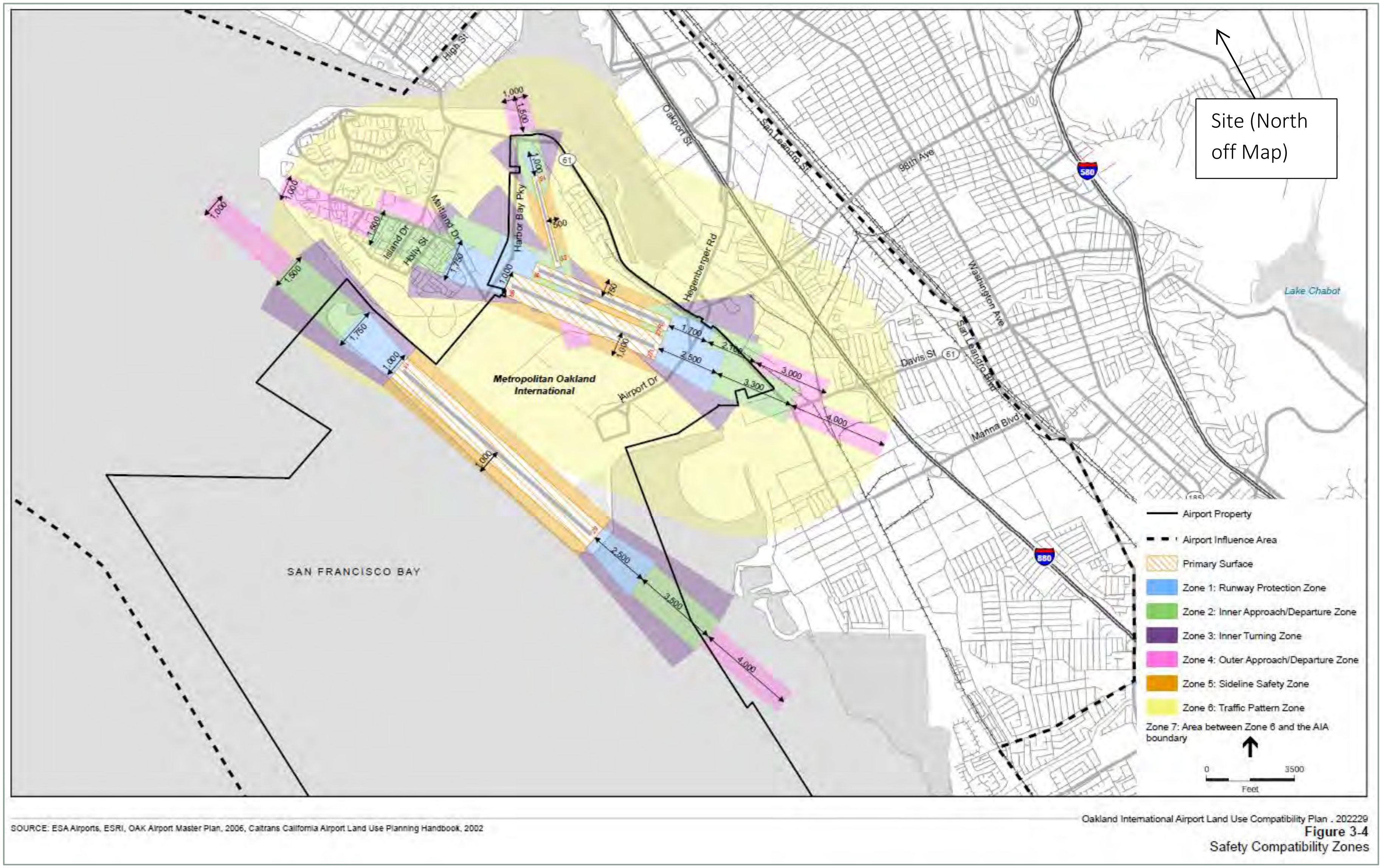


Figure 14 Oakland International Airport Safety Compatibility Zones

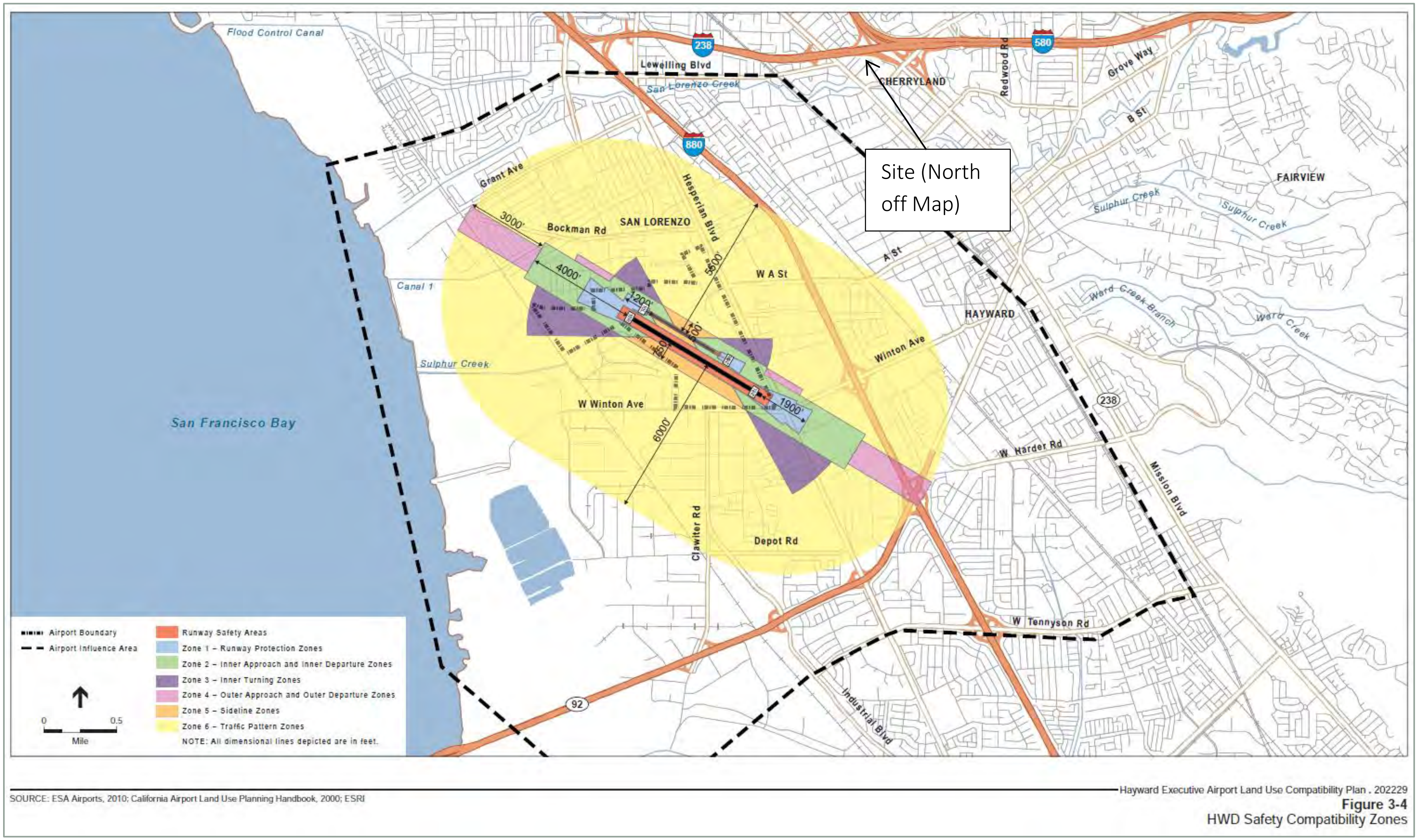


Figure 15 Hayward Executive Airport Safety Compatibility Zones

Appendix C – Biology

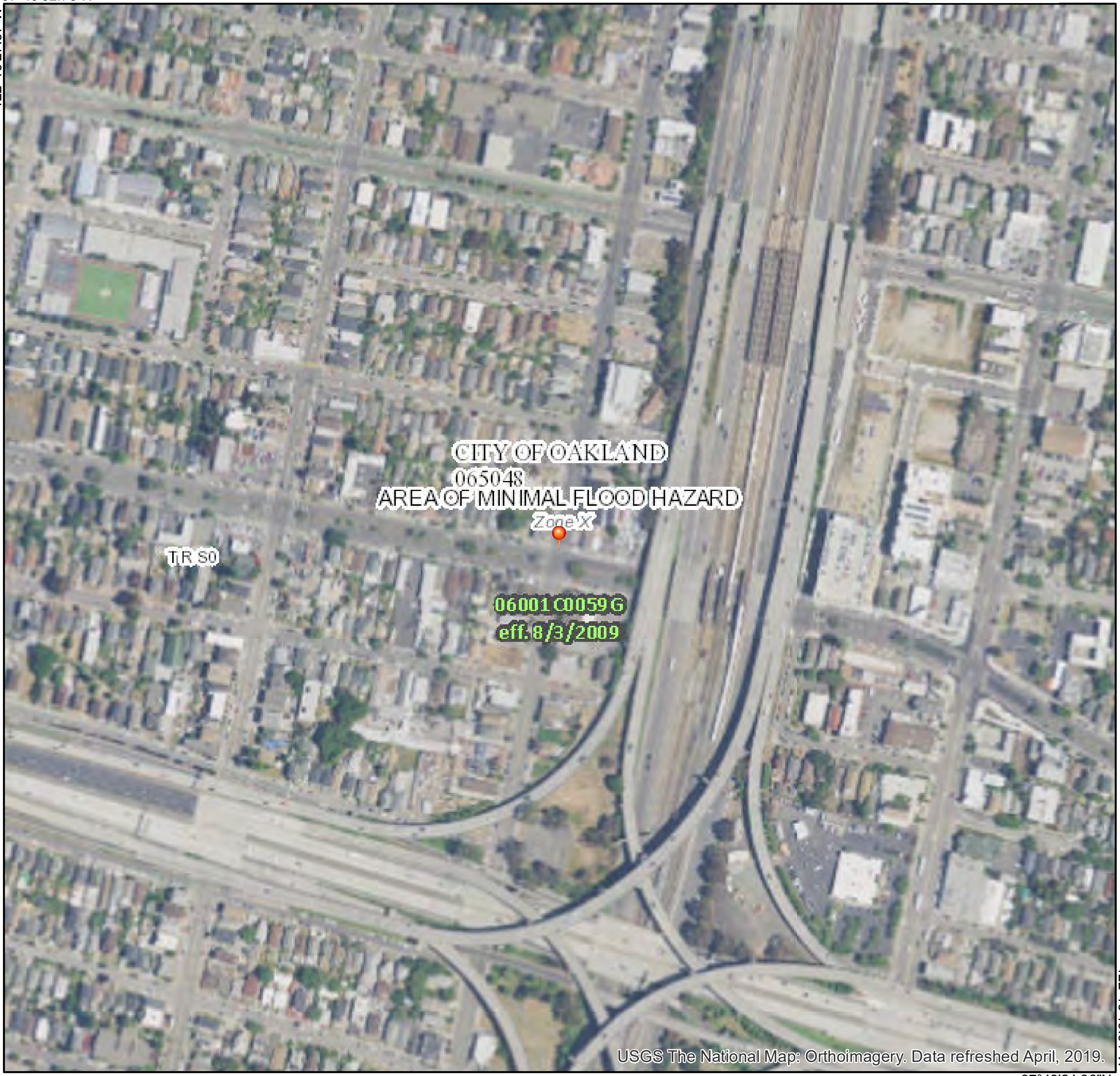
- **U.S. Department of Homeland Security.** *Flood Insurance Rate Map (FIRM) for Alameda County, California and Incorporated Areas.* s.l. : Federal Emergency Management Agency, Effective Date August 3, 2009. FIRM Panel No. 06001C0059G.
- **United States Fish and Wildlife Service.** Wetlands Mapper. *National Wetlands Inventory.* [Online] [Cited: September 26, 2019.] https://www.fws.gov/wetlands/Data/Mapper.html.
- **United States Department of the Interior, Fish and Wildlife Service.** *List of threatened and endangered species that may occur in the project location or may be affected by project Longfellow Corner.* Sacramento, CA : Sacramento Fish and Wildlife Office, September 26, 2019. Consultation Code: 08ESMF00-2019-SLI-3166.

National Flood Hazard Layer FIRMette

FEMA

37°49'52.78"N

122°16'27.37"W



122°15'49.91"W

37°49'24.36"N

Feet 1:6,000

0 250 500 1,000 1,500 2,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/16/2019 at 8:43:54 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

U.S. Fish and Wildlife Service

National Wetlands Inventory

Longfellow Corner

September 26, 2019

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: September 26, 2019
Consultation Code: 08ESMF00-2019-SLI-3166
Event Code: 08ESMF00-2019-E-10070
Project Name: Longfellow Corner

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2019-SLI-3166

Event Code: 08ESMF00-2019-E-10070

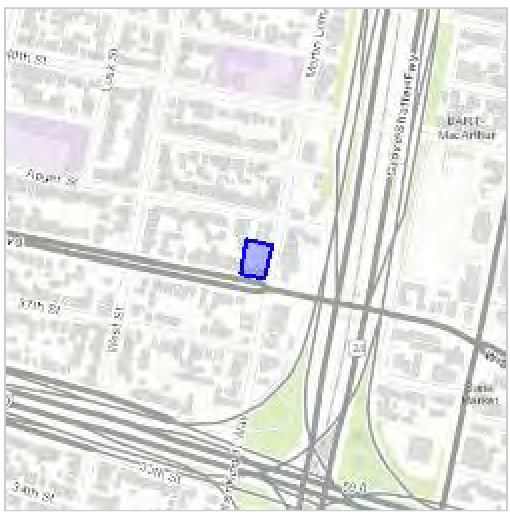
Project Name: Longfellow Corner

Project Type: DEVELOPMENT

Project Description: The project will demolish existing improvements on four parcels that total approx. 1/2 acre and construct a six-story building with 77 affordable apartments and ground-floor commercial space. The project is infill in a highly urbanized environment.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/37.827617672136206N122.26931953001323W



Counties: Alameda, CA

Endangered Species Act Species

There is a total of 12 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Salt Marsh Harvest Mouse *Reithrodontomys raviventris* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/613	Endangered

Birds

NAME	STATUS
California Clapper Rail *Rallus longirostris obsoletus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4240	Endangered
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

Reptiles

NAME	STATUS
Alameda Whipsnake (=striped Racer) *Masticophis lateralis euryxanthus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5524	Threatened
Green Sea Turtle *Chelonia mydas* Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf	Threatened

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened
Tidewater Goby *Eucyclogobius newberryi* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
San Bruno Elfin Butterfly *Callophrys mossii bayensis* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3394	Endangered

Flowering Plants

NAME	STATUS
California Seablite *Suaeda californica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6310	Endangered
Santa Cruz Tarplant *Holocarpha macradenia* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6832	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix D – Air Quality

- Illingworth & Rodkin, Inc. *3801 Martin Luther King Jr. Way Residential Project, Community Risk Assessment.* Cotati, CA : s.n., August 7, 2019. I&R Project: 19-118.

3801 MARTIN LUTHER KING JR. WAY RESIDENTIAL PROJECT COMMUNITY RISK ASSESSMENT

Oakland, California

August 7, 2019

PREPARED FOR:

Cinnamon Crake
AEM Consulting
422 Larkfield Center #104
Santa Rosa, CA 95403

Alexandra Arjo
Resources for Community Development
2220 Oxford Street
Berkeley, CA 94704

PREPARED BY:

James Reyff
Casey Divine
& William Popenuck
ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
429 E. Cotati Avenue
Cotati, CA 94931
(707) 794-0400

I&R Project: 19-118

Introduction

This report provides the results of a toxic air contaminant (TAC) health risk analysis (HRA) for the proposed development of a mixed-use residential housing project proposed at 3801 Martin Luther King Jr. Way in Oakland, California. The proposed project would demolish the two existing vacant two-story residential buildings and construct a six-story mixed-use building with 77 affordable housing units, 2,052 square feet (sf) of retail/commercial land use, and 39 parking spaces. Parking and retail uses would be located on the ground (1^{st}) floor and residential uses would be on the 2^{nd} through 6^{th} floors. This assessment predicts community risk impacts with respect to the City of Oakland Standard Conditions of Approval (SCA). Since the project includes residents near TAC sources, the project is subject to the City's SCA for air quality that is provided as *Attachment 1*. The following condition applies:

> *SCA #19. Exposure to Air Pollution (Toxic Air Contaminants) - Health Risk Reduction Measures.*
> This measure requires projects near sources of toxic air contaminants to perform a health risk assessment and, if necessary, incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants.

In addition, the project emissions are assessed against U.S. Department of Housing and Urban Development (HUD) thresholds for projects.

Setting

The project site is located in Alameda County which is a part of San Francisco Bay Area Air Basin. Air quality in the region is affected by natural factors such as proximity to the Bay and ocean, topography, and meteorology, as well as proximity to sources of air pollution. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$).

<u>Air Pollutants and TACs</u>

Particulate Matter

Particulate matter (PM) is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as metals, soot, soil, and dust. Particles 10 microns or less in diameter are defined as "respirable particulate matter" or "PM_{10}." Fine particles are 2.5 microns or less in diameter ($PM_{2.5}$) and, while also respirable, can contribute significantly to regional haze and reduction of visibility. Inhalable particulates come from smoke, dust, aerosols, and metallic oxides. Although particulates are found naturally in the air, most particulate matter found in the vicinity of the project site is emitted either directly or indirectly by motor vehicles, industry, construction, agricultural activities, and wind erosion of disturbed areas. Most $PM_{2.5}$ is comprised of combustion products such as smoke. Extended exposure to PM can increase the risk of chronic respiratory disease (Bay Area Air Quality

Management District (BAAQMD) 2011a).[1, 2] PM exposure is also associated with increased risk of premature deaths, especially in the elderly and people with pre-existing cardiopulmonary disease.

Toxic Air Contaminants

Toxic Air Contaminants (TACs) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer or serious illness) and include but are not limited to criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level. The identification, regulation, and monitoring of TACs is relatively new compared to that for criteria air pollutants that have established ambient air quality standards. TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an ambient air quality standard or emission-based threshold.

Diesel exhaust is the predominant cancer-causing TAC in California. The California Air Resources Board (CARB) estimates that about 70% of total known cancer risk related to air toxics in California is attributable to diesel particulate matter (DPM).[3] According to CARB, diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the state's Proposition 65 or under the Federal Hazardous Air Pollutants programs.

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.[4] In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, a significant component of the plan involves application of emission control strategies to existing diesel vehicles and equipment. Many of the measures of the Diesel Risk Reduction Plan have been approved and adopted, including the Federal on-road and non-road diesel engine emission standards for new engines, as well as adoption of regulations for low sulfur fuel in California.

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. CARB regulations require on-road diesel trucks to be retrofitted with particulate matter controls or replaced to meet 2010 or later engine standards that have much lower DPM and $PM_{2.5}$ emissions. This regulation

---

[1] BAAQMD 2016. Planning Healthy Places. May Accessed at http://www.baaqmd.gov/~/media/files/planning-and-research/planning-healthy-places/php_may20_2016-pdf.pdf?la=en on August 24, 2016

[2] Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017.

[3] CAEB. *Summary: Diesel Particulate Matter Health Impacts*. https://www.arb.ca.gov/research/diesel/diesel-health_summ.htm

[4] California Air Resources Board. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October 2000.

will substantially reduce these emissions between 2013 and 2023. While new trucks and buses will meet strict federal standards, this measure is intended to accelerate the rate at which the fleet either turns over so there are more cleaner vehicles on the road or is retrofitted to meet similar standards. With this regulation, older, more polluting trucks would be removed from the roads sooner.

CARB has also adopted and implemented regulations to reduce DPM and NOx emissions from in-use (existing) and new off-road heavy-duty diesel vehicles (e.g., loaders, tractors, bulldozers, backhoes, off-highway trucks, etc.). The regulations apply to diesel-powered off-road vehicles with engines 25 horsepower (hp) or greater. The regulations are intended to reduce particulate matter and nitrogen oxides (NOx) exhaust emissions by requiring owners to turn over their fleet (replace older equipment with newer equipment) or retrofit existing equipment in order to achieve specified fleet-averaged emission rates. Implementation of this regulation, in conjunction with stringent Federal off-road equipment engine emission limits for new vehicles, will significantly reduce emissions of DPM and NOx.

Sensitive Receptors

"Sensitive receptors" are defined as facilities where sensitive population groups, such as children, the elderly, the acutely ill, and the chronically ill, are likely to be located. These land uses include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The project would include sensitive receptors in the form of new residences. For the purposes of a thorough health risk assessment, residents of the project site assume all types: 3rd-trimeter fetus, infant, child, and adult.

TAC and $PM_{2.5}$ Impact Analysis

The City uses the BAAQMD California Environmental Quality Act (CEQA) Air Quality Guidelines to consider exposure of sensitive receptors to air pollutant levels that result in an unacceptable cancer risk or hazard, to be significant. For cancer risk, which is a concern with DPM and other mobile-source TACs, the BAAQMD considers an increased risk of contracting cancer that is 10.0 in one million chances or greater, to be significant risk for a single source. The BAAQMD CEQA Guidelines also consider single-source TAC exposure to be significant if annual fine particulate matter ($PM_{2.5}$) concentrations exceed 0.3 micrograms per cubic meter ($\mu g/m^3$) or if the computed hazard index (HI) is greater than 1.0 for non-cancer risk hazards. Cumulative exposure is assessed by combining the risks and annual $PM_{2.5}$ concentrations for all sources within 1,000 feet of a project. The thresholds for cumulative exposure are an excess cancer risk of 100 in one million, annual $PM_{2.5}$ concentrations of 0.8 $\mu g/m^3$, and a hazard index greater than 10.0. These thresholds were used to address impacts from TAC sources that could affect future project residents. The methodology for computing cancer risk, annual $PM_{2.5}$ concentrations, and non-cancer hazards is contained in *Attachment 2*. Note that this methodology describes new guidance to computed cancer risk that was recently finalized by the State Office of Environmental Heal Hazards Assessment (OEHHA) and provides greater protections for infants and children.

The City uses the BAAQMD California Environmental Quality Act (CEQA) Air Quality Guidelines to consider exposure of sensitive receptors to air pollutant levels that result in an unacceptable cancer risk or hazard, to be significant. For cancer risk, which is a concern with diesel particulate matter (DPM) and other mobile-source TACs, the BAAQMD considers an increased risk of contracting cancer that is 10.0 in one million chances or greater, to be significant risk for a single source. The BAAQMD CEQA Guidelines also consider single-source TAC exposure to be significant if annual fine particulate matter ($PM_{2.5}$) concentrations exceed 0.3 micrograms per cubic meter ($\mu g/m^3$) or if the computed hazard index (HI) is greater than 1.0 for non-cancer risk hazards. Cumulative exposure is assessed by combining the risks and annual $PM_{2.5}$ concentrations for all sources within 1,000 feet of a project. The thresholds for cumulative exposure are an excess cancer risk of 100 in one million, annual $PM_{2.5}$ concentrations of 0.8 $\mu g/m^3$, and a hazard index greater than 10.0. These thresholds were used to address impacts from TAC sources that could affect future project residents. The methodology for computing cancer risk, annual $PM_{2.5}$ concentrations, and non-cancer hazards is contained in *Attachment 2*. Note that this methodology describes new guidance to computed cancer risk that was recently finalized by the State Office of Environmental Heal Hazards Assessment (OEHHA) and provides greater protections for infants and children.

A review of the project site has identified several sources including a freeway, a high-volume roadway and stationary sources that are within 1,000 feet of the site and could, therefore, adversely affect the site. Contributing sources within the influence area include:

1. Freeways: Interstate 580 (I-580) and State Route 24 (S.R. 24);

2. Local Roadways: W. MacArthur Boulevard, Martin Luther King Jr. Way, and 40th Street (identified as a high-volume roadway with an excess of 10,000 average daily traffic (ADT)); and

3. Stationary Sources: There are four identified stationary TAC sources listed and permitted by the Bay Area Air Quality Management District (BAAQMD).

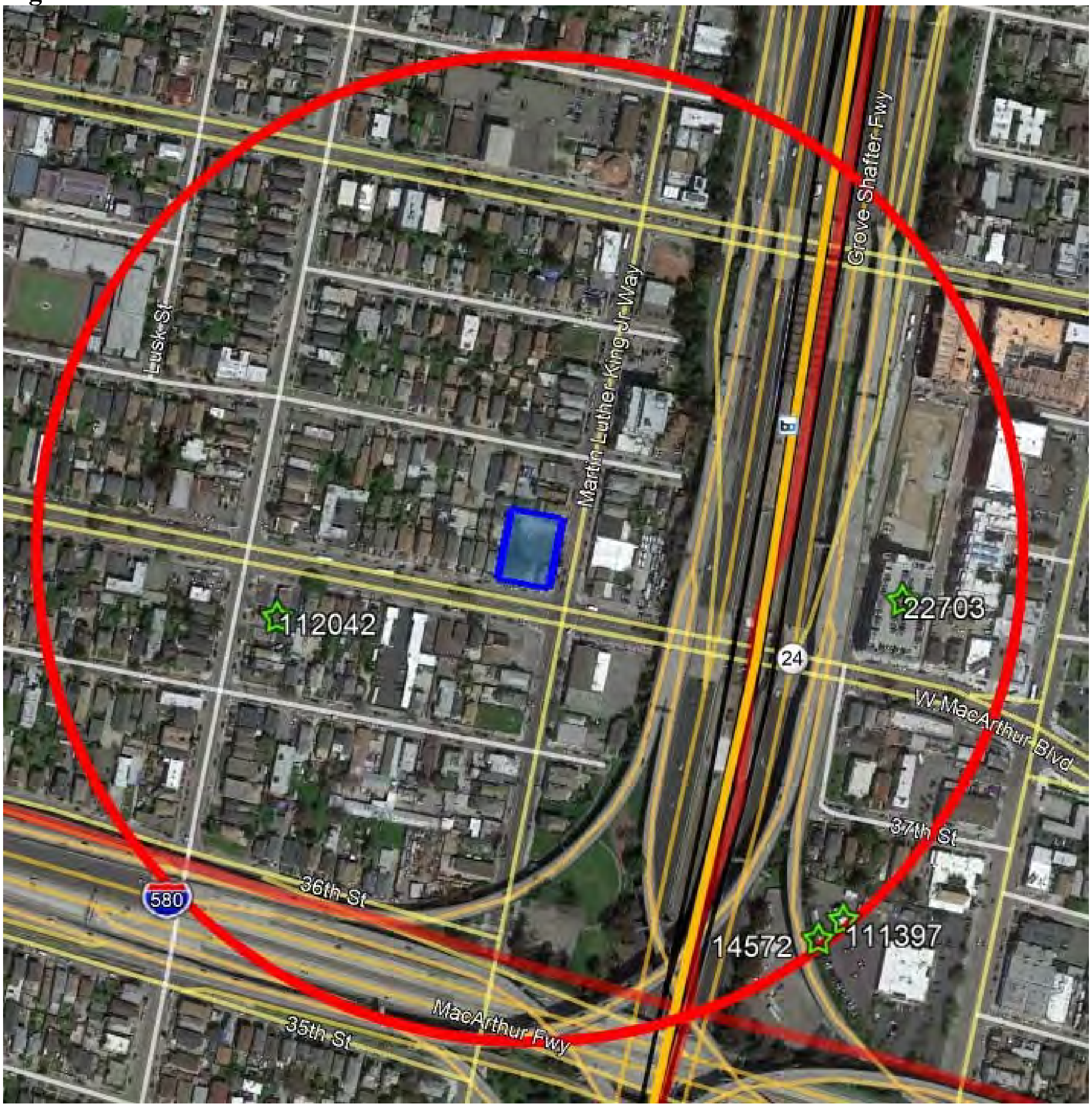
A summary of the predicted impacts of these sources on the project are shown in Table 1. Locations of these sources and the project are shown in in Figure 1.

Table 1 Summary of TAC Impacts from Sources within 1,000 feet on Project

Source	Range in Distance (feet)	Maximum Impact: Cancer Risk[1] (per million)	Maximum Impact: Annual $PM_{2.5}$ (µg/m^3)	Maximum Impact: Hazard Index	Analysis Method
Interstate 580 & Ramp from State route 24 to Interstate 580	~800	1.5	0.11	<0.01	Refined Modeling using EMFAC2014 and AERMOD
State Route 24 & Ramp from State Route 24 to Interstate 580	300	2.7	0.16	<0.01	
W. MacArthur Blvd. East-West roadway, 25 feet North ADT = ~25,610	25	3.1	0.22	<0.01	Refined Modeling using EMFAC2014 and AERMOD
MLK Jr. Way (North-South) at 30 feet West (2nd floor) ADT = ~11,100	30 2nd floor	4.5	0.12	<0.03	Refined BAAQMD Roadway Screening Analysis Calculator with adjustment for EMFAC2014
40th Street (East-West) at 700 feet South ADT = ~21,650	700	0.9	0.02	<0.03	
Plant 112042-Gasoline Dispensing Facility, Westco Gas at 731 W. MacArthur Blvd.	~460	1.5	--	0.01	BAAQMD Health Risk Calculator screening values using provided emissions data
Plant 22703-Generator, BART at 550 W. MacArthur Blvd.	~750	<0.1	<0.01	<0.01	
Plant 111397-Gasoline Dispensing Facility, CHP at 3601 Telegraph.	~1,000	0.2	--	<0.01	
Plant 14572-Generator, CHP at 3601 Telegraph.	~1,000	4.9	0.01	<0.01	
Combined Impacts from All Sources		*<19.4*	*<0.65*	*<0.13*	

[1] Cancer risk predictions include the application of 2015 OEHHA guidance and assume infant exposure.

Figure 1 TAC Influence Area



*Note that stationary source locations are based on BAAQMD data and not accurately depicted. The locations were determined based on the address of the source and review of aerial maps.

Freeway: I-580 and S.R. 24 Refined Modeling

The project site is located approximately 300 feet west of S.R. 24 and 800 feet north of I-580. Using the BAAQMD Highway Risk Screening tool, the cancer risk from these roadways at the closest project site receptors was found to exceed the BAAQMD significance threshold of 10 in a million (when applying the 2015 cancer risk guidance from OEHHA – described in *Attachment 2*). Hence, a refined analysis of the cancer risk impacts from traffic was conducted using the developed vehicle emissions model, recent traffic data reported by Caltrans (including vehicle mix), dispersion modeling that utilizes historical meteorological data for the area, and cancer risk calculations based on the latest State guidance. In addition to S.R. 24 and I-580, the off ramp from westbound S.R.24 to westbound I-580 (Ramp), was included in the analysis.

This analysis involved the computation of DPM and organic TAC emissions for traffic on I-580, S.R. 24, and the Ramp near the project site using the CARB EMFAC2014 emission factor model and traffic mix data published by the California Department of Transportation (Caltrans) in the vicinity of the project site. Roadway geometry receptor coordinates and elevations, meteorological data, traffic volumes, and the emission factors were used with the U.S. Environmental Protection Agency (EPA) AERMOD dispersion model to predict annual concentrations of TACs from roadway traffic. Traffic TAC concentrations are combined with risk factors to predict lifetime cancer risks at the project site. Figure 2 shows the project site and the modeled roadway line-sources and receptors.

In the project area, I-580 has a traffic volume of 248,000 average daily traffic (ADT) and S.R. 24 has a volume of 145,000 ADT, as reported by Caltrans.[5] The Ramp was assigned an ADT of 24,167 assuming that the Ramp carries one-third of the southbound S.R.24 traffic. A review of the Caltrans truck traffic information indicates about 1.11 percent of the traffic on I-580 is truck traffic, of which 0.39 percent are considered heavy duty trucks and 0.72 percent are medium duty trucks. On S.R. 24, the total truck percentage is 2.48 percent, comprised of 0.95 percent heavy duty trucks and 1.53 percent medium duty trucks. The Ramp was assumed to have the same vehicle distribution as S.R. 24.

Traffic Emissions Modeling

DPM, organic TACs, and $PM_{2.5}$ emissions for traffic on I-580, S.R. 24, and the Ramp were computed using the CARB EMFAC2014 emission factor model and the traffic mix developed from Caltrans data. DPM emissions are projected to decrease in the future and are reflected in the EMFAC2014 emissions data.

Residential occupation of the project was assumed to begin in 2020 or thereafter. In order to estimate TAC and $PM_{2.5}$ emissions for calculating increased cancer risks to new residents from traffic on I-580, S.R. 24, and the Ramp, the EMFAC2014 model was used to develop vehicle emission factors for the year 2020 using the calculated mix of cars and trucks on the freeways and assuming a 1 percent per year growth rate in traffic volume. Year 2020 emissions were conservatively assumed as being representative of future conditions beyond 2020 since, as discussed above, overall vehicle emissions and, in particular, diesel truck emissions will decrease in the future. Default EMFAC2014 vehicle model fleet age distributions for Alameda County were assumed in calculating the emissions.

Average hourly traffic distributions for Alameda County roadways were developed using the EMFAC model,[6] which were then applied to the average daily traffic volumes to obtain estimated hourly traffic volumes and emissions for the freeways. For all hours of the day, other than during the two-hour peak a.m. and p.m. periods, an average free-flow travel speed of 65 mph was assumed for all vehicles on I-580 and S.R. 24 other than trucks which were assumed to travel at a speed of 60

[5] California Department of Transportation. 2017. *2016 Annual Average Truck on California State Highways*
[6] The Burden output from EMFAC2007, CARB's previous version of the EMFAC model, was used for this since the current web-based version of EMFAC2011 does not include Burden type output with hour by hour traffic volume information.

mph. Vehicle speed on the Ramp was assumed to be 45 mph for all hours of the day. For I-580, average travel speeds of 55 mph and 20 mph were used for a.m. and p.m. peak period eastbound traffic, respectively. An average travel speed of 20 mph was used for both peak a.m. and p.m. westbound traffic. For S.R. 24, the average free-flow travel speed was used for eastbound a.m. and westbound p.m. peak periods, a travel speed of 15 mph was used for peak p.m. eastbound traffic and a travel speed of 50 mph was used for peak a.m. westbound traffic.

Emissions of total organic gases (TOG) were also calculated using the EMFAC2014 model. These TOG emissions were then used in modeling the organic TACs (i.e., TACs associated with motor vehicle from TOG exhaust emissions and evaporative TOG emissions). TOG emissions from exhaust and for running evaporative loses from gasoline vehicles were calculated using EMFAC2014 default model values for Alameda County along with the estimated traffic volumes and vehicle mixes.

$PM_{2.5}$ emissions for vehicles traveling on the freeways were calculated using the same basic approach that was used for assessing TAC impacts. All $PM_{2.5}$ emissions from all vehicles were used, rather than just the $PM_{2.5}$ fraction from diesel powered vehicles, because all vehicle types (i.e., gasoline and diesel powered) produce $PM_{2.5}$. Additionally, $PM_{2.5}$ emissions from vehicle tire and brake wear and from re-entrained roadway dust were included in these emissions. The assessment involved, first, calculating $PM_{2.5}$ emission rates from traffic traveling on freeways. These emissions were calculated using the EMFAC2014 model for the 2020 traffic volumes and were calculated in the same manner as discussed earlier for the TAC modeling. $PM_{2.5}$ re-entrained dust emissions from vehicles traffic were calculated using CARB emission calculation procedures.[7]

Dispersion Modeling

Dispersion modeling of DPM and $PM_{2.5}$ emissions was conducted using the AERMOD model, which is recommended by the BAAQMD for this type of analysis.[8] A five-year (2009-2013) data set of hourly meteorological data from the Oakland Airport, prepared by the CARB for use in health risk modeling, was used with the model. Other inputs to the model included road geometry and elevations, hourly traffic volumes, emission rates, and on-site project receptor locations and heights. Eastbound and westbound traffic on I-580, S.R. 24, and the Ramp within about 1,000 feet of the project site was evaluated with the model.

Receptors are specific locations, identified by modeling coordinates, where TAC or $PM_{2.5}$ concentrations were predicted by the dispersion model. The modeling used a grid of receptors spaced every 7 meters (23 feet) within the project boundary. The proposed building will be mixed use and have residential units on the second through sixth floors, so receptor heights of 5.2 and 8.2 meters (17 and 27 feet) were used in modeling to represent the breathing heights of future residents on the second and third floor levels. TAC concentrations from higher floor levels would be lower than those of the first and second floor levels. The AERMOD model provides annual concentrations at each receptor. Figure 2 shows the roadway links and receptor locations used in the modeling.

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[7] CARB, 2018. *Miscellaneous Process Methodology 7.9, Entrained Road Travel, Paved Road Dust*. Revised and updated, March 2018.
[8] BAAQMD, 2012. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May.

Computed Community Risk

The model predicted the maximum annual DPM concentration from combined I-580 and the Ramp traffic of 0.0013 μg/m^3 and the maximum concentration from combined S.R. 24 and the Ramp of 0.0027 μg/m^3. These maximum concentrations occurred at a second-floor receptor near the southeast corner of the project residential area. This receptor most affected by both roadways is considered to be the project maximally exposed individual or MEI (see Figure 2). The maximum annual $PM_{2.5}$ concentration at the MEI location from S.R. 24 and the Ramp was 0.16 μg/m^3 and the maximum $PM_{2.5}$ concentration at the MEI location from I-580 and the Ramp was 0.11 μg/m^3. DPM and $PM_{2.5}$ concentrations from I-580 and S.R. 24 at other residential locations and floor levels would be lower than at the MEI. The maximum annual $PM_{2.5}$ concentrations do not exceed the $PM_{2.5}$ threshold of greater than 0.3 μg/m^3.

Increased cancer risks for residents at the project site from traffic on I-580, S.R. 24, and the Ramp were calculated using modeled TAC concentrations (i.e., $PM_{2.5}$ exhaust or DPM concentrations and TOG TAC concentrations) and the cancer risk calculation methods and exposure parameters described in Attachment 2. The maximum increased cancer risks from traffic on I-580 and the Ramp was computed as 1.5 in one million and the maximum increased cancer risk from S.R. 24 and the Ramp was computed as 2.7 in one million. These occurred at the same receptor that had the highest annual DPM and $PM_{2.5}$ concentrations from both roadways, as shown on Figure 2. Cancer risks at other residential locations and floor levels would be lower than the maximum risk. The cancer risks at the project site would not exceed BAAQMD's significance recommended threshold of greater than 10.0 in one million excess cancer cases per million.

For non-cancer health effects from DPM, a chronic HI of less than 0.01 was computed for both I-580 and the Ramp and for S.R. 24 and the Ramp based on maximum annual average DPM concentrations. This HI is well below the BAAQMD threshold of greater than 1.0. HIs at all other receptors throughout the site would be lower than the maximum HI value.

Results are listed in Table 1. The modeling results and health risk calculations for the receptor with the maximum cancer risks from traffic on I-580, S.R. 24 and the Ramp are provided in *Attachment 3*.

Figure 2 **Project Site, On-Site Sensitive Receptors, Roadway Segments Modeled, and Receptor with Maximum TAC Impacts**

<u>Local Roadways: W. MacArthur Boulevard, Martin Luther King Jr. Way, and 40th Street</u>

For local roadways, BAAQMD has provided the *Roadway Screening Analysis Calculator* to assess whether roadways with traffic volumes of over 10,000 vehicles per day may have a potentially significant effect on a proposed project. Note this is a screening model and more refined modeling could be conducted if potentially significant impacts are identified. Two adjustments were made to the cancer risk predictions made by this calculator: (1) adjustment for latest vehicle emissions rates predicted using EMFAC2014 and (2) adjustment of cancer risk to reflect new OEHHA guidance (see *Attachment 2*).

The calculator uses EMFAC2011 emission rates for the year 2014. In addition, a new version of the emissions factor model, EMFAC2014 is available. This version predicts lower emission rates. An adjustment factor of 0.5 was developed by comparing emission rates of TOG for running exhaust and running losses developed using EMFAC2011 for year 2014 and those from EMFAC2014 for 2018. The predicted cancer risk was then adjusted using a factor of 1.3744 to account for new OEHHA guidance. This factor was provided by BAAQMD for use with their CEQA screening tools that are used to predict cancer risk.[9]

Three roadways were identified that appear to have traffic volumes greater than 10,000 ADT; W. MacArthur Boulevard, Martin Luther King Jr. Way, and 40th Street. ADT volumes were assessed using traffic volumes published in the MacArthur Village Project EIR for Cumulative Year 2030 Baseline Plus Project Conditions,[10] assuming the ADT was ten times the average AM and PM peak-hour volumes. Based on these projections, the ADT on W. MacArthur Boulevard was estimated to be 25,610 vehicles, the ADT on Martin Luther King Jr. Way was estimated to be 11,100 vehicles, and the ADT on 40th Street was estimated to be 21,650 vehicles.

The BAAQMD *Roadway Screening Analysis Calculator* for Alameda County was used for these roadways. W. MacArthur Boulevard was identified as an east-west roadway with the project site 35 feet north of the roadway. Martin Luther King Jr. Way was identified as a north-south roadway with the project site 30 feet west of the roadway. 40th Street was identified as an east-west roadway with the project site 700 feet south of the roadway. Estimated risk values for the roadways upon the project's sensitive receptors are listed in Table 1. Note that BAAQMD has found that non-cancer hazards from all local roadways would be below a Hazard Index of 0.03. Details of the screening and community risk calculations are included in *Attachment 4.*

The predicted impacts from W. MacArthur Boulevard would not exceed the hazard index BAAQMD threshold but would exceed the cancer risk and $PM_{2.5}$ concentration thresholds. Since these results are based on use of screening tools, a refined assessment was conducted.

Refined Roadway Impacts: W. MacArthur Boulevard *TAC Impacts*

Since screening computations indicate increases in $PM_{2.5}$ concentrations from traffic on W. MacArthur Boulevard would exceed the BAAQMD $PM_{2.5}$ concentration thresholds at the project dwelling units closest to W. MacArthur Boulevard, a refined analysis of the impacts of TACs and $PM_{2.5}$ to new sensitive receptors is necessary to evaluate potential cancer risks and $PM_{2.5}$ concentrations from W. MacArthur Boulevard. Refined modeling of local roadways predicts more accurate results, because project specific information is used in the modeling. This includes roadway orientation with respect to receptors (i.e., where dwelling units would be located with respect to

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[9] Correspondence with Alison Kirk, BAAQMD, November 23, 2015.

[10] MacArthur Transit Village Project EIR, January 2008.
http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/dowd008976.pdf

traffic), emission estimates (i.e., based on traffic speeds and traffic mix), and meteorological conditions near the project site.

The refined analysis of the impacts of TACs and $PM_{2.5}$ to new sensitive receptors is necessary to evaluate potential cancer risks and $PM_{2.5}$ concentrations from W. MacArthur Boulevard. This analysis involved the development of DPM, organic TAC, and $PM_{2.5}$ emissions for traffic on W. MacArthur Boulevard using the CARB EMFAC2014 emission factor model and a local traffic volume of 25,610 ADT.

Residential occupation of the project was assumed to begin in 2020 or thereafter. In order to estimate TAC and $PM_{2.5}$ emissions over a 30-year exposure period (2020-2049) for calculating increased cancer risks to new residents from traffic on W. MacArthur Boulevard, the EMFAC2014 model was used to develop vehicle emission factors for the year 2020. Year 2020 emissions were conservatively assumed as being representative of future conditions over the time period that cancer risks are evaluated (30 years), since, as discussed above, overall vehicle emissions, and in particular diesel truck emissions will decrease in the future.

The EMFAC2014 model was used to develop vehicle DPM emission factors for the year 2020 using an estimated mix of cars and trucks for W. MacArthur Boulevard. The predominate source of DPM emissions is from diesel fueled trucks. A truck mix of 4.09 percent was assumed for roadway traffic based on BAAQMD recommendations for truck percentages on non-highway roads in Alameda County.[11] One-third of the trucks were assumed to be heavy duty trucks and two-thirds were assumed to be medium duty trucks. Default EMFAC2014 vehicle model fleet age distributions for Alameda County were assumed in calculating the emissions. Average hourly traffic distributions for Alameda County roadways were developed using the EMFAC model,[12] which were then applied to the project area traffic volumes to obtain estimated hourly traffic volumes and emissions. The speed limit on W. MacArthur Boulevard is 35 miles per hour (mph) in the project area, but congestion likely occurs for at least 4 hours of the day (2 hours in the morning and 2 hours in the evening) during peak travel where traffic speeds were assumed to be 20 mph.

Emissions of TOG from gasoline-powered vehicles were calculated using the EMFAC2014 model. These TOG emissions were then used in modeling the organic TACs (i.e., TACs associated with motor vehicle from TOG exhaust emissions and evaporative TOG emissions). TOG emissions from exhaust and for running evaporative loses from gasoline vehicles were calculated using EMFAC2014 default model values for Alameda County along with the traffic volumes and vehicle mixes.

$PM_{2.5}$ emissions for vehicles traveling on W. MacArthur Boulevard were calculated using the same basic approach that was used for assessing TAC impacts. All $PM_{2.5}$ emissions from all vehicles were used, rather than just the $PM_{2.5}$ exhaust fraction from diesel powered vehicles, because all vehicle types (i.e., gasoline and diesel powered) produce $PM_{2.5}$. Additionally, $PM_{2.5}$ emissions from vehicle

[11] BAAQMD. 2012. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. may

[12] The Burden output from EMFAC2007, CARB's previous version of the EMFAC model, was used for this since the current web-based version of EMFAC2011 does not include Burden type output with hour by hour traffic volume information.

tire and brake wear and from re-entrained roadway dust were included in the emissions. The assessment involved, first, calculating $PM_{2.5}$ emission rates from traffic traveling on the roadway, including tire and brake wear. These emissions were calculated using the EMFAC2014 model and were calculated in the same manner as discussed above. $PM_{2.5}$ re-entrained dust emissions from vehicles traffic were calculated using CARB emission calculation procedures.[13]

Dispersion modeling of TAC and $PM_{2.5}$ emissions was conducted using the U.S. EPA AERMOD model, which is recommended by the BAAQMD for this type of analysis.[14] East and westbound traffic on W. MacArthur Boulevard within about 1,000 feet of the project site were evaluated with the model. The modeling used a five-year (2009-2013) data set of hourly meteorological data from the Oakland Airport, prepared by the CARB for use in health risk modeling.

Other inputs to the model included road geometry and elevations, hourly traffic emissions, and receptor locations. The modeling used a grid of receptors placed every 7 meters (23 feet) within the proposed project residential areas. Receptors used for the modeling are the same as those used for the I-580 and S.R. 24 roadway modeling, discussed above. The maximum DPM and annual $PM_{2.5}$ concentration occurred at a second-floor residential unit in the southeast corner of the project site, adjacent to W. MacArthur Boulevard. Figure 2 shows the project site, residential area, roadway segments modeled and residential receptor locations that were used in the modeling.

The maximum increased lifetime cancer risks, non-cancer health effects (health hazard index), and annual $PM_{2.5}$ concentrations for new residents at the project site were computed using modeled TAC and $PM_{2.5}$ concentrations and the methods and exposure parameters described in *Attachment 2*. The maximum increased cancer risk from W. MacArthur Boulevard traffic would be 3.1 in one million. The maximum $PM_{2.5}$ concentration would be 0.22 $\mu g/m^3$ and the maximum hazard index would be less than 0.01. These impacts would all be below their applicable BAAQMD significant impact thresholds. In general, cancer risks and $PM_{2.5}$ concentration will decrease with distance from the roadway and with height of the receptors.

Results are listed in Table 1. The emission information, modeling results, and health risk calculations for the receptor with the maximum cancer risk from W. MacArthur Boulevard traffic are provided in *Attachment 5*.

<u>BAAQMD-Permitted Stationary Sources</u>

Permitted stationary sources of air pollution near the project site were identified using BAAQMD's *Stationary Source Risk & Hazard Analysis Tool*. This mapping tool uses Google Earth and identifies the location of nearby stationary sources and their estimated risk and hazard impacts. In addition, *BAAQMD's Permitted Stationary Sources 2017* GIS website[15] was used to locate updated nearby permitted stationary sources. A Stationary Source Information Form (SSIF) containing the identified

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[13] CARB, 2018. *Miscellaneous Process Methodology 7.9, Entrained Road Travel, Paved Road Dust*. Revised and updated, March 2018.
[14] BAAQMD, 2012. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May 2012.
[15] BAAQMD, https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65

sources was prepared and submitted to BAAQMD. BAAQMD provided updated emissions data.[16] Those data were input into BAAQMD's *Risk and Hazards Emissions Screening Calculator* which computes the cancer risk, annual $PM_{2.5}$ concentrations, and HI using adjustments to account for new OEHHA guidance and distance from the sources.

Four stationary sources were identified; Plant #112042 and #111397 are gas dispensing facilities and Plant #22703 and 14572 are diesel-powered generators. Concentrations and community risk impacts from these sources upon the project site are reported in Table 1.

Combined Cancer Risk, Hazard Index and Annual $PM_{2.5}$ Concentrations

The combination of impacts from all sources at the receptor most affected by TAC sources or considered the Maximally Exposed Individual (MEI) is also reported in Table 1. The maximum impacts from each source were simply added to compute the combined impacts from all sources. This is a slight overestimate, because each source affects the site at a different location and this assessment assumes the worst location for each source is at the same location. This combined cancer risk is below the threshold of 100 chances per million, the annual $PM_{2.5}$ concentration does not exceed 0.8 $\mu g/m^3$, and the Hazard Index is well below 10.0. The impact from each source does not exceed the single-source threshold of 10.0 chances per million for cancer risk, 0.3 $\mu g/m^3$ for annual $PM_{2.5}$ concentration, and 1.0 for Hazard Index.

Conclusions and TAC Mitigation

Community risk thresholds for TAC emissions from traffic sources and a stationary source located within 1,000 feet of the project site were found to be below significance thresholds for both single and combined sources. As a result, features to mitigate or reduce these TAC impacts are not necessary.

Criteria Air Pollutants

The Federal Clean Air Act governs air quality in the United States. In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act. At the Federal level, the United States Environmental Protection Agency (USEPA) administers the Clean Air Act. The California Clean Air Act is administered by the CARB at the State level and by the Air Quality Management Districts at the regional and local levels. BAAQMD regulates air quality at the regional level, which includes the nine-county Bay Area.

The federal Clean Air Act requires each state to identify areas that have ambient air quality in violation of federal standards. States are required to develop, adopt, and implement a state implementation plan (SIP) to achieve, maintain, and enforce federal ambient air quality standards in these nonattainment areas. SIP elements are developed on a pollutant-by-pollutant basis whenever one or more air quality standards are being violated. In California, local and regional air pollution control agencies have primary responsibility for developing SIPs, generally in coordination with

[16] Correspondence with Areana Flores, BAAQMD, July 10, 2019.

local and regional land use and transportation planning agencies. BAAQMD is the responsible regional air pollution control agency in the San Francisco Bay Area.

An area's compliance with national ambient air quality standards under the Clean Air Act is categorized as nonattainment, attainment (better than national standards), unclassifiable, or attainment/cannot be classified. The unclassified designation includes attainment areas that comply with federal standards, as well as areas for which monitoring data are lacking. Unclassified areas are treated as attainment areas for most regulatory purposes. Simple attainment designations generally are used only for areas that transition from nonattainment status to attainment status. Areas that have been reclassified from nonattainment to attainment of federal air quality standards are automatically considered maintenance areas, although this designation is seldom noted in status listings. The San Francisco Bay Area is designated as nonattainment for the federal 8-hour ozone standard and the 24-hour $PM_{2.5}$ standard. The San Francisco Bay Area is designated as attainment or unclassified for the other national ambient air quality standards.

With respect to the state ambient air quality standards, California classifies areas as attainment, nonattainment, nonattainment-transitional, or unclassified. The San Francisco Bay Area is designated as nonattainment for the state ozone, inhalable particulate matter (PM_{10}), and $PM_{2.5}$ standards and as attainment or unclassified for the other state ambient air quality standards. The predominant regulation that guides assessment of air quality impacts of federal actions is the General Conformity Rule, established under the Clean Air Act (Section 176(c)(4)). The General Conformity Rule ensures that the actions taken by federal agencies in nonattainment and maintenance areas do not interfere with a state's plans to meet national standards for air quality. The project area is located within the San Francisco Bay Area Air Basin, which is designated as a nonattainment area for the federal 8-hour ozone standard and the federal $PM_{2.5}$ standard. The air basin is designated as a maintenance area with respect to the federal carbon monoxide (CO) standards.

In keeping with the General Conformity Rule process, this assessment applies the appropriate *de minimis* thresholds of the Rule as they apply to the San Francisco Bay Area Air Basin for ozone precursors, $PM_{2.5}$, and CO. The *de minimis* thresholds for these three pollutants in the San Francisco Bay Area Air Basin are 100 tons per year for each pollutant.

Criteria Air Pollutant Analysis

The BAAQMD CEQA Air Quality Guidelines include project screening sizes that identify projects would potentially exceeding BAAQMD-recommended significance thresholds. These thresholds include criteria air pollutants or their precursor pollutants that are considered non-attainment under the NAAQS for the Bay Area. Applicable non-attainment pollutants (or precursors) are shown in Table 2.

Table 2 BAAQMD Significance Thresholds for Project Emissions

Pollutant	Construction Threshold	Operational Threshold
Ozone precursor (ROG)	54 lbs/average day equivalent to 10 tons per year	54 lbs/average day or 10 tons per year
Ozone Precursor (NOx)	54 lbs/average day equivalent to 10 tons per year	54 lbs/average day or 10 tons per year
$PM_{2.5}$	54 lbs/average day equivalent to 10 tons per year	54 lbs/average day or 10 tons per year

The BAAQMD CEQA guidelines include significance thresholds screening level project sizes that can be used to assess whether projects would exceed the emission-based thresholds shown in Table 2. The project, which includes 77 residential units and 2,052-sf of retail, would be well below these screening criteria. The construction screening size for the project is 240 dwelling units and 277,000-sf for the retail portion of the project. Combined, the project would be 33 percent of the construction screening size that would have emissions above the significance threshold. The operational screening size for the project is 494 dwelling units and 99,000-sf for the retail portion of the project. Combined, the project would be 18 percent of the operational screening size that would have emissions above the significance threshold. Since the project would have construction and operational maximum annual emissions well below 10 tons per year for any non-attainment pollutant (or precursor), the emissions would not exceed the *de minimis* thresholds for these pollutants in the San Francisco Bay Area Air Basin of 100 tons per year for each pollutant. As a result, features to mitigate or reduce these criteria air pollutant impacts are not necessary.

Attachments

The supporting screening calculations and modeling information are provided in attachments to this report:

Attachment 1: Applicable City of Oakland Condition of Approval (#19)
Attachment 2: Health Impact Evaluation Methodology
Attachment 3: Refined Highway Modeling
Attachment 4: Local Roadway and Stationary Source Screening Health Risk Calculations
Attachment 5: Refined W. MacArthur Boulevard Modeling

Attachment 1: Applicable City of Oakland SCAs

19. Exposure to Air Pollution (Toxic Air Contaminants)

a. Health Risk Reduction Measures

Requirement: The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. The project applicant shall choose one of the following methods:

i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City.

\- or -

ii. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City:

- Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 [insert MERV-16 for projects located in the West Oakland Specific Plan area] or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required.
- Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph).
- Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible.
- The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods.
- Sensitive receptors shall be located on the upper floors of buildings, if feasible.
- Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including

one or more of the following: Pine (*Pinus nigra* var. *maritima*), Cypress (*X Cupressocyparis leylandii*), Hybrid popular (*Populus deltoids X trichocarpa*), and Redwood *(Sequoia sempervirens*).

- Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible.
- Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible.
- Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible:
    - Installing electrical hook-ups for diesel trucks at loading docks.
    - Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards.
    - Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels.
    - Prohibiting trucks from idling for more than two minutes.
    - Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

b. Maintenance of Health Risk Reduction Measures

Requirement: The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

Attachment 2: Health Impact Evaluation Methodology

A health risk assessment (HRA) for exposure to Toxic Air Contaminates (TACs) requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.[17] These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA's recommended methods.[18] This HRA used the 2015 OEHHA risk assessment guidelines and CARB guidance. The BAAQMD has adopted recommended procedures for applying the newest OEHHA guidelines as part of Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.[19] Exposure parameters from the OEHHA guidelines and the recent BAAQMD HRA Guidelines were used in this evaluation.

<u>Cancer Risk</u>

Potential increased cancer risk from inhalation of TACs are calculated based on the TAC concentration over the period of exposure, inhalation dose, the TAC cancer potency factor, and an age sensitivity factor to reflect the greater sensitivity of infants and children to cancer causing TACs. The inhalation dose depends on a person's breathing rate, exposure time and frequency and duration of exposure. These parameters vary depending on the age, or age range, of the persons being exposed and whether the exposure is considered to occur at a residential location or other sensitive receptor location.

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day). As recommended by the BAAQMD for residential exposures, 95th percentile breathing rates are used for the third trimester and infant exposures, and 80th percentile breathing rates for child and adult exposures. For children at schools and daycare facilities, BAAQMD recommends using the 95th percentile breathing rates. Additionally, CARB and the BAAQMD recommend the use of a residential exposure duration of 30 years for sources with long-term emissions (e.g., roadways). For workers, assumed to be adults, a 25-year exposure period is

17 OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.
18 CARB, 2015. *Risk Management Guidance for Stationary Sources of Air Toxics*. July 23.
19 BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*. December 2016.

recommended by the BAAQMD.

Under previous OEHHA and BAAQMD HRA guidance, residential receptors are assumed to be at their home 24 hours a day, or 100 percent of the time. In the 2015 Risk Assessment Guidance, OEHHA includes adjustments to exposure duration to account for the fraction of time at home (FAH), which can be less than 100 percent of the time, based on updated population and activity statistics. The FAH factors are age-specific and are: 0.85 for third trimester of pregnancy to less than 2 years old, 0.72 for ages 2 to less than 16 years, and 0.73 for ages 16 to 70 years. Use of the FAH factors is allowed by the BAAQMD if there are no schools in the project vicinity that would have a cancer risk of one in a million or greater assuming 100 percent exposure (FAH = 1.0).

Functionally, cancer risk is calculated using the following parameters and formulas:

Cancer Risk (per million) = $CPF \times Inhalation\ Dose \times ASF \times ED/AT \times FAH \times 10^6$

Where:

CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = $C_{air} \times DBR \times A \times (EF/365) \times 10^{-6}$

Where:

C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

The health risk parameters used in this evaluation are summarized as follows:

Parameter	***Exposure Type →***	**Infant**		**Child**		**Adult**
	Age Range →	**3rd Trimester**	**0<2**	**2 < 9**	**2 < 16**	**16 - 30**
DPM Cancer Potency Factor $(mg/kg\text{-}day)^{-1}$		1.10E+00	1.10E+00	1.10E+00	1.10E+00	1.10E+00
Daily Breathing Rate (L/kg-day) 80th Percentile Rate		273	758	631	572	261
Daily Breathing Rate (L/kg-day) 95th Percentile Rate		361	1,090	861	745	335
Inhalation Absorption Factor		1	1	1	1	1
Averaging Time (years)		70	70	70	70	70
Exposure Duration (years)		0.25	2	14	14	14
Exposure Frequency (days/year)		350	350	350	350	350
Age Sensitivity Factor		10	10	3	3	1
Fraction of Time at Home		0.85-1.0	0.85-1.0	0.72-1.0	0.72-1.0	0.73

Non-Cancer Hazards

Non-cancer health risk is usually determined by comparing the predicted level of exposure to a chemical to the level of exposure that is not expected to cause any adverse effects (reference exposure level), even to the most susceptible people. Potential non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). The HI value represents the maximum concentration at which no adverse health effects to the respiratory system are anticipated to occur. OEHHA has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The total HI is calculated as the sum of the HIs for each TAC evaluated and the total HI is compared to the BAAQMD significance thresholds to determine whether a significant non-cancer health impact from a project would occur.

Typically, for residential projects located near roadways with substantial TAC emissions, the primary TAC of concern with non-cancer health effects is diesel particulate matter (DPM). For DPM, the chronic inhalation REL is 5 micrograms per cubic meter ($\mu g/m^3$).

Annual $PM_{2.5}$ Concentrations

While not a TAC, fine particulate matter ($PM_{2.5}$) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA). The thresholds of significance for $PM_{2.5}$ (project level and cumulative) are in terms of an increase in the annual average concentration. When considering $PM_{2.5}$ impacts, the contribution from all sources of $PM_{2.5}$ emissions should be included. For projects with potential impacts from nearby local roadways, the $PM_{2.5}$ impacts should include those from vehicle exhaust emissions, $PM_{2.5}$ generated from vehicle tire and brake wear, and fugitive emissions from re-suspended dust on the roads.

Attachment 3: I-580, S.R. 24, and Ramp Traffic Emissions and Health Risk Calculations

3801 Martin Luther King Jr. Way, Oakland, CA
I-580
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2020

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Width (ft)	Link Width (m)	Release Height (m)	Diesel ADT	Average Speed (mph)
EB-I580	Eastbound I-580	E	3	448	56	17.0	3.4	1,625	variable
WB-I580	Westbound I-580	W	3	447	56	17.0	3.4	1,625	variable

2020 Hourly Diesel Traffic Volumes Per Direction and DPM Emissions - EB-I580

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.42%	23	0.0319	9	7.50%	122	0.0166	17	7.13%	116	0.0269
2	0.98%	16	0.0265	10	2.67%	43	0.0334	18	6.55%	106	0.0265
3	1.21%	20	0.0254	11	7.48%	122	0.0215	19	6.26%	102	0.0183
4	1.34%	22	0.0362	12	7.70%	125	0.0217	20	5.65%	92	0.0172
5	0.89%	14	0.0324	13	7.49%	122	0.0214	21	1.19%	19	0.0322
6	1.23%	20	0.0375	14	7.50%	122	0.0214	22	1.42%	23	0.0343
7	2.19%	36	0.0359	15	7.14%	116	0.0208	23	0.94%	15	0.0302
8	7.04%	114	0.0162	16	6.59%	107	0.0194	24	0.49%	8	0.0293
								Total		1,625	

2020 Hourly Diesel Traffic Volumes Per Direction and DPM Emissions - WB-I580

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.42%	23	0.0319	9	7.50%	122	0.0272	17	7.13%	116	0.0269
2	0.98%	16	0.0265	10	2.67%	43	0.0334	18	6.55%	106	0.0265
3	1.21%	20	0.0254	11	7.48%	122	0.0215	19	6.26%	102	0.0183
4	1.34%	22	0.0362	12	7.70%	125	0.0217	20	5.65%	92	0.0172
5	0.89%	14	0.0324	13	7.49%	122	0.0214	21	1.19%	19	0.0322
6	1.23%	20	0.0375	14	7.50%	122	0.0214	22	1.42%	23	0.0343
7	2.19%	36	0.0359	15	7.14%	116	0.0208	23	0.94%	15	0.0302
8	7.04%	114	0.0268	16	6.59%	107	0.0194	24	0.49%	8	0.0293
								Total		1,625	

3801 Martin Luther King Jr. Way, Oakland, CA
I-580
PM2.5 & TOG Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2020

Group Link	Description	Direction	No. Lanes	Link Length (m)	Link Width (ft)	Link Width (m)	Release Height (m)	ADT	Average Speed (mph)
EB-I580	Eastbound I-580	E	3	448	56	17.0	1.3	128,960	variable
WB-I580	Westbound I-580	W	3	447	56	17.0	1.3	128,960	variable

2020 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - EB-I580

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.07%	1380	0.0201	9	7.06%	9110	0.0193	17	7.39%	9535	0.0214
2	0.35%	450	0.0205	10	4.23%	5451	0.0198	18	8.33%	10740	0.0214
3	0.28%	357	0.0210	11	4.58%	5906	0.0197	19	5.83%	7521	0.0195
4	0.16%	213	0.0251	12	5.83%	7516	0.0197	20	4.40%	5671	0.0194
5	0.44%	566	0.0205	13	6.18%	7964	0.0196	21	3.30%	4250	0.0196
6	0.80%	1026	0.0206	14	6.03%	7779	0.0196	22	3.31%	4266	0.0196
7	3.76%	4843	0.0198	15	7.10%	9156	0.0196	23	2.48%	3195	0.0196
8	7.95%	10253	0.0192	16	7.25%	9356	0.0195	24	1.91%	2458	0.0195
								Total		128,960	

2020 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - WB-I580

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.07%	1380	0.0201	9	7.06%	9110	0.0215	17	7.39%	9535	0.0214
2	0.35%	450	0.0205	10	4.23%	5451	0.0198	18	8.33%	10740	0.0214
3	0.28%	357	0.0210	11	4.58%	5906	0.0197	19	5.83%	7521	0.0195
4	0.16%	213	0.0251	12	5.83%	7516	0.0197	20	4.40%	5671	0.0194
5	0.44%	566	0.0205	13	6.18%	7964	0.0196	21	3.30%	4250	0.0196
6	0.80%	1026	0.0206	14	6.03%	7779	0.0196	22	3.31%	4266	0.0196
7	3.76%	4843	0.0198	15	7.10%	9156	0.0196	23	2.48%	3195	0.0196
8	7.95%	10253	0.0214	16	7.25%	9356	0.0195	24	1.91%	2458	0.0195
								Total		128,960	

3801 Martin Luther King Jr. Way, Oakland, CA
I-580
Entrained PM2.5 Road Dust Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2020

Group Link	Description	Direction	No. Lanes	Link Length (m)	Link Width (ft)	Link Width (m)	Release Height (m)	ADT	Average Speed (mph)
EB-I580	Eastbound I-580	E	3	448	56	17.0	1.3	128,960	variable
WB-I580	Westbound I-580	W	3	447	56	17.0	1.3	128,960	variable

2020 Hourly Traffic Volumes Per Direction and Road Dust PM2.5 Emissions - EB-I580

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.07%	1380	0.0077	9	7.06%	9110	0.0077	17	7.39%	9535	0.0077
2	0.35%	450	0.0077	10	4.23%	5451	0.0077	18	8.33%	10740	0.0077
3	0.28%	357	0.0077	11	4.58%	5906	0.0077	19	5.83%	7521	0.0077
4	0.16%	213	0.0077	12	5.83%	7516	0.0077	20	4.40%	5671	0.0077
5	0.44%	566	0.0077	13	6.18%	7964	0.0077	21	3.30%	4250	0.0077
6	0.80%	1026	0.0077	14	6.03%	7779	0.0077	22	3.31%	4266	0.0077
7	3.76%	4843	0.0077	15	7.10%	9156	0.0077	23	2.48%	3195	0.0077
8	7.95%	10253	0.0077	16	7.25%	9356	0.0077	24	1.91%	2458	0.0077
								Total		128,960	

2020 Hourly Traffic Volumes Per Direction and Road Dust PM2.5 Emissions - WB-I580

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.07%	1380	0.0077	9	7.06%	9110	0.0077	17	7.39%	9535	0.0077
2	0.35%	450	0.0077	10	4.23%	5451	0.0077	18	8.33%	10740	0.0077
3	0.28%	357	0.0077	11	4.58%	5906	0.0077	19	5.83%	7521	0.0077
4	0.16%	213	0.0077	12	5.83%	7516	0.0077	20	4.40%	5671	0.0077
5	0.44%	566	0.0077	13	6.18%	7964	0.0077	21	3.30%	4250	0.0077
6	0.80%	1026	0.0077	14	6.03%	7779	0.0077	22	3.31%	4266	0.0077
7	3.76%	4843	0.0077	15	7.10%	9156	0.0077	23	2.48%	3195	0.0077
8	7.95%	10253	0.0077	16	7.25%	9356	0.0077	24	1.91%	2458	0.0077
								Total		128,960	

3801 Martin Luther King Jr. Way, Oakland, CA
I-580 Traffic Data and PM2.5 & TOG Emission Factors - 63 mph

Analysis Year = *2020*

						Emission Factors				
						Diesel	All Vehicles		Gas Vehicles	
Vehicle Type	2016 Caltrans Number Vehicles (veh/day)	2020 Number Vehicles (veh/day)	2020 Percent Diesel	Number Diesel Vehicles (veh/day)	Vehicle Speed (mph)	Vehicles DPM (g/VMT)	Total PM2.5 (g/VMT)	Exhaust PM2.5 (g/VMT)	Exhaust TOG (g/VMT)	Running TOG (g/VMT)
LDA	171,959	178,837	1.11%	1,984	65	0.0160	0.0194	0.0016	0.0179	0.046
LDT	73,288	76,220	0.16%	125	65	0.0175	0.0193	0.0015	0.0238	0.091
MDT	1,782	1,853	10.18%	189	60	0.0155	0.0233	0.0024	0.0448	0.179
HDT	971	1,010	94.31%	952	60	0.0375	0.0804	0.0351	0.1172	0.104
Total	248,000	257,920	-	3,250	62.5	-	-		-	-
Mix Avg Emission Factor						**0.02232**	**0.01961**	**0.00173**	**0.01988**	**0.06020**
Increase From 2016		1.04								
Vehicles/Direction		128,960		1,625						
Avg Vehicles/Hour/Direction		**5,373**		**68**						

Traffic Data Year = *2016*

Caltrans 2016 Truck AADTs %		Total	Truck by Axle			
	Total	Truck	2	3	4	5
I-580 A Oakland, Jct Rtes 24/980	248,000	2,753	1,782	340	42	589
			64.73%	12.35%	1.53%	21.40%
Percent of Total Vehicles		1.11%	0.72%	0.14%	0.02%	0.24%

Traffic Increase per Year (%) = *1.00%*

3801 Martin Luther King Jr. Way, Oakland, CA
I-580 Traffic Data and PM2.5 & TOG Emission Factors - 20 mph

Analysis Year = *2020*

						Emission Factors				
						Diesel	All Vehicles		Gas Vehicles	
Vehicle Type	2016 Caltrans Number Vehicles (veh/day)	2020 Number Vehicles (veh/day)	2020 Percent Diesel	Number Diesel Vehicles (veh/day)	Vehicle Speed (mph)	Vehicles DPM (g/VMT)	Total PM2.5 (g/VMT)	Exhaust PM2.5 (g/VMT)	Exhaust TOG (g/VMT)	Running TOG (g/VMT)
LDA	171,959	178,837	1.11%	1,984	20	0.0251	0.0212	0.0035	0.0394	0.046
LDT	73,288	76,220	0.16%	125	20	0.0274	0.0211	0.0034	0.0527	0.091
MDT	1,782	1,853	10.18%	189	20	0.0345	0.0333	0.0124	0.1196	0.179
HDT	971	1,010	94.31%	952	20	0.0317	0.0751	0.0298	0.2906	0.104
Total	248,000	257,920	-	3,250	20	-	-	-	-	-
Mix Avg Emission Factor						**0.02769**	**0.02149**	**0.00361**	**0.04399**	**0.06020**
Increase From 2016		1.04								
Vehicles/Direction		128,960		1,625						
Avg Vehicles/Hour/Direction		**5,373**		**68**						

Traffic Data Year = *2016*

Caltrans 2016 Truck AADTs %		Total	Truck by Axle			
	Total	Truck	2	3	4	5
I-580 A Oakland, Jct Rtes 24/980	248,000	2,753	1,782	340	42	589
			64.73%	12.35%	1.53%	21.40%
Percent of Total Vehicles		1.11%	0.72%	0.14%	0.02%	0.24%

Traffic Increase per Year (%) = *1.00%*

3801 Martin Luther King Jr. Way, Oakland, CA
I-580 Traffic Data and Entrained PM2.5 Road Dust Emission Factors

$E_{2.5}$ = [k(sL)^$^{0.91}$ x (W)^$^{1.02}$ x (1-P/4N) x 453.59

where:

$E_{2.5}$ = $PM_{2.5}$ emission factor (g/VMT)
k = particle size multiplier (g/VMT) [$k_{PM2.5}$ = k_{PM10} x (0.0686/0.4572) = 1.0 x 0.15 = 0.15 g/VMT][a]
sL = roadway specific silt loading (g/m^2)
W = average weight of vehicles on road (Bay Area default = 2.4 tons)[a]
P = number of days with at least 0.01 inch of precipitation in the annual averaging period
N = number of days in the annual averaging period (default = 365)

Notes: [a] CARB 2018, Miscellaneous Process Methodology 7.9, Entrained Road Travel, Paved Road Dust (Revised and updated, March 2018)

Road Type	Silt Loading (g/m^2)	Average Weight (tons)	County	No. Days ppt > 0.01"	$PM_{2.5}$ Emission Factor (g/VMT)
Freeway	0.015	2.4	Alameda	61	0.00768

SFBAAB[a]

Road Type	Silt Loading (g/m^2)
Collector	0.032
Freeway	0.015
Local	0.32
Major	0.032

SFBAAB[a]

County	>0.01 inch precipitation
Alameda	61
Contra Costa	60
Marin	66
Napa	68
San Francisco	67
San Mateo	60
Santa Clara	64
Solano	54
Sonoma	69

3801 Martin Luther King Jr. Way, Oakland, CA
Highway-24
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2020

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Width (ft)	Link Width (m)	Release Height (m)	Diesel ADT	Average Speed (mph)
EB-Hwy-24	Eastbound Highway 24	E	3	703	56	17.0	3.4	1,404	variable
WB-Hwy-24	Westbound Highway 24	W	3	699	56	17.0	3.4	1,404	variable

2020 Hourly Diesel Traffic Volumes Per Direction and DPM Emissions - EB-Hwy-24

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	2.27%	32	0.0325	9	7.04%	99	0.0249	17	6.46%	91	0.0359
2	1.51%	21	0.0273	10	4.16%	58	0.0344	18	5.38%	75	0.0353
3	1.86%	26	0.0262	11	7.10%	100	0.0255	19	5.02%	70	0.0206
4	2.20%	31	0.0364	12	7.38%	104	0.0258	20	4.13%	58	0.0187
5	1.42%	20	0.0329	13	7.05%	99	0.0255	21	1.83%	26	0.0333
6	2.03%	28	0.0375	14	7.07%	99	0.0254	22	2.23%	31	0.0351
7	3.45%	48	0.0368	15	6.48%	91	0.0247	23	1.41%	20	0.0315
8	6.25%	88	0.0244	16	5.58%	78	0.0226	24	0.70%	10	0.0312
								Total		1,404	

2020 Hourly Diesel Traffic Volumes Per Direction and DPM Emissions - WB-Hwy-24

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	2.27%	32	0.0325	9	7.04%	99	0.0181	17	6.46%	91	0.0247
2	1.51%	21	0.0273	10	4.16%	58	0.0344	18	5.38%	75	0.0206
3	1.86%	26	0.0262	11	7.10%	100	0.0255	19	5.02%	70	0.0206
4	2.20%	31	0.0364	12	7.38%	104	0.0258	20	4.13%	58	0.0187
5	1.42%	20	0.0329	13	7.05%	99	0.0255	21	1.83%	26	0.0333
6	2.03%	28	0.0375	14	7.07%	99	0.0254	22	2.23%	31	0.0351
7	3.45%	48	0.0368	15	6.48%	91	0.0247	23	1.41%	20	0.0315
8	6.25%	88	0.0176	16	5.58%	78	0.0226	24	0.70%	10	0.0312
								Total		1,404	

3801 Martin Luther King Jr. Way, Oakland, CA
Highway-24
PM2.5 & TOG Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2020

Group Link	Description	Direction	No. Lanes	Link Length (m)	Link Width (ft)	Link Width (m)	Release Height (m)	ADT	Average Speed (mph)
EB-Hwy-24	Eastbound Highway 24	E	3	703	56	17.0	1.3	75,400	variable
WB-Hwy-24	Westbound Highway 24	W	3	699	56	17.0	1.3	75,400	variable

2020 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - EB-Hwy-24

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.08%	818	0.0212	9	7.07%	5328	0.0200	17	7.39%	5570	0.0233
2	0.36%	271	0.0220	10	4.25%	3206	0.0205	18	8.30%	6256	0.0231
3	0.30%	224	0.0232	11	4.59%	3464	0.0202	19	5.81%	4380	0.0197
4	0.19%	141	0.0316	12	5.84%	4402	0.0201	20	4.38%	3300	0.0196
5	0.45%	340	0.0222	13	6.17%	4654	0.0200	21	3.29%	2481	0.0199
6	0.82%	616	0.0224	14	6.03%	4549	0.0200	22	3.31%	2494	0.0201
7	3.77%	2839	0.0204	15	7.09%	5343	0.0198	23	2.47%	1865	0.0199
8	7.92%	5974	0.0197	16	7.23%	5453	0.0197	24	1.90%	1433	0.0197
								Total		75,400	

2020 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - WB-Hwy-24

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.08%	818	0.0212	9	7.07%	5328	0.0196	17	7.39%	5570	0.0198
2	0.36%	271	0.0220	10	4.25%	3206	0.0205	18	8.30%	6256	0.0196
3	0.30%	224	0.0232	11	4.59%	3464	0.0202	19	5.81%	4380	0.0197
4	0.19%	141	0.0316	12	5.84%	4402	0.0201	20	4.38%	3300	0.0196
5	0.45%	340	0.0222	13	6.17%	4654	0.0200	21	3.29%	2481	0.0199
6	0.82%	616	0.0224	14	6.03%	4549	0.0200	22	3.31%	2494	0.0201
7	3.77%	2839	0.0204	15	7.09%	5343	0.0198	23	2.47%	1865	0.0199
8	7.92%	5974	0.0194	16	7.23%	5453	0.0197	24	1.90%	1433	0.0197
								Total		75,400	

3801 Martin Luther King Jr. Way, Oakland, CA
Highway-24
Entrained PM2.5 Road Dust Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2020

Group Link	Description	Direction	No. Lanes	Link Length (m)	Link Width (ft)	Link Width (m)	Release Height (m)	ADT	Average Speed (mph)
EB-Hwy-24	Eastbound Highway 24	E	3	703	56	17.0	1.3	75,400	variable
WB-Hwy-24	Westbound Highway 24	W	3	699	56	17.0	1.3	75,400	variable

2020 Hourly Traffic Volumes Per Direction and Road Dust PM2.5 Emissions - EB-Hwy-24

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.08%	818	0.0077	9	7.07%	5328	0.0077	17	7.39%	5570	0.0077
2	0.36%	271	0.0077	10	4.25%	3206	0.0077	18	8.30%	6256	0.0077
3	0.30%	224	0.0077	11	4.59%	3464	0.0077	19	5.81%	4380	0.0077
4	0.19%	141	0.0077	12	5.84%	4402	0.0077	20	4.38%	3300	0.0077
5	0.45%	340	0.0077	13	6.17%	4654	0.0077	21	3.29%	2481	0.0077
6	0.82%	616	0.0077	14	6.03%	4549	0.0077	22	3.31%	2494	0.0077
7	3.77%	2839	0.0077	15	7.09%	5343	0.0077	23	2.47%	1865	0.0077
8	7.92%	5974	0.0077	16	7.23%	5453	0.0077	24	1.90%	1433	0.0077
								Total		75,400	

2020 Hourly Traffic Volumes Per Direction and Road Dust PM2.5 Emissions - WB-Hwy-24

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.08%	818	0.0077	9	7.07%	5328	0.0077	17	7.39%	5570	0.0077
2	0.36%	271	0.0077	10	4.25%	3206	0.0077	18	8.30%	6256	0.0077
3	0.30%	224	0.0077	11	4.59%	3464	0.0077	19	5.81%	4380	0.0077
4	0.19%	141	0.0077	12	5.84%	4402	0.0077	20	4.38%	3300	0.0077
5	0.45%	340	0.0077	13	6.17%	4654	0.0077	21	3.29%	2481	0.0077
6	0.82%	616	0.0077	14	6.03%	4549	0.0077	22	3.31%	2494	0.0077
7	3.77%	2839	0.0077	15	7.09%	5343	0.0077	23	2.47%	1865	0.0077
8	7.92%	5974	0.0077	16	7.23%	5453	0.0077	24	1.90%	1433	0.0077
								Total		75,400	

3801 Martin Luther King Jr. Way, Oakland, CA
Highway-24 Traffic Data and PM2.5 & TOG Emission Factors - 63 mph

Analysis Year = ***2020***

Vehicle Type	2016 Caltrans Number Vehicles (veh/day)	2020 Number Vehicles (veh/day)	2020 Percent Diesel	Number Diesel Vehicles (veh/day)	Vehicle Speed (mph)	Emission Factors: Diesel Vehicles DPM (g/VMT)	All Vehicles: Total PM2.5 (g/VMT)	All Vehicles: Exhaust PM2.5 (g/VMT)	Gas Vehicles: Exhaust TOG (g/VMT)	Gas Vehicles: Running TOG (g/VMT)
LDA	99,148	103,114	1.11%	1,144	65	0.0160	0.0194	0.0016	0.0179	0.046
LDT	42,257	43,947	0.16%	72	65	0.0175	0.0193	0.0015	0.0238	0.091
MDT	2,211	2,299	10.18%	234	60	0.0155	0.0233	0.0024	0.0448	0.179
HDT	1,384	1,439	94.31%	1,357	60	0.0375	0.0804	0.0351	0.1172	0.104
Total	145,000	150,800	-	2,807	62.5	-	-		-	-
Mix Avg Emission Factor						**0.02637**	**0.01999**	**0.00192**	**0.02010**	**0.06110**
Increase From 2016		1.04								
Vehicles/Direction		75,400		1,404						
Avg Vehicles/Hour/Direction		**3,142**		**58**						

Traffic Data Year = ***2016***

2016 Caltrans Truck AADT Data ***Location***	Total	Total Truck	Truck by Axle: 2	3	4	5
Hwy 24, A Oakland, Jct. Rtes 580 & 980	145,000	3,595	2,211	596	128	660
			61.50%	16.58%	3.56%	18.36%
Percent of Total Vehicles		2.48%	1.52%	0.41%	0.09%	0.46%

Traffic Increase per Year (%) = ***1.00%***

3801 Martin Luther King Jr. Way, Oakland, CA
Highway-24 Traffic Data and PM2.5 & TOG Emission Factors - 50 mph

Analysis Year = ***2020***

Vehicle Type	2016 Caltrans Number Vehicles (veh/day)	2020 Number Vehicles (veh/day)	2020 Percent Diesel	Number Diesel Vehicles (veh/day)	Vehicle Speed (mph)	Emission Factors: Diesel Vehicles DPM (g/VMT)	All Vehicles: Total PM2.5 (g/VMT)	All Vehicles: Exhaust PM2.5 (g/VMT)	Gas Vehicles: Exhaust TOG (g/VMT)	Gas Vehicles: Running TOG (g/VMT)
LDA	99,148	103,114	1.11%	1,144	50	0.0130	0.0191	0.0013	0.0146	0.046
LDT	42,257	43,947	0.16%	72	50	0.0142	0.0190	0.0013	0.0197	0.091
MDT	2,211	2,299	10.18%	234	50	0.0173	0.0253	0.0043	0.0439	0.179
HDT	1,384	1,439	94.31%	1,357	50	0.0244	0.0685	0.0232	0.1263	0.104
Total	145,000	150,800	-	2,807	50	-	-		-	-
Mix Avg Emission Factor						**0.01888**	**0.01961**	**0.00155**	**0.01661**	**0.06110**
Increase From 2016		1.04								
Vehicles/Direction		75,400		1,404						
Avg Vehicles/Hour/Direction		**3,142**		**58**						

Traffic Data Year = ***2016***

2016 Caltrans Truck AADT Data ***Location***	Total	Total Truck	Truck by Axle: 2	3	4	5
Hwy 24, A Oakland, Jct. Rtes 580 & 980	145,000	3,595	2,211	596	128	660
			61.50%	16.58%	3.56%	18.36%
Percent of Total Vehicles		2.48%	1.52%	0.41%	0.09%	0.46%

Traffic Increase per Year (%) = ***1.00%***

3801 Martin Luther King Jr. Way, Oakland, CA
Highway-24 Traffic Data and PM2.5 & TOG Emission Factors - 15 mph

Analysis Year = ***2020***

Vehicle Type	2016 Caltrans Number Vehicles (veh/day)	2020 Number Vehicles (veh/day)	2020 Percent Diesel	Number Diesel Vehicles (veh/day)	Vehicle Speed (mph)	Emission Factors: Diesel Vehicles DPM (g/VMT)	All Vehicles: Total PM2.5 (g/VMT)	All Vehicles: Exhaust PM2.5 (g/VMT)	Gas Vehicles: Exhaust TOG (g/VMT)	Gas Vehicles: Running TOG (g/VMT)
LDA	99,148	103,114	1.11%	1,144	15	0.0323	0.0226	0.0049	0.0554	0.046
LDT	42,257	43,947	0.16%	72	15	0.0353	0.0226	0.0048	0.0737	0.091
MDT	2,211	2,299	10.18%	234	15	0.0444	0.0396	0.0187	0.1710	0.179
HDT	1,384	1,439	94.31%	1,357	15	0.0397	0.0817	0.0365	0.3838	0.104
Total	145,000	150,800	-	2,807	15	-	-	-	-	-
Mix Avg Emission Factor						**0.03695**	**0.02343**	**0.00537**	**0.06264**	**0.06110**
Increase From 2016		1.04								
Vehicles/Direction		75,400		1,404						
Avg Vehicles/Hour/Direction		**3,142**		**58**						

Traffic Data Year = ***2016***

2016 Caltrans Truck AADT Data / ***Location***	Total	Total Truck	Truck by Axle: 2	3	4	5
Hwy 24, A Oakland, Jct. Rtes 580 & 980	145,000	3,595	2,211	596	128	660
			61.50%	16.58%	3.56%	18.36%
Percent of Total Vehicles		2.48%	1.52%	0.41%	0.09%	0.46%

Traffic Increase per Year (%) = ***1.00%***

3801 Martin Luther King Jr. Way, Oakland, CA
Highway-24 Traffic Data and Entrained PM2.5 Road Dust Emission Factors

$E_{2.5} = [k(sL)^{0.91} \times (W)^{1.02} \times (1-P/4N) \times 453.59$

where:

$E_{2.5}$ = $PM_{2.5}$ emission factor (g/VMT)

k = particle size multiplier (g/VMT) [$k_{PM2.5} = k_{PM10} \times (0.0686/0.4572) = 1.0 \times 0.15 = 0.15$ g/VMT][a]

sL = roadway specific silt loading (g/m^2)

W = average weight of vehicles on road (Bay Area default = 2.4 tons)[a]

P = number of days with at least 0.01 inch of precipitation in the annual averaging period

N = number of days in the annual averaging period (default = 365)

Notes: [a] CARB 2018, Miscellaneous Process Methodology 7.9, Entrained Road Travel, Paved Road Dust (Revised and updated, March 2018)

Road Type	Silt Loading (g/m^2)	Average Weight (tons)	County	No. Days ppt > 0.01"	$PM_{2.5}$ Emission Factor (g/VMT)
Freeway	0.015	2.4	Alameda	61	0.00768

SFBAAB[a]

Road Type	Silt Loading (g/m^2)
Collector	0.032
Freeway	0.015
Local	0.32
Major	0.032

SFBAAB[a]

County	>0.01 inch precipitation
Alameda	61
Contra Costa	60
Marin	66
Napa	68
San Francisco	67
San Mateo	60
Santa Clara	64
Solano	54
Sonoma	69

3801 Martin Luther King Jr. Way, Oakland, CA
WB SR 24 Off-Ramp to WB I-580
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2020

Road Link	Description	Direction	No. Lanes	Link Length (m)	Road Width (ft)	Link Width (m)	Release Height (m)	Diesel ADT	Average Speed (mph)
Ramp	SR24 Off-ramp to I-580	S to W	2	859	44	13.3	3.4	467	45

2020 Hourly Diesel Traffic Volumes and DPM Emissions - Ramp

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	2.72%	13	0.0202	9	6.53%	30	0.0180	17	6.10%	28	0.0177
2	1.65%	8	0.0193	10	5.86%	27	0.0196	18	5.37%	25	0.0157
3	1.97%	9	0.0191	11	5.57%	26	0.0192	19	3.99%	19	0.0162
4	2.26%	11	0.0227	12	6.33%	30	0.0188	20	2.54%	12	0.0154
5	1.60%	7	0.0208	13	6.15%	29	0.0185	21	3.20%	15	0.0181
6	2.36%	11	0.0219	14	6.11%	28	0.0185	22	3.60%	17	0.0189
7	4.95%	23	0.0200	15	5.99%	28	0.0178	23	2.43%	11	0.0178
8	6.08%	28	0.0174	16	5.16%	24	0.0167	24	1.47%	7	0.0169
								Total		467	

3801 Martin Luther King Jr. Way, Oakland, CA
WB SR 24 Off-Ramp to WB I-580
PM2.5 & TOG Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2020

Group Link	Description	Direction	No. Lanes	Link Length (m)	Road Width (ft)	Link Width (m)	Release Height (m)	ADT	Average Speed (mph)
Ramp	SR24 Off-ramp to I-580	S to W	2	859	44	13.3	1.3	25,133	45

2020 Hourly Traffic Volumes and PM2.5 Emissions - Ramp

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.08%	273	0.0209	9	7.07%	1776	0.0197	17	7.39%	1857	0.0196
2	0.36%	90	0.0216	10	4.25%	1069	0.0202	18	8.30%	2085	0.0194
3	0.30%	75	0.0228	11	4.59%	1155	0.0199	19	5.81%	1460	0.0194
4	0.19%	47	0.0308	12	5.84%	1467	0.0199	20	4.38%	1100	0.0193
5	0.45%	113	0.0218	13	6.17%	1551	0.0197	21	3.29%	827	0.0196
6	0.82%	205	0.0220	14	6.03%	1516	0.0197	22	3.31%	831	0.0198
7	3.77%	946	0.0201	15	7.09%	1781	0.0196	23	2.47%	622	0.0196
8	7.92%	1991	0.0195	16	7.23%	1818	0.0194	24	1.90%	478	0.0194
								Total		25,133	

3801 Martin Luther King Jr. Way, Oakland, CA
WB SR 24 Off-Ramp to WB I-580 Traffic Data, DPM, PM2.5 & TOG Emission Factors - 45 mph

Analysis Year = ***2020***

						Emission Factors				
						Diesel	All Vehicles		Gas Vehicles	
Vehicle Type	**2016 Caltrans Number Vehicles (veh/day)**	**2020 Number Vehicles (veh/day)**	**2020 Percent Diesel**	**Number Diesel Vehicles (veh/day)**	**Vehicle Speed (mph)**	**Vehicles DPM (g/VMT)**	**Total PM2.5 (g/VMT)**	**Exhaust PM2.5 (g/VMT)**	**Exhaust TOG (g/VMT)**	**Running TOG (g/VMT)**
LDA	16,525	17,186	1.11%	191	45	0.0132	0.0191	0.0014	0.0152	0.046
LDT	7,043	7,324	0.16%	12	45	0.0143	0.0191	0.0013	0.0206	0.091
MDT	369	383	10.18%	39	45	0.0158	0.0234	0.0025	0.0426	0.179
HDT	231	240	93.74%	225	45	0.0234	0.0776	0.0222	0.1390	0.102
Total	24,167	25,133	-	467	45	-	-		-	-
Mix Avg Emission Factor						**0.01834**	**0.01971**	**0.00156**	**0.01725**	**0.06110**

Increase From 2016		1.04		
No. Vehicles		25,133		467
Avg Vehicles/Hour		**1,047**		**19**

Traffic Data Year = ***2016***

2016 Caltrans Truck AADT Data		Total	Truck by Axle			
	Total	Truck	2	3	4	5
SR24 Off-ramp to I-580	24,167	599	369	99	21	110
			61.50%	16.58%	3.56%	18.36%
Percent of Total Vehicles		2.48%	1.53%	0.41%	0.09%	0.46%

Traffic Increase per Year (%) = ***1.00%***

3801 Martin Luther King Jr. Way, Oakland, CA
WB SR 24 Off-Ramp to WB I-580 Traffic Data and Entrained PM2.5 Road Dust Emission Factors

$E_{2.5}$ = [k(sL)^$^{0.91}$ x (W)^$^{1.02}$ x (1-P/4N) x 453.59

where:

$E_{2.5}$ = $PM_{2.5}$ emission factor (g/VMT)
k = particle size multiplier (g/VMT) [$k_{PM2.5}$ = k_{PM10} x (0.0686/0.4572) = 1.0 x 0.15 = 0.15 g/VMT][a]
sL = roadway specific silt loading (g/m^2)
W = average weight of vehicles on road (Bay Area default = 2.4 tons)[a]
P = number of days with at least 0.01 inch of precipitation in the annual averaging period
N = number of days in the annual averaging period (default = 365)

Notes: [a] CARB 2018, Miscellaneous Process Methodology 7.9, Entrained Road Travel, Paved Road Dust (Revised and updated, March 2018)

Road Type	**Silt Loading (g/m^2)**	**Average Weight (tons)**	**County**	**No. Days ppt > 0.01"**	**$PM_{2.5}$ Emission Factor (g/VMT)**
Freeway	0.015	2.4	Alameda	61	0.00768

SFBAAB[a]

Road Type	**Silt Loading (g/m^2)**
Collector	0.032
Freeway	0.015
Local	0.32
Major	0.032

SFBAAB[a]

County	**>0.01 inch precipitation**
Alameda	61
Contra Costa	60
Marin	66
Napa	68
San Francisco	67
San Mateo	60
Santa Clara	64
Solano	54
Sonoma	69

3801 Martin Luther King Jr. Way, Oakland, CA - Highway 24 & Ramp - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations
On-Site Residential Receptors - 2nd Floor (5.2 meter receptor heights)

Emissions Year	2020
Receptor Information	
Number of Receptors	34
Receptor Height =	5.2 meters above ground level (2nd floor)
Receptor distances =	7 meter spacing in residential areas
Meteorological Conditions	
BAAQMD Oakland Airport Met Data	2009-2013
Land Use Classification	urban
Wind speed =	variable
Wind direction =	variable

MEI Maximum Concentrations

Meteorological Data Years	Concentration ($\mu g/m^3$)		
	DPM	Exhaust TOG	Evaporative TOG
2009-2013	0.00273	0.1321	0.3594

Meteorological Data Years	PM2.5 Concentrations ($\mu g/m^3$)		
	Total PM2.5	Road Dust PM2.5	Vehicle PM2.5
2009-2013	0.1600	0.0441	0.11592

3801 Martin Luther King Jr. Way, Oakland, CA - Highway 24 & Ramp Maximum Cancer Risks
On-Site Residential Receptors - 2nd Floor (5.2 meter receptor heights)
30-Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

	Infant/Child			Adult
Age -->	3rd Trimester	0 - <2	2 - <16	16 - 30
Parameter				
ASF	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
ED =	0.25	2	14	14
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for 3rd trimester and infants, 80th percentile for children and adults

Road Traffic Cancer Risk by Year - Maximum Impact Receptor Location

				Maximum - Exposure Information				Cancer Risk (per million)			
					Annual TAC Conc (ug/m3)						
Exposure Year	Year	Exposure Duration (years)	Age	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	Total
0	2020	0.25	-0.25 - 0*	10	0.0027	0.1321	0.3594	0.037	0.010	0.002	0.05
1	2020	1	1	10	0.0027	0.1321	0.3594	0.45	0.124	0.020	0.59
2	2021	1	2	10	0.0027	0.1321	0.3594	0.45	0.124	0.020	0.59
3	2022	1	3	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
4	2023	1	4	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
5	2024	1	5	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
6	2025	1	6	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
7	2026	1	7	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
8	2027	1	8	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
9	2028	1	9	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
10	2029	1	10	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
11	2030	1	11	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
12	2031	1	12	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
13	2032	1	13	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
14	2033	1	14	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
15	2034	1	15	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
16	2035	1	16	3	0.0027	0.1321	0.3594	0.07	0.020	0.003	0.09
17	2036	1	17	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
18	2037	1	18	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
19	2038	1	19	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
20	2039	1	20	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
21	2040	1	21	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
22	2041	1	22	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
23	2042	1	23	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
24	2043	1	24	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
25	2044	1	25	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
26	2045	1	26	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
27	2046	1	27	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
28	2047	1	28	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
29	2048	1	29	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
30	2049	1	30	1	0.0027	0.1321	0.3594	0.01	0.002	0.000	0.010
Total Increased Cancer Risk			**Total**					2.03	0.562	0.090	**2.684**

* Third trimester of pregnancy

3801 Martin Luther King Jr. Way, Oakland, CA - I-580 & Ramp - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations
On-Site Residential Receptors - 2nd Floor (5.2 meter receptor heights)

Emissions Year	2020
Receptor Information	
Number of Receptors	34
Receptor Height =	5.2 meters above ground level (2nd floor)
Receptor distances =	7 meter spacing in residential areas
Meteorological Conditions	
CARB Oakland Airport Met Data	2009-2013
Land Use Classification	urban
Wind speed =	variable
Wind direction =	variable

MEI Maximum Concentrations

Meteorological Data Years	Concentration ($\mu g/m^3$)		
	DPM	Exhaust TOG	Evaporative TOG
2009-2013	0.00131	0.0970	0.2526

Meteorological Data Years	PM2.5 Concentrations ($\mu g/m^3$)		
	Total PM2.5	Road Dust PM2.5	Vehicle PM2.5
2009-2013	0.1128	0.0313	0.08149

3801 Martin Luther King Jr. Way, Oakland, CA - I-580 & Ramp Maximum Cancer Risks
On-Site Residential Receptors - 2nd Floor (5.2 meter receptor heights)
30-Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

	Infant/Child			Adult
Age -->	3rd Trimester	0 - <2	2 - <16	16 - 30
Parameter				
ASF	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
ED =	0.25	2	14	14
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for 3rd trimester and infants, 80th percentile for children and adults

Road Traffic Cancer Risk by Year - Maximum Impact Receptor Location

				Maximum - Exposure Information				Cancer Risk (per million)			
		Exposure		Age	Annual TAC Conc (ug/m3)						
Exposure		Duration		Sensitivity		Exhaust	Evaporative		Exhaust	Evaporative	
Year	Year	(years)	Age	Factor	DPM	TOG	TOG	DPM	TOG	TOG	Total
0	2020	0.25	-0.25 - 0*	10	0.0013	0.0970	0.2526	0.018	0.008	0.001	0.03
1	2020	1	1	10	0.0013	0.0970	0.2526	0.22	0.091	0.014	0.32
2	2021	1	2	10	0.0013	0.0970	0.2526	0.22	0.091	0.014	0.32
3	2022	1	3	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
4	2023	1	4	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
5	2024	1	5	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
6	2025	1	6	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
7	2026	1	7	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
8	2027	1	8	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
9	2028	1	9	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
10	2029	1	10	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
11	2030	1	11	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
12	2031	1	12	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
13	2032	1	13	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
14	2033	1	14	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
15	2034	1	15	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
16	2035	1	16	3	0.0013	0.0970	0.2526	0.03	0.014	0.002	0.05
17	2036	1	17	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
18	2037	1	18	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
19	2038	1	19	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
20	2039	1	20	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
21	2040	1	21	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
22	2041	1	22	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
23	2042	1	23	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
24	2043	1	24	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
25	2044	1	25	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
26	2045	1	26	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
27	2046	1	27	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
28	2047	1	28	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
29	2048	1	29	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
30	2049	1	30	1	0.0013	0.0970	0.2526	0.00	0.002	0.000	0.006
Total Increased Cancer Risk			Total					0.98	0.412	0.063	**1.5**

* Third trimester of pregnancy

3801 Martin Luther King Jr. Way, Oakland, CA - I-580, SR 24, Ramp & W MacArthur - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations
On-Site Residential Receptors - 2nd Floor (5.2 meter receptor heights)

Emissions Year	2020
Receptor Information	
Number of Receptors	34
Receptor Height =	5.2 meters above ground level (2nd floor)
Receptor distances =	7 meter spacing in residential areas
Meteorological Conditions	
BAAQMD Oakland Airport Met Data	2009-2013
Land Use Classification	urban
Wind speed =	variable
Wind direction =	variable

MEI Maximum Concentrations

Meteorological Data Years	Concentration ($\mu g/m^3$)		
	DPM	Exhaust TOG	Evaporative TOG
2009-2013	0.00670	0.3569	0.9221

Meteorological Data Years	PM2.5 Concentrations ($\mu g/m^3$)		
	Total PM2.5	Road Dust PM2.5	Vehicle PM2.5
2009-2013	0.4561	0.1587	0.29744

3801 Martin Luther King Jr. Way, Oakland, CA -I-580, SR 24, Ramp & W MacArthur Maximum Cancer Risks
On-Site Residential Receptors - 2nd Floor (5.2 meter receptor heights)
30-Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

	Infant/Child			Adult
Age -->	3rd Trimester	0 - <2	2 - <16	16 - 30
Parameter				
ASF	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
ED =	0.25	2	14	14
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for 3rd trimester and infants, 80th percentile for children and adults

Road Traffic Cancer Risk by Year - Maximum Impact Receptor Location

				Maximum - Exposure Information				Cancer Risk (per million)			
		Exposure		Age	Annual TAC Conc (ug/m3)						
Exposure		Duration		Sensitivity		Exhaust	Evaporative		Exhaust	Evaporative	
Year	Year	(years)	Age	Factor	DPM	TOG	TOG	DPM	TOG	TOG	Total
0	2020	0.25	-0.25 - 0*	10	0.0067	0.3569	0.9221	0.091	0.028	0.004	0.12
1	2020	1	1	10	0.0067	0.3569	0.9221	1.10	0.335	0.051	1.49
2	2021	1	2	10	0.0067	0.3569	0.9221	1.10	0.335	0.051	1.49
3	2022	1	3	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
4	2023	1	4	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
5	2024	1	5	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
6	2025	1	6	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
7	2026	1	7	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
8	2027	1	8	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
9	2028	1	9	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
10	2029	1	10	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
11	2030	1	11	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
12	2031	1	12	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
13	2032	1	13	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
14	2033	1	14	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
15	2034	1	15	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
16	2035	1	16	3	0.0067	0.3569	0.9221	0.17	0.053	0.008	0.23
17	2036	1	17	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
18	2037	1	18	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
19	2038	1	19	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
20	2039	1	20	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
21	2040	1	21	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
22	2041	1	22	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
23	2042	1	23	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
24	2043	1	24	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
25	2044	1	25	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
26	2045	1	26	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
27	2046	1	27	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
28	2047	1	28	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
29	2048	1	29	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
30	2049	1	30	1	0.0067	0.3569	0.9221	0.02	0.006	0.001	0.026
Total Increased Cancer Risk			Total					4.99	1.517	0.231	**6.73**

* Third trimester of pregnancy

Attachment 4: Roadway and Stationary Source Screening Health Risk Calculations

Bay Area Air Quality Management District

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

• County: Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.

• Roadway Direction: Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.

• Side of the Roadway: Identify on which side of the roadway the project is located.

• Distance from Roadway: Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.

• Annual Average Daily Traffic (ADT): Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.

Notes and References listed below the Search Boxes

Search Parameters

County	Alameda	
Roadway Direction	North-South	
Side of the Roadway	West	
Distance from Roadway	30	feet
Annual Average Daily Traffic (ADT)	11,100	

Results

Alameda County

NORTH-SOUTH DIRECTIONAL ROADWAY

PM2.5 annual average

0.116 (µg/m^3)

Cancer Risk

6.48 (per million)

MLK Jr. Way

Cumulative plus project volumes from traffic report

Data for Alameda County based on meteorological data collected from Pleasanton in 2005

Adjusted for 2015 OEHHA and EMFAC2014 for 2018

4.45

(per million)

Note that EMFAC2014 predicts DSL PM2.5 aggragate rates in 2018 that are 46% of EMFAC2011 for 2014. TOG gasoline rates are 56% of EMFAC2011 year 2014 rates. This is for light- and medium-duty vehciles traveling at 30 mph for Bay Area

Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using ~~CALINE4~~ Cal3qhcr air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHHA toxicity values adopted in 2013.

Bay Area Air Quality Management District

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

• County: Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.

• Roadway Direction: Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.

• Side of the Roadway: Identify on which side of the roadway the project is located.

• Distance from Roadway: Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.

• Annual Average Daily Traffic (ADT): Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.

Notes and References listed below the Search Boxes

Search Parameters

County	Alameda	
Roadway Direction	East-West	
Side of the Roadway	South	
Distance from Roadway	700	feet
Annual Average Daily Traffic (ADT)	21,650	

Results

Alameda County

EAST-WEST DIRECTIONAL ROADWAY

PM2.5 annual average

0.022 ($\mu g/m^3$)

Cancer Risk

1.31 (per million)

40th Street

Cumulative plus project volumes from traffic report

Data for Alameda County based on meteorological data collected from Pleasanton in 2005

Adjusted for 2015 OEHHA and EMFAC2014 for 2018

0.90

(per million)

Note that EMFAC2014 predicts DSL PM2.5 aggragate rates in 2018 that are 46% of EMFAC2011 for 2014. TOG gasoline rates are 56% of EMFAC2011 year 2014 rates. This is for light- and medium-duty vehciles traveling at 30 mph for Bay Area

Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using ~~CALINE4~~ Cal3qhcr air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHHA toxicity values adopted in 2013.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD

This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

Click here for guidance on coducting risk & hazard screening, including roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.

Click here for District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.

Table A: Requester Contact Information

Date of Request	**7/5/2019**
Contact Name	Casey Divine
Affiliation	Illingworth & Rodkin, Inc.
Phone	707-794-0400 x103
Email	cdivine@illingworthrodkin.com
Project Name	3801 MLK Jr Way
Address	3801 MLK Jr Way
City	Oakland
County	Alameda
Type (residential, commercial, mixed use, industrial, etc.)	Mixed-use
Project Size (# of units or building square feet)	77du, 2.1ksf retail
Comments:	

For Air District assistance, the following steps must be completed:

1. Complete all the contact and project information requested in **Table A** incomplete forms will not be processed. Please include a project site map.

2. Download and install the free program Google Earth, **http://www.google.com/earth/download/ge/,** and then download the county specific Google Earth stationary source application files from the District's website, **http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.** The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.

3. Find the project site in Google Earth by inputting the site's address in the Google Earth search box.

4. Identify stationary sources within at least a 1000ft radius of project site. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to

5. List the stationary source information in **Table B** blue section only.

6. Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.

7. Email this completed form to District staff. District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.
Submit forms, maps, and questions to Areana Flores at 415-749-4616, or aflores@baaqmd.gov

Table B: Google Earth data

Distance from Receptor (m) or MEI[1]	Facility Name	Address	Plant No.	Cancer Risk[2]	Hazard Risk[2]	$PM_{2.5}$[2]	Source No.[3]	Type of Source[4]	Fuel Code[5]	Status/Comments	I&R Action
139.288	Westco Gas	731 W Macarthur Blvd	112042	1.49	0.01	0.00	S1	GDF		Permitted max throughput for 2019: 3.09 million gallons/year	Computed using GDF benzene ef of 0.00369lb/1,000gal.
227.1	Bay Area Rapid Transit	550 W MacArthur Blvd	22703	0.01	0.00001	0.00001	S1	Generator		Emissions file attached. Use Health Risk Calculator	computed
302.8	California Highway Patrol	3601 Telegraph Ave	111397	0.17	0.001	0.00	S1	GDF		Permitted max throughput for 2018: 940,000 gallons/year	Computed using GDF benzene ef of 0.00369lb/1,000gal.
302.8	California Highway Patrol-Telecommunications	3601 Telegraph Ave	14572	4.94	0.002	0.01	S1	Generator		Emissions file attached. Use Health Risk Calculator	computed

Footnotes:
1. Maximally exposed individual
2. These Cancer Risk, Hazard Index, and PM2.5 columns represent the values in the Google Earth Plant Information Table.
3. Each plant may have multiple permits and sources.
4. Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.
5. Fuel codes: 98 = diesel, 189 = Natural Gas.
6. If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.
7. The date that the HRSA was completed.
8. Engineer who completed the HRSA. For District purposes only.
9. All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.
10. The HRSA "Chronic Health" number represents the Hazard Index.
11. Further information about common sources:
   a. Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.
   b. The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard
   c. BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010. Therefore, there is no cancer risk, hazard or PM2.5 concentrations from co-residential dry cleaning businesses in the BAAQMD.
   d. Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but
   e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Mulitplier worksheet.
   f. Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.
   g. This spray booth is considered to be insignificant.

Date last updated:
03/13/2018

Attachment 5: W. MacArthur Boulevard Traffic Emissions and Health Risk Calculations

3801 Martin Luther King Jr. Way, Oakland, CA
W. MacArthur Blvd
DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions
Year = 2020

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Width (ft)	Link Width (m)	Release Height (m)	Diesel ADT	Average Speed (mph)
EB-W-MacArthur	Eastbound W MacArthur	E	2	678	44	13.3	3.4	313	variable
WB-W-MacArthur	Westbound W MacArthur	W	2	678	44	13.3	3.4	313	variable

2020 Hourly Diesel Traffic Volumes Per Direction and DPM Emissions - EB-W-MacArthur

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	2.71%	8	0.0223	9	6.84%	21	0.0294	17	6.12%	19	0.0290
2	1.90%	6	0.0209	10	4.79%	15	0.0229	18	4.96%	16	0.0285
3	2.37%	7	0.0207	11	6.91%	22	0.0199	19	4.52%	14	0.0179
4	2.51%	8	0.0235	12	7.20%	23	0.0200	20	3.46%	11	0.0168
5	1.68%	5	0.0225	13	6.80%	21	0.0199	21	2.13%	7	0.0226
6	2.29%	7	0.0239	14	6.83%	21	0.0199	22	2.55%	8	0.0232
7	3.85%	12	0.0237	15	6.15%	19	0.0196	23	1.67%	5	0.0221
8	5.83%	18	0.0287	16	5.12%	16	0.0187	24	0.81%	3	0.0220
								Total		313	

2020 Hourly Diesel Traffic Volumes Per Direction and DPM Emissions - WB-W-MacArthur

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	2.71%	8	0.0223	9	6.84%	21	0.0294	17	6.12%	19	0.0290
2	1.90%	6	0.0209	10	4.79%	15	0.0229	18	4.96%	16	0.0285
3	2.37%	7	0.0207	11	6.91%	22	0.0199	19	4.52%	14	0.0179
4	2.51%	8	0.0235	12	7.20%	23	0.0200	20	3.46%	11	0.0168
5	1.68%	5	0.0225	13	6.80%	21	0.0199	21	2.13%	7	0.0226
6	2.29%	7	0.0239	14	6.83%	21	0.0199	22	2.55%	8	0.0232
7	3.85%	12	0.0237	15	6.15%	19	0.0196	23	1.67%	5	0.0221
8	5.83%	18	0.0287	16	5.12%	16	0.0187	24	0.81%	3	0.0220
								Total		313	

3801 Martin Luther King Jr. Way, Oakland, CA
W. MacArthur Blvd
PM2.5 & TOG Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2020

Group Link	Description	Direction	No. Lanes	Link Length (m)	Link Width (ft)	Link Width (m)	Release Height (m)	ADT	Average Speed (mph)
EB-W-MacArthur	Eastbound W MacArthur	E	2	678	44	13.3	1.3	13,305	variable
WB-W-MacArthur	Westbound W MacArthur	W	2	678	44	13.3	1.3	13,305	variable

2020 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - EB-W-MacArthur

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.10%	146	0.0216	9	7.07%	941	0.0223	17	7.39%	983	0.0221
2	0.37%	49	0.0225	10	4.27%	569	0.0208	18	8.27%	1101	0.0218
3	0.32%	43	0.0237	11	4.61%	613	0.0205	19	5.79%	770	0.0198
4	0.20%	27	0.0322	12	5.84%	778	0.0204	20	4.36%	580	0.0198
5	0.46%	61	0.0226	13	6.17%	821	0.0202	21	3.29%	437	0.0201
6	0.83%	111	0.0229	14	6.03%	803	0.0202	22	3.31%	440	0.0203
7	3.77%	501	0.0206	15	7.07%	941	0.0200	23	2.47%	329	0.0201
8	7.90%	1050	0.0219	16	7.21%	960	0.0199	24	1.90%	252	0.0199
								Total		13,305	

2020 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - WB-W-MacArthur

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.10%	146	0.0216	9	7.07%	941	0.0223	17	7.39%	983	0.0221
2	0.37%	49	0.0225	10	4.27%	569	0.0208	18	8.27%	1101	0.0218
3	0.32%	43	0.0237	11	4.61%	613	0.0205	19	5.79%	770	0.0198
4	0.20%	27	0.0322	12	5.84%	778	0.0204	20	4.36%	580	0.0198
5	0.46%	61	0.0226	13	6.17%	821	0.0202	21	3.29%	437	0.0201
6	0.83%	111	0.0229	14	6.03%	803	0.0202	22	3.31%	440	0.0203
7	3.77%	501	0.0206	15	7.07%	941	0.0200	23	2.47%	329	0.0201
8	7.90%	1050	0.0219	16	7.21%	960	0.0199	24	1.90%	252	0.0199
								Total		13,305	

3801 Martin Luther King Jr. Way, Oakland, CA
W. MacArthur Blvd
Entrained PM2.5 Road Dust Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions
Year = 2020

Group Link	Description	Direction	No. Lanes	Link Length (m)	Link Width (ft)	Link Width (m)	Release Height (m)	ADT	Average Speed (mph)
EB-W-MacArthur	Eastbound W MacArthur	E	2	678	44	13.3	1.3	13,305	variable
WB-W-MacArthur	Westbound W MacArthur	W	2	678	44	13.3	1.3	13,305	variable

2020 Hourly Traffic Volumes Per Direction and Road Dust PM2.5 Emissions - EB-W-MacArthur

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.10%	146	0.0153	9	7.07%	941	0.0153	17	7.39%	983	0.0153
2	0.37%	49	0.0153	10	4.27%	569	0.0153	18	8.27%	1101	0.0153
3	0.32%	43	0.0153	11	4.61%	613	0.0153	19	5.79%	770	0.0153
4	0.20%	27	0.0153	12	5.84%	778	0.0153	20	4.36%	580	0.0153
5	0.46%	61	0.0153	13	6.17%	821	0.0153	21	3.29%	437	0.0153
6	0.83%	111	0.0153	14	6.03%	803	0.0153	22	3.31%	440	0.0153
7	3.77%	501	0.0153	15	7.07%	941	0.0153	23	2.47%	329	0.0153
8	7.90%	1050	0.0153	16	7.21%	960	0.0153	24	1.90%	252	0.0153
								Total		13,305	

2020 Hourly Traffic Volumes Per Direction and Road Dust PM2.5 Emissions - WB-W-MacArthur

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.10%	146	0.0153	9	7.07%	941	0.0153	17	7.39%	983	0.0153
2	0.37%	49	0.0153	10	4.27%	569	0.0153	18	8.27%	1101	0.0153
3	0.32%	43	0.0153	11	4.61%	613	0.0153	19	5.79%	770	0.0153
4	0.20%	27	0.0153	12	5.84%	778	0.0153	20	4.36%	580	0.0153
5	0.46%	61	0.0153	13	6.17%	821	0.0153	21	3.29%	437	0.0153
6	0.83%	111	0.0153	14	6.03%	803	0.0153	22	3.31%	440	0.0153
7	3.77%	501	0.0153	15	7.07%	941	0.0153	23	2.47%	329	0.0153
8	7.90%	1050	0.0153	16	7.21%	960	0.0153	24	1.90%	252	0.0153
								Total		13,305	

3801 Martin Luther King Jr. Way, Oakland, CA
W. MacArthur Blvd Traffic Data and PM2.5 & TOG Emission Factors - 35 mph

Analysis Year = ***2020***

						Emission Factors				
						Diesel	All Vehicles		Gas Vehicles	
Vehicle Type	**2020 Caltrans Number Vehicles (veh/day)**	**2020 Number Vehicles (veh/day)**	**2020 Percent Diesel**	**Number Diesel Vehicles (veh/day)**	**Vehicle Speed (mph)**	**Vehicles DPM (g/VMT)**	**Total PM2.5 (g/VMT)**	**Exhaust PM2.5 (g/VMT)**	**Exhaust TOG (g/VMT)**	**Running TOG (g/VMT)**
LDA	17,895	17,895	1.11%	198	35	0.0151	0.0194	0.0017	0.0191	0.046
LDT	7,627	7,627	0.16%	12	35	0.0165	0.0194	0.0016	0.0258	0.091
MDT	726	726	10.18%	74	35	0.0182	0.0239	0.0030	0.0530	0.179
HDT	363	363	94.31%	342	35	0.0239	0.0678	0.0226	0.1719	0.104
Total	26,610	26,610	-	627	35	-	-		-	-
Mix Avg Emission Factor						**0.02029**	**0.02020**	**0.00199**	**0.02201**	**0.06244**
Increase From 2020		1.00								
Vehicles/Direction		13,305		313						
Avg Vehicles/Hour/Direction		**554**		**13**						

Traffic Data Year = ***2020***

		Total	Truck by Axle			
Location	Total	Truck	2	3	4	5
W MacArthur	26,610	1,088	726	121	121	121
			66.67%	11.11%	11.11%	11.11%
Percent of Total Vehicles		4.09%	2.73%	0.45%	0.45%	0.45%

Traffic Increase per Year (%) = ***1.00%***

3801 Martin Luther King Jr. Way, Oakland, CA
W. MacArthur Blvd Traffic Data and PM2.5 & TOG Emission Factors - 20 mph

Analysis Year = ***2020***

						Emission Factors				
						Diesel	All Vehicles		Gas Vehicles	
Vehicle Type	**2020 Caltrans Number Vehicles (veh/day)**	**2020 Number Vehicles (veh/day)**	**2020 Percent Diesel**	**Number Diesel Vehicles (veh/day)**	**Vehicle Speed (mph)**	**Vehicles DPM (g/VMT)**	**Total PM2.5 (g/VMT)**	**Exhaust PM2.5 (g/VMT)**	**Exhaust TOG (g/VMT)**	**Running TOG (g/VMT)**
LDA	17,895	17,895	1.11%	198	20	0.0251	0.0212	0.0035	0.0394	0.046
LDT	7,627	7,627	0.16%	12	20	0.0274	0.0211	0.0034	0.0527	0.091
MDT	726	726	10.18%	74	20	0.0345	0.0333	0.0124	0.1196	0.179
HDT	363	363	94.31%	342	20	0.0317	0.0751	0.0298	0.2906	0.104
Total	26,610	26,610	-	627	20	-	-	-	-	-
Mix Avg Emission Factor						**0.02986**	**0.02226**	**0.00404**	**0.04554**	**0.06244**
Increase From 2020		1.00								
Vehicles/Direction		13,305		313						
Avg Vehicles/Hour/Direction		**554**		**13**						

Traffic Data Year = ***2020***

		Total	Truck by Axle			
Location	Total	Truck	2	3	4	5
W MacArthur	26,610	1,088	726	121	121	121
			66.67%	11.11%	11.11%	11.11%
Percent of Total Vehicles		4.09%	2.73%	0.45%	0.45%	0.45%

Traffic Increase per Year (%) = ***1.00%***

3801 Martin Luther King Jr. Way, Oakland, CA
W. MacArthur Blvd Traffic Data and Entrained PM2.5 Road Dust Emission Factors

$E_{2.5}$ = [k(sL)^$^{0.91}$ x (W)^$^{1.02}$ x (1-P/4N) x 453.59

where:

$E_{2.5}$ = $PM_{2.5}$ emission factor (g/VMT)
k = particle size multiplier (g/VMT) [$k_{PM2.5}$ = k_{PM10} x (0.0686/0.4572) = 1.0 x 0.15 = 0.15 g/VMT][a]
sL = roadway specific silt loading (g/m^2)
W = average weight of vehicles on road (Bay Area default = 2.4 tons)[a]
P = number of days with at least 0.01 inch of precipitation in the annual averaging period
N = number of days in the annual averaging period (default = 365)

Notes: [a] CARB 2018, Miscellaneous Process Methodology 7.9, Entrained Road Travel, Paved Road Dust (Revised and updated, March 2018)

Road Type	Silt Loading (g/m^2)	Average Weight (tons)	County	No. Days ppt > 0.01"	$PM_{2.5}$ Emission Factor (g/VMT)
Major	0.032	2.4	Alameda	61	0.01531

SFBAAB[a]

Road Type	Silt Loading (g/m^2)
Collector	0.032
Freeway	0.015
Local	0.32
Major	0.032

SFBAAB[a]

County	>0.01 inch precipitation
Alameda	61
Contra Costa	60
Marin	66
Napa	68
San Francisco	67
San Mateo	60
Santa Clara	64
Solano	54
Sonoma	69

3801 Martin Luther King Jr. Way, Oakland, CA - W MacArthur - TACs & PM2.5
AERMOD Risk Modeling Parameters and Maximum Concentrations
On-Site Residential Receptors - 2nd Floor (5.2 meter receptor heights)

Emissions Year	2020
Receptor Information	
Number of Receptors	34
Receptor Height =	5.2 meters above ground level (2nd floor)
Receptor distances =	7 meter spacing in residential areas
Meteorological Conditions	
BAAQMD Oakland Airport Met Data	2009-2013
Land Use Classification	urban
Wind speed =	variable
Wind direction =	variable

MEI Maximum Concentrations

Meteorological	Concentration ($\mu g/m^3$)		
Data Years	DPM	Exhaust TOG	Evaporative TOG
2009-2013	0.00317	0.1597	0.3895

Meteorological	PM2.5 Concentrations ($\mu g/m^3$)		
Data Years	Total PM2.5	Road Dust PM2.5	Vehicle PM2.5
2009-2013	0.2217	0.0940	0.12772

3801 Martin Luther King Jr. Way, Oakland, CA - W MacArthur Maximum Cancer Risks
On-Site Residential Receptors - 2nd Floor (5.2 meter receptor heights)
30-Year Residential Exposure

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

	Infant/Child			Adult
Age -->	3rd Trimester	0 - <2	2 - <16	16 - 30
Parameter				
ASF	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
ED =	0.25	2	14	14
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for 3rd trimester and infants, 80th percentile for children and adults

Road Traffic Cancer Risk by Year - Maximum Impact Receptor Location

				Maximum - Exposure Information				Cancer Risk (per million)			
		Exposure		Age	Annual TAC Conc (ug/m3)						
Exposure		Duration		Sensitivity		Exhaust	Evaporative		Exhaust	Evaporative	
Year	Year	(years)	Age	Factor	DPM	TOG	TOG	DPM	TOG	TOG	Total
0	2020	0.25	-0.25 - 0*	10	0.0032	0.1597	0.3895	0.043	0.012	0.002	0.06
1	2020	1	1	10	0.0032	0.1597	0.3895	0.52	0.150	0.022	0.69
2	2021	1	2	10	0.0032	0.1597	0.3895	0.52	0.150	0.022	0.69
3	2022	1	3	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
4	2023	1	4	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
5	2024	1	5	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
6	2025	1	6	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
7	2026	1	7	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
8	2027	1	8	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
9	2028	1	9	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
10	2029	1	10	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
11	2030	1	11	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
12	2031	1	12	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
13	2032	1	13	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
14	2033	1	14	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
15	2034	1	15	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
16	2035	1	16	3	0.0032	0.1597	0.3895	0.08	0.024	0.003	0.11
17	2036	1	17	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
18	2037	1	18	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
19	2038	1	19	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
20	2039	1	20	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
21	2040	1	21	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
22	2041	1	22	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
23	2042	1	23	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
24	2043	1	24	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
25	2044	1	25	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
26	2045	1	26	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
27	2046	1	27	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
28	2047	1	28	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
29	2048	1	29	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
30	2049	1	30	1	0.0032	0.1597	0.3895	0.01	0.003	0.000	0.012
Total Increased Cancer Risk			**Total**					2.36	0.679	0.098	**3.14**

* Third trimester of pregnancy

Appendix E – Contamination and Toxic Substances

- **Prowell, Cheryl.** *Memorandum in re: Site Summary and Corrective Action Memo for Longfellow Corner site.* Berkeley Office : Department of Toxic Substances Control, August 26, 2020.
- **Roux Associates, Inc.** *Site Summary and Corrective Action Memorandum, Longfellow MLK, 3801-3829 Martin Luther King, Jr. Way, Oakland, CA 94609.* August 13, 2020.
- **Essel Environmental Engineering and Consulting.** *Soil Management Plan, Vacant Property, 3801-3829 Martin Luther King Junior Way, Oakland, California 94609.* Oakland, CA : s.n., November 8, 2019. Project No. 19272.
- **Essel Environmental Engineering & Consulting.** *Report, Soil Characterization, Soil Stockpile Sampling, and Limited Soil Vapor Survey, Vacant Property, 3801-3829 Martin Luther King Junior Way, Oakland, California 94609.* Oakland, CA : s.n., November 8, 2019. Project No. 19272.
- **Environmental Science by Papineau.** *Phase I Environmental Site Assessment of 3801-3829 Martin Luther King Jr. Way in Oakland, California.* August 23, 2019.
- **Environmental Science by Papineau.** *Phase I Environmental Site Assessment of 3801-07 Martin Luther King Jr. Way in Oakland, California.* August 2, 2017.
- **Arjo, Alexandra.** *ASTs and Acceptable Separation Distance Calculator Tools for each AST - Longfellow Corner - 3801-3829 MLK.* s.l. : Resources for Community Development, September 8, 2020.
- **U.S. Department of Housing and Urban Development.** *Explosive and Flammable Hazards (CEST and EA) - PARTNER Worksheet - Longfellow Corner.* s.l. : Resources for Community Development, September 8, 2020.

August 26, 2020

Longfellow Corner, L.P.
Ms. Jessica Sheldon
2200 Oxford Street
Brekeley, California 94704
JSheldon@rcdhousing.org

City of Oakland, Housing and Community Development
Everett Cleveland, Jr.
250 Frank H. Ogawa Plaza, Suite 5315
Oakland, California 94612
eclevelandjr@oaklandca.gov

Dear Ms. Sheldon and Mr. Cleveland:

The Department of Toxic Substances Control (DTSC) has reviewed the Site Summary and Corrective Action Memo (Memo) for the Longfellow Corner site (Site) located at 3801-3829 Martin Luther King Jr. Way, California, submitted by Roux Associates, Inc. (Roux) and dated August 13, 2020. The Site is comprised of two southern parcels, owned by Longfellow Corner, L.P. (Longfellow Corner South, 3801 and 3807 Martin Luther King Jr. Way), and two northern parcels owned by the City of Oakland (Longfellow Corner North, 3823 and 3829 Martin Luther King Jr. Way). The Memo summarizes previous Site environmental investigations conducted in 2017 and 2019, and results from soil, soil gas, and groundwater sampling that Roux conducted in July 2020. The Memo also outlines the likely remediation activities that will be completed at the Site.

Environmental investigations indicate that the following contaminants of potential concern (COPCs) are present above applicable DTSC Human and Ecological Risk Office Note 3 screening levels and/or United States Environmental Protection Agency Regional Screening levels at the Site: organochlorine pesticides (OCPs) in soil, semi-volatile organic compounds (SVOCs) and polycyclic aromatic hydrocarbons (PAHs) in soil, metals in soil, and volatile organic compounds (VOCs) in soil, soil gas and groundwater.

Based on currently available data, the Memo outlines remediation activities that may be conducted to reduce risk to human health and the environment at the Site. Remediation activities will be evaluated in more detail in a Removal Action Workplan (RAW) to be prepared in accordance with Health and Safety Code sections 25323.1 and 25356.1. DTSC concurs that remediation at the Site will likely include some combination of the following activities and controls:

- Soil: Excavate and dispose of soil in areas where COPC concentrations in soil exceed applicable screening levels, conduct confirmation sampling and backfill with clean fill. Soil consolidation and stabilization may also be conducted as a part of the soil remedy.

- Groundwater: Remediation of groundwater at the site will likely not be required; however, groundwater use at the Site may be restricted to prohibit extraction of groundwater for the purpose of drinking water and to prohibit drilling any wells aside from monitoring wells.
- Soil Gas/Indoor Air: Prior to construction of the proposed commercial/residential development, a vapor barrier, sub slab venting system (SSVS) and/or vapor mitigation system (VMS) will be required to prevent vapor intrusion into indoor air in future Site buildings. An operation and maintenance (O&M) agreement and plan will be required to ensure that the vapor barrier, SSVS and/or VMS continue to be protective of future building occupants.
- Lastly, a land use covenant (LUC) may be necessary to ensure that all environmental conditions at the Site remain protective of human health and the environment for future Site occupants.

DTSC hereby approves the Memo, and DTSC concurs with the likely remediation activities described in the Memo. As stated above, the Site owners will be required to submit a more detailed evaluation of proposed remediation activities in a RAW, which will require DTSC review and approval. Review and approval of the RAW will include appropriate public participation activities that will be conducted in accordance with Health and Safety Code section 25358.7.

If you have any questions or need further assistance, please contact Eric Chodoroff at (510) 540-3777 or via email at Eric.Chodoroff@dtsc.ca.gov.

Sincerely,

Digitally signed by Cheryl L. Prowell
Date: 2020.08.26 10:16:51 -07'00'

Cheryl Prowell – Unit Chief
Site Mitigation and Restoration Program - Berkeley Office
Department of Toxic Substances Control

cc: See next page

cc: (via email)

Mr. Joshua Graber, CHMM, Principal Scientist
Roux Associates, Inc.
jgraber@rouxinc.com

Mr. Nicholas Targ
Holland & Knight LLP
Nicholas.Targ@hklaw.com

MEMORANDUM

ROUX

Date: August 13, 2020

To: Eric Chodoroff and Cheryl Prowell, Department of Toxic Substance Control
Jessica Sheldon, Resources for Community Development
Everett Cleveland Jr., City of Oakland

From: Joshua Graber, CHMM and Michael Montag, PG - Roux Associates, Inc.

Subject: **Site Summary and Corrective Action Memorandum**
Longfellow MLK
3801-3829 Martin Luther King Jr. Way, Oakland, CA 94609

On behalf of the Resources for Community Development (RCD), Roux Associates, Inc. (Roux) has prepared this Site Summary and Corrective Action Memorandum (Memo) summarizing current environmental subsurface conditions and associated, potential corrective actions for the proposed mixed-use development at 3801-3829 Martin Luther King Jr. Way in Oakland, California (Site; Figure 1). The Site is comprised of four parcels. RCD owns the two southernmost parcels and the City of Oakland owns the two northernmost parcels. The environmental assessment and redevelopment are being regulated by the Department of Toxic Substances Control (DTSC). Recent investigations included environmental sampling to evaluate potential health risks to future occupants and construction workers at the Site and inform potential corrective actions.

Background

The following sections describe the Site background, investigation history, contaminants and potential corrective actions to be implemented during redevelopment.

Site Location and Description

The Site is located at 3801-3829 Martin Luther King Jr. Way, in a mixed commercial and residential area in west Oakland, on the northwest corner of the intersection of West Macarthur Boulevard and Martin Luther King Jr. Way. The two northern parcels (identified as 3823 and 3829 Martin Luther King Jr. Way) are owned by the City of Oakland and the two southern parcels (identified as 3801 and 3807 Martin Luther King Jr. Way) are currently owned by RCD. The Site is approximately 0.49 acres of land. The Northern two-thirds of the Site are undeveloped and have until recently been used for parking. The southern third of the Site contains two vacant 2-story residential buildings, one of which had first-floor commercial use, and a garage. The majority of the Site is unpaved (Figure 2). The Site is proposed for redevelopment as an affordable housing complex.

According to RCD, the proposed Site redevelopment includes a mixed-use six-story apartment building. The ground floor of the building will consist of a street-level parking garage with stairwells, two elevator shafts, maintenance room, electrical room, boiler room, bike storage room, management offices, and two commercial retail spaces. Excavation for the foundation footings and utilities are anticipated from 0 to 5 feet below ground surface (bgs).

Environmental oversight for the Site was previously undertaken through a voluntary remedial action program with the Alameda County Department of Environmental Health (ACDEH) under Site Cleanup Case No. RO0003404. As of June 18, 2020, the DTSC assumed regulatory oversight for redevelopmentand environmental matters.

Previous Environmental Investigations

Two Phase I Environmental Site Assessments (ESA) were conducted for the Site, which included limited environmental sampling of shallow soils, were performed by Environmental Service by Papineau (Papineau) in 2017 and 2019. An additional Soil Characterization, Soil Stockpile Sampling, and Limited Soil Vapor Survey was performed by Essel Environmental Consulting (Essel) in 2019. A Supplemental Investigation was performed by Roux in July 2020 to further delineate the nature and extent of contamination at the Site and fill data gaps.

The Papineau investigations identified the presence of lead and the organochlorine pesticides (OCPs) in surface soil (0 to 6 inches) above applicable San Francisco Bay Regional Water Quality Control Board (RWQCB) Tier 1 (most conservative) Environmental Screening Levels (ESLs). In soil sampling conducted by Essel at varying depths down to 5 feet below ground surface (bgs) and locations, the following compounds were detected above their respective Tier 1 ESLs in shallow soil samples: the semi-volatile organic compound (SVOC) phenol; the OCPs dieldrin and DDT; and the metals lead and vanadium.

A small soil stockpile approximately of 1 to 2 cubic yards in volume in the northern portion of the Site was also targeted for sampling by Essel. The Essel 2019 investigation identified polycyclic aromatic hydrocarbons (PAHs) (benzo(a)pyrene), OCPs (chlordane [technical], dieldrin, 4,4-Dichlorodiphenyltrichloroethane [DDT], and heptachlor epoxide), and metals (arsenic, barium, cobalt, lead, vanadium, and zinc) at concentrations above each respective Tier 1 ESL from the soil stockpile.

Tetrachloroethene (PCE) was detected by Essel at concentrations above the Tier 1 ESL in three soil vapor samples collected in the northern and central portions of the Site at a depth of 6.5 feet bgs. Benzene was also detected in soil vapor above the Tier 1 ESL. The PCE and benzene detections above the Tier 1 ESLs indicated that a potential for vapor intrusion health risk to future residential occupants may be present at the Site.

To more fully screen for impacts across the Site, the Roux 2020 Supplemental Investigation consisted of collecting soil, soil vapor and groundwater samples across the Site and analyzed for volatile organic compounds (VOCs). Soil vapor samples were also screened for fixed gases. Results of VOC sampling were screened against the DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 Screening Levels (SLs), or USEPA Regional Screening Levels (RSLs) where the DTSC HERO SLs were not available. The sampling plan and summary of analytical results are presented in Tables 1 through 5.

In the 2020 Supplemental Investigation, detections of VOCs in soil samples were limited and no sample results exceeded screening criteria. In groundwater, which was first encountered at depths between 11 and 20 feet bgs, PCE, benzene, naphthalene, trichloroethylene (TCE), and 1,2,3-trichloropropane were detected at concentrations in exceedance of DTSC HERO SLs and/or EPA RSLs for tap water. In soil vapor samples collected at 5 and 10 feet bgs, PCE, benzene and chloroform were detected in several samples at concentrations in exceedance of the DTSC HERO SLs for residential and commercial ambient air, adjusted in accordance with soil gas guidance with an attenuation factor of 0.03 to assess soil gas conditions for vapor intrusion potential. In general, detections of compounds in soil gas were more elevated in the deeper samples collected from 10 feet bgs than the same compounds in the samples collected from 5 feet bgs, indicating that impacts in soil vapor likely originate from impacted groundwater.

Contaminants of Concern

Based on the environmental investigations conducted at the Site, the following contaminants of concern (COCs) are present in the listed media below at the Site in exceedance of applicable screening criteria.

Soil

Soil sampling has detected the following maximum concentrations of analytes in exceedance of applicable screening criteria: phenol (28 milligrams per kilogram [mg/kg]), technical chlordane (1.2 mg/kg), dieldrin (0.16 mg/kg), 4,4'-DDT (0.021 mg/kg) lead (2,600 mg/kg), and vanadium (120 mg/kg).

Groundwater

First encountered groundwater (generally observed around 11 to 20 feet bgs) contains the following maximum concentrations of analytes in exceedance of the DTSC HERO SLs or EPA RSLs for Tap Water: benzene (0.39 micrograms per liter [µg/L]), naphthalene (0.17 µg/L), PCE (29 µg/L), TCE (2.9 µg/L), and 1,2,3-trichloropropane (0.0097 µg/L).

Soil Vapor

Soil vapor at a depth of 5 feet bgs contains the following maximum concentrations of analytes in exceedance of the DTSC HERO SLs or EPA RSLs for both residential use scenarios, with an attenuation factor of 0.03 for vapor intrusion: benzene (18 $\mu g/m^3$), chloroform (27 $\mu g/m^3$), PCE (350 $\mu g/m^3$), and TCE (18 $\mu g/m^3$).

Soil vapor at a depth of 6.5 feet bgs contains the following maximum concentrations of analytes in exceedance of RWQCB Tier 1 ESLs: benzene (31 $\mu g/m^3$), and PCE (190 $\mu g/m^3$).

Soil vapor at a depth of 10 feet bgs contains the following maximum concentrations of analytes in exceedance of the DTSC HERO SLs or EPA RSLs for residential and commercial use scenarios, with an attenuation factor of 0.03 for vapor intrusion: benzene (28 $\mu g/m^3$), PCE (7,700 $\mu g/m^3$), and TCE (680 $\mu g/m^3$). In one sample collected from 10 feet bgs, at location RCD-7 in the southwest quadrant of the Site, the concentration of PCE exceeds the screening criteria with an attenuation factor of 0.001 for vapor intrusion for residential and commercial use scenarios, and TCE exceeds the screening criteria with an attenuation factor of 0.001 for vapor intrusion for residential use scenario.

Potential Corrective Actions

This section presents a selection of potential corrective actions to address the COCs identified at the Site, based on existing data. One or more of the corrective actions or mitigation strategies described in this section may be implemented prior to or during redevelopment in consultation with the DTSC.

Soil

In consultation with DTSC, determination of appropriate corrective actions to remediate impacts to soil may include; excavation and soil stabilization. A description of each technology is included below.

Soil Excavation

Soil excavation is highly effective in eliminating exposure of impacted soils to human health and the environment, as impacted soil would be physically removed from the Site. According to the proposed Site redevelopment, shallow soil in the footprint of the proposed buildings is expected to be excavated for construction purposes, with additional soil excavated for any proposed elevators or other foundation elements. As part of a Removal Action, the horizonal and vertical extent for the excavation may also be extended to over-excavate soil that exceeds applicable screening levels. Following over-excavation of any areas suspected to be impacted, confirmation samples would be collected from the soil remaining under the building to confirm COCs have been removed. Over-excavated areas would be backfilled with virgin quarry materials and/or imported clean fill, as needed, to meet the finished grade.

Soil Stabilization and/or Consolidation

If significant impacts to soil exist, soil stabilization and/or consolidation may be proposed to reduce the solubility of COCs, primarily metals, and reduce soil disposal costs. Soil stabilization would consist of mixing soil with an appropriate amendment (such as Portland cement) to lower the solubility of COCs and reduce the waste classification. If appropriate, soils may also be consolidated in areas of the Site to reduce disposal costs. If soil consolidation is considered, appropriate land use covenants would be required.

Groundwater

Based on the known distribution of contaminants in groundwater on-Site and off-Site, including the relatively low concentrations detected on-Site, it is not anticipated that groundwater remediation will be required at the Site.

Soil Vapor

Based on the collected soil vapor and groundwater data, vapor mitigation engineering control(s) (VMEC) may be appropriate for the Site. At a minimum, a chemically compatible vapor barrier is expected to be installed at the Site; however, additional passive or active vapor mitigation methods may be necessary, which will be determined in consultation with the DTSC. Further, we note that the building proposed for the site includes a podium parking garage across much of the ground floor footprint, which can also be expected to reduce potential vapor intrusion pathways into occupied areas of the building above. Furthermore, no residential units are proposed on the ground floor.

Roux anticipates that a VMEC is likely to be proposed to mitigate vapor intrusion into the proposed building. If a VMEC is determined to be warranted for the Site, an Operations and Maintenance Plan (O&M Plan) would be necessary for the Site. The O&M Plan will include, but not limited to, the following: pre-occupancy indoor air sampling or appropriate sub-slab monitoring; disturbance, and restoration procedures; ongoing VMEC monitoring frequency; action levels; emergency contact information; analysis method for measuring the VMEC performance; contingency plan based on the performance of the VMEC monitoring results; record keeping; and reporting requirements. VMEC monitoring activities for each monitoring event would be documented in a summary report and issued to the DTSC for review and comment. Post construction monitoring requirements will be determined in consultation with the DTSC.

Vapor Barrier

A vapor barrier involves the installation of a sub-slab, chemical resistant membrane to mitigate vapor intrusion into future occupied buildings. A properly installed vapor barrier is effective in retarding VOCs in the subsurface from entering the building and mitigating risk to future building occupants and may be appropriate if low concentrations of VOCs exist. Vapor barriers are easy to implement prior to the construction of new building slabs/foundations, and are often paired with plugs in utility trenches to slow the migration along these preferential pathways.

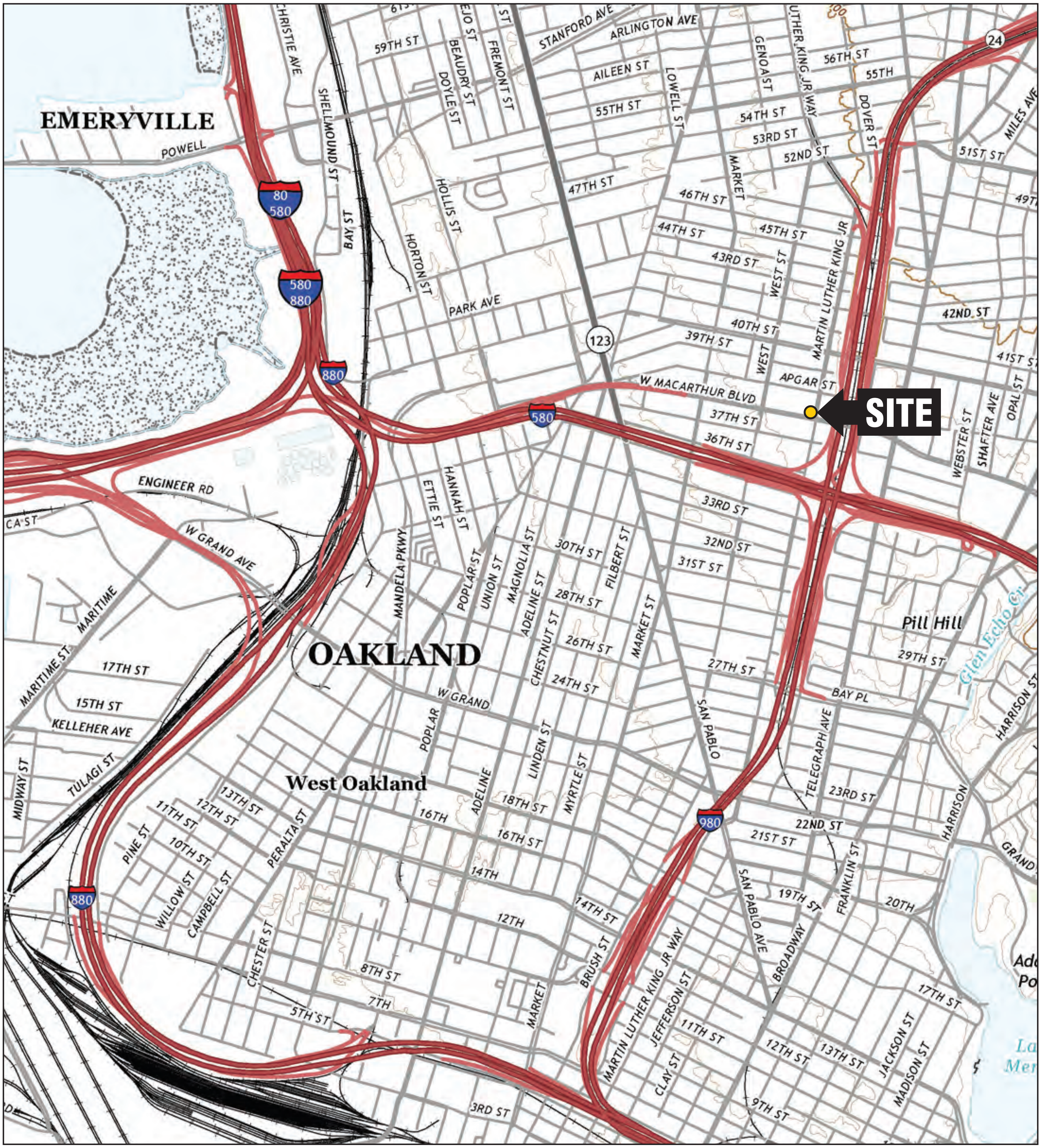
Subslab Venting System (SSVS) or Vapor Mitigation System (VMS)

A SSVS or VMS involves the installation of a passive or active sub-slab soil vapor extraction system to mitigate vapor intrusion into occupied buildings. A SSVS is typically comprised of a network of perforated pipes installed within a subslab gravel layer beneath a chemical-resistant vapor barrier and connected to vertical risers extending through utility chases and ultimately venting subsurface vapors above the roofline of the building. A SSVS is often proposed with plugs in utility trenches to slow the migration along these preferential pathways, air inlet vents along the perimeter of the building to balance subslab pressure and increase flow, and is appropriate when substantially elevated concentrations of VOCs exist in soil vapor or are present in groundwater. A SSVS is effective in mitigation vapor intrusion into a building by creating a negative pressure under the slab and venting soil vapor from sub-slab soil to the atmosphere. A SSVS is relatively easy to implement prior to the construction of a new building. A VMS is largely similar to a SSVS; however, perimeter inlet vents may not be proposed, depending on subsurface materials.

Land Use Covenant

Following completion of corrective actions, a land use covenant (LUC) may be appropriate for the Site. The LUC would identify any restrictions that are reasonably necessary to protect human health and safety or the environment due to any residual hazardous conditions expected to remain at the Site. The conditions of a LUC may include, but not be limited to, measures such as the following:

- If soil is proposed to remain at the Site containing COCs above their respective SLs, then no excavation (including the installation of utilities) is allowed without the DTSC approval;
- The owner will conduct annual inspections to confirm pathways to subsurface soils are not complete;
- No wells for the purpose of extracting water for any use, other than for groundwater monitoring, shall be allowed on the Site;
- The DTSC shall have reasonable access to the Site for the purposes of inspection, surveillance, maintenance, or monitoring;
- Disturbance of any approved VMEC is not allowed without provisions made in advance to restore the VMEC to an operational condition at the conclusion of the disturbance;
- No owner or occupant of the Site shall aggravate or contribute to the existing environmental conditions of the Site; and
- All use and development of the Site shall preserve the integrity of any corrective actions, remedial measures, or engineering controls.



QUADRANGLE LOCATION

N

0 2000'

SOURCE:
USGS; 2018, Oakland West, CA
7.5 Minute Topographic Quadrangle

Title:

SITE LOCATION MAP

3801 MARTIN LUTHOR KING JR. WAY
OAKLAND, CALIFORNIA

Prepared for:

RESOURCES FOR COMMUNITY DEVELOPMENT

ROUX

Compiled by: D.S.	Date: 31MAR20	FIGURE
Prepared by: B.H.C.	Scale: AS SHOWN	1
Project Mgr: M.E.M.	Project: 3444.0002S000	
File: 3444.0002S100.01.CDR		

\3444S\0002S\100\3444.0002S100.01.CDR

S:\CLIENTS\RESOURCES FOR COMMUNITY DEVELOPMENT\LONGFELLOW_MLK\CAD\SITE PLAN 6-2-2020.DWG

LEGEND

- SOIL, SOIL GAS, AND GRAB GROUNDWATER SAMPLE LOCATION, TO BE CONVERTED TO GROUNDWATER MONITORING WELL, ROUX JULY 2020
- SOIL, SOIL GAS, AND GRAB GROUNDWATER SAMPLE LOCATION, ROUX JULY 2020
- SOIL AND/OR SOIL GAS SAMPLE LOCATION, ROUX JULY 2020
- SOIL VAPOR SAMPLING LOCATION, ESSEL OCTOBER 2019
- SOIL SAMPLING LOCATION, ESSEL OCTOBER 2019
- SITE PROPERTY LINE
- 3833 MARTIN LUTHER KING JR. WAY (HISTORIC CLEANERS) PROPERTY LINE

NOTES

3833 MARTIN LUTHER KING JR. WAY IS OFF–SITE AND NOT INCLUDED IN THE PROPOSED INVESTIGATION

SOURCE

GOOGLE EARTH

SOIL CHARACTERIZATION, SOIL STOCKPILE SAMPLING, AND LIMITED SOIL VAPOR SURVEY. ESSEL 11/8/2019

N

30' 0 30'

Title:

SITE PLAN AND SAMPLING LOCATIONS

3801 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA

Prepared for

RESOURCES FOR COMMUNITY DEVELOPMENT

ROUX

Compiled by: PD	Date: 13JUL2020	FIGURE
Prepared by: PD	Scale: AS SHOWN	2
Project Mgr: MM	Project: 3444.0002S000	
File: SITE PLAN 6-2-2020.DWG		

Table 1: Summary of Sampling and Analytical Testing
3801-3829 Martin Luther King Drive, Oakland, California

Sampling Matrix						Analyses[3]					
Sample Location	**Location Rationale**	**Sample Depths[1, 2]**	**Soil**	**Soil Gas**	**Grab GW**	**VOCs**	**TPH-gas**	**TEPH-d/mo**	**VOCs in soil gas**	**Fixed Gases in Soil Gas**	**Water Quality Parameters**
RCD-1	Northwest lot corner. Adjacent to rear of historical dry cleaner and downgradient property line. Planned boiler room and parking garage.	0.5									
		1.5	X			X					
		5.0	HOLD	X		HOLD			X	X	
		10.0	HOLD	X		HOLD			X	X	
		GW			X	X					X
		WELL			X	X	X	X			X
RCD-2	North central portion. Vicinity of surface stockpile. Planned utility room.	0.5									
		1.5	X			X					
		5.0	HOLD	X		HOLD			X	X	
		10.0	HOLD	X		HOLD			X	X	
		GW			X	X					X
		WELL			X	X	X	X			X
RCD-3	West central portion. Adjacent to downgradient property line. Planned parking garage stalls.	0.5									
		1.5	X			X					
		5.0	HOLD	X		HOLD			X	X	
		10.0	X	X		HOLD			X	X	
		GW			X	X					X
		WELL			X	X	X	X			X
RCD-4	Northeast lot corner. Adjacent to historical dry cleaner and upgradient property line. Planned trash room, stairwell, and parking garage.	0.5									
		1.5	X			X					
		5.0	HOLD	X		HOLD			X	X	
		10.0	HOLD	X		HOLD			X	X	
		GW			X	X					X
RCD-5	East central portion. Planned retail shop.	5.0		X					X	X	
RCD-6	South central portion. Vicinity of PCE detection in shallow soil. Planned elevator pit.	0.5									
		1.5	X			X					
		5.0	HOLD	X		HOLD			X	X	
		10.0	HOLD	X					X	X	
		GW			X	X					X
RCD-7	Southwest lot corner. Adjacent to downgradient property line. Planned parking garage stairs and backflow preventer.	0.5									
		1.5	X			X					
		5.0	HOLD	X		HOLD			X	X	
		10.0	X	X		HOLD			X	X	
RCD-8	Central south edge. Adjacent to potentially downgradient property line. Planned lobby area.	0.5									
		1.5	X			X					
		5.0	HOLD	X		HOLD			X	X	
		10.0	HOLD	X		HOLD			X	X	
		GW			X	X					X

Notes:
"X" indicates discrete sample to be collected from this location and depth and run for the given analysis.
"HOLD" indicates sample to be collected from this location and depth and held by the laboratory pending results of the soil gas sample. Select soil samples may be analzyed where high concentrations of soil gas are detected.
(1) "Sample Depths" indicates approximate feet below current ground surface (ft bgs) of TOP of sample.
(2) Soil gas sample depths may be adjusted to depths of 8 and 13 ft bgs to facilitate sampling from depths below at least five feet of undisturbed soil. Depths of sampling will be confirmed prior to mobilization based on as-built utility plans.
(3) "Analyses" indicates laboratory anlytical methods as follows:
"VOCs" indicates volatile organic compounds by USEPA method 8260B. EnCore-type sample containers or similar will be used for soil samples for VOCs, in accordance with USEPA 5035.
"VOCs in Soil Gas" indicates soil vapor sample by USEPA TO-15.
"Fixed gases in Soil Gas" indicates soil vapor sample by USEPA D1946
"Water Quality Parameters" will include field measurement of pH, temperature, conductivity, and oxidation-reduction potential.
Sampling for soil disposal profiling is expcted to to be conducted upon development of more mature development plan.

Table 2. Summary of Volatile Organic Compounds Detected in Soil
3801 Martin Luther King Junior Way, Oakland, California

					Sample ID:	RCD-1-1.5	RCD-2-1.5	RCD-3-1.5	RCD-3-10.0	RCD-4-1.5	RCD-6-1.5	RCD-7-1.5	RCD-7-10.0	RCD-8-1.5
					Boring ID:	RCD-1	RCD-2	RCD-3	RCD-3	RCD-4	RCD-6	RCD-7	RCD-7	RCD-8
					Sample Date:	07/02/2020	07/02/2020	07/01/2020	44013	07/02/2020	07/01/2020	07/01/2020	44013	07/01/2020
					Sample Depth (ft bgs):	1.5	1.5	1.5	10	1.5	1.5	1.5	10	1.5
Parameter	DTSC HERO Recommended Screening Levels for Residential Soil	DTSC HERO Recommended Screening Levels for Commercial Soil	EPA RSL for Residential Soil	EPA RSL for Commercial Soil	Unit									
Bromoform	1.90E+01		1.90E+01	8.60E+01	mg/kg	<0.0019	<0.0019	<0.0020	0.0019 J	<0.0018	<0.0019	<0.0019	0.0013 J	<0.0016
Tetrachloroethylene	5.90E-01	3.90E+02	2.40E+01	1.00E+02	mg/kg	0.00031 J	0.0026	0.0018	<0.0023	<0.00022	0.001 J	0.005	0.0069	<0.00019
Toluene	1.10E+03	5.30E+03	4.90E+03	4.70E+04	mg/kg	<0.0018	<0.0018	<0.0019	<0.0024	<0.0017	<0.0018	<0.0018	<0.0024	<0.0015
Xylene, m&p *	--	--	5.50E+02	2.40E+03	mg/kg	<0.0025	<0.0026	0.0029 J	<0.0040	<0.0025	<0.0026	<0.0025	<0.0040	<0.0021
Xylenes, Total	--	--	5.80E+02	2.50E+03	mg/kg	<0.0055	<0.0056	0.0029 J	<0.0050	<0.0054	<0.0057	<0.0055	<0.0050	<0.0047
All other VOCs	--	--	--	--	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes

DTSC = Department of Toxic Substances Control
EPA = U.S. Environmental Protection Agency
ft bg = feet below ground surface
HERO = Human and Ecological Risk Office
HHRA = Human Health Risk Assessment
J = estimated value
mg/kg = milligrams per kilogram
NA = not applicable
ND = not detected above method detection limits
RBSL = risk-based screening levels
RSL = Regional Screening Level
SL = screening level
VOC = volatile organic ompound
-- = No Standards available or sample not tested for specific compound
<X.X = Compound was analyzed for but not detected above the indicated method detection limit
* = the most conservative screening level of m- and p-xylenes was used (m-xylenes)

RBSLs are shown for residential and commercial land use, and are based on DTSC-recommended values from HERO Note 3, with EPA RSLs utilized where HERO Note 3 values are not available. RBSLs are based on cancer or noncancer health effects. Cancer-based RBSLs are based on target cancer risk of 1E-06 (one per million). Noncancer-based RBSLs are based on target chronic noncancer hazard quotient of 1. For data screening, the lower of the cancer or noncancer value is utilized. June 2020 update was utilized for screening.

Table 3. Summary of Volatile Organic Compounds Detected in Grab Groundwater
3801 Martin Luther King Junior Way, Oakland, California

				Sample ID:	RCD-1-GW	RCD-2-GW	RCD-3-GW	RCD-4-GW	RCD-6-GW	RCD-8-GW
				Boring ID:	RCD-1	RCD-2	RCD-3	RCD-4	RCD-6	RCD-8
				Sample Date:	07/02/2020	07/02/2020	07/02/2020	07/02/2020	07/02/2020	07/02/2020
Parameter	DTSC HERO HHRA Note 3 Tap Water Screening Levels	EPA RSL for Tap Water	RWQCB ESL Direct Exposure Human Health Risk Levels - MCL Priority	Unit						
2-Butanone	--	5.60E+03	5.57E+03	µg/L	<2.1	<2.1	<1.9	<2.1	<1.9	2.7 J
Acetone	--	1.40E+04	1.41E+04	µg/L	<30	<30	40	<30	<30	<30
Benzene	**1.50E-01**	4.60E-01	1.00E+00	µg/L	**0.15 J**	**0.18 J**	0.084 J	<0.036	**0.26**	**0.39**
Cis-1,2-Dichloroethene	1.20E+01	--	6.00E+00	µg/L	<0.069	<0.069	<0.093	<0.069	0.91	<0.093
Cumene (isopropyltoluene)	--	4.50E+02	--	µg/L	<0.061	<0.061	0.57	<0.061	<0.15	<0.15
Ethylbenzene	--	1.50E+00	3.00E+01	µg/L	<0.081	<0.081	0.51	<0.081	<0.13	<0.13
Naphthalene	**1.20E-01**	1.20E-01	1.65E-01	µg/L	*<0.43*	*<0.43*	<0.088	*<0.43*	**0.17**	<0.088
Tetrachloroethylene	**8.40E-02**	1.10E+01	5.00E+00	µg/L	<0.079	**18**	**5.5**	<0.079	**29**	**11**
Toluene	4.10E+02	1.10E+03	4.00E+01	µg/L	<0.19	<0.19	<0.16	<0.19	0.23 J	0.25 J
Trichloroethylene	--	4.90E-01	5.00E+00	µg/L	<0.19	0.43 J	0.058 J	<0.19	**2.9**	0.13 J
Trichloropropane, 1,2,3-	**2.00E-04**	7.50E-04	5.00E-03	µg/L	*<0.025*	*<0.025*	**0.0097**	*<0.025*	*<0.0047*	*<0.0047*
Vinylidene Chloride	1.30E+02	--	--	µg/L	<0.015	<0.015	<0.0084	<0.015	0.011	<0.0084
Xylene, m&p	--	1.90E+02	2.00E+01	µg/L	<0.15	<0.15	2.1	<0.15	0.5 J	<0.24
Xylene, o	--	1.90E+02	2.00E+01	µg/L	<0.07	<0.07	0.76	<0.07	0.14 J	<0.12
Xylenes, Total	--	1.90E+02	2.00E+01	µg/L	<0.5	<0.5	2.9	<0.5	0.64 J	<0.5
All other VOCs	--	--	--	µg/L	NA	NA	NA	NA	NA	NA

Notes

DTSC = Department of Toxic Substances Control
EPA = U.S. Environmental Protection Agency
ESL = Environmental Screening Level
ft bg = feet below ground surface
HERO = Human and Ecological Risk Office
HHRA = Human Health Risk Assessment
J = estimated value
MCL = Maximum Concentration Limit
NA = not applicable
ND = not detected above method detection limits
RBSL = risk-based screening levels
RSL = Regional Screening Level
RWQCB = San Francisco Bay Regional Water Quality Control Board
SL = screening level
VOC = volatile organic compound
µg/L = micrograms per liter
-- = No Standards available or sample not tested for specific compound
<X.X = Compound was analyzed for but not detected above the indicated reporting limit
* = the most conservative screening level of m- and p-xylenes was used (m-xylenes)

RBSLs are for tap water, and are based on DTSC-recommended values from HERO Note 3, with EPA RSLs utilized where HERO Note 3 values are not available. RBSLs are based on cancer or noncancer health effects. Cancer-based RBSLs are based on target cancer risk of 1E-06 (one per million). Noncancer-based RBSLs are based on target chronic noncancer hazard quotient of 1. For data screening, the lower of the cancer or noncancer value is utilized. June 2020 update utilized for screening.

Underlined data indicates that parameter was non-detect with a reporting limit above the DTSC SLs

Underlined and italicized data indicates that parameter was non-detect with a reporting limit above the DTSC SLs and EPA RSLs

Bold data indicates that parameter was detected above the DTSC SLs or EPA RSLs, where applicable.

Bold and yellow highlighted data indicates that parameter was detected above the DTSC SLs and EPA RSLs.

Table 4. Summary of Volatile Organic Compounds Detected in Soil Gas by TO-15
3801 Martin Luther King Junior Way, Oakland, California

Parameter	DTSC HERO Note 3 Commercial Screening Levels Ambient Air - Cancer Risk	DTSC HERO Note 3 Commercial Screening Levels Soil Gas - AF 0.03	DTSC HERO Note 3 Commercial Screening Levels Soil Gas - AF 0.001	DTSC HERO Note 3 Residential Screening Levels Ambient Air - Cancer Risk	DTSC HERO Note 3 Residential Screening Levels Soil Gas - AF 0.03	DTSC HERO Note 3 Residential Screening Levels Soil Gas - AF 0.001	Unit	RCD-1-5.0-SV	RCD-1-10.0-SV	RCD-2-5.0-SV	RCD-2-10.0-SV	RCD-3-5.0-SV	RCD-3-10.0-SV	RCD-4-5.0-SV	RCD-4-10.0-SV
Sample ID:								RCD-1-5.0-SV	RCD-1-10.0-SV	RCD-2-5.0-SV	RCD-2-10.0-SV	RCD-3-5.0-SV	RCD-3-10.0-SV	RCD-4-5.0-SV	RCD-4-10.0-SV
Boring ID:								RCD-1	RCD-1	RCD-2	RCD-2	RCD-3	RCD-3	RCD-4	RCD-4
Sample Date:								7/2/2020	7/2/2020	7/2/2020	7/2/2020	7/1/2020	7/1/2020	7/2/2020	7/2/2020
Sample Depth (ft bgs):								5	10	5	10	5	10	5	10
1,1,1-Trichloroethane	4.40E+03	1.47E+05	4.40E+06	1.00E+03	3.33E+04	1.00E+06	µg/m³	< 4.3	< 4.2	< 2.1	< 2.0	< 4.4	< 4.3	< 3.3	< 3.1
2,2,4-Trimethylpentane	--	--	--	--	--	--	µg/m³	6.6	10	< 2.9	< 2.8	< 3.8	< 3.7	< 4.7	< 4.4
2-Butanone	2.20E+04	7.33E+05	2.20E+07	5.20E+03	7.33E+05	2.20E+07	µg/m³	33	24	32	20	< 5.6	< 5.4	91	33
4-Methyl-2-Pentanone	1.30E+04	4.33E+05	1.30E+07	3.10E+03	4.33E+05	1.30E+07	µg/m³	6.9	6	7.7	5.8	< 3.3	< 3.2	15	15
Acetone	1.40E+05	4.67E+06	1.40E+08	3.20E+04	4.67E+06	1.40E+08	µg/m³	170	120	180	63	56	53	310	100
Benzene	4.20E-01	1.40E+01	4.20E+02	9.70E-02	3.23E+00	9.70E+01	µg/m³	**15**	**23**	**5.8**	**28**	< 2.6	**26**	**9.4**	**17**
Bromodichloromethane	3.30E-01	1.10E+01	3.30E+02	7.60E-02	2.53E+00	7.60E+01	µg/m³	< 5.3	< 5.2	< 2.5	< 2.4	< 5.4	< 5.3	< 4.1	< 3.8
Carbon Disulfide	3.10E+03	1.03E+05	3.10E+06	7.30E+02	1.03E+05	3.10E+06	µg/m³	< 5.8	< 5.6	< 4.9	< 4.7	< 5.9	< 5.8	54	< 7.4
Carbon Tetrachloride	2.00E+00	6.67E+01	2.00E+03	4.70E-01	1.57E+01	4.70E+02	µg/m³	< 5.0	< 4.9	< 4.0	< 3.8	< 5.1	< 5.0	< 6.4	< 6.0
Chlorobenzene	2.20E+02	7.33E+03	2.20E+05	5.20E+01	7.33E+03	2.20E+05	µg/m³	< 3.6	< 3.6	< 1.7	< 1.7	< 3.7	< 3.6	< 2.8	< 2.6
Chlorodibromomethane	5.80E-01	1.93E+01	5.80E+02	1.30E-01	4.33E+00	1.30E+02	µg/m³	< 6.7	< 6.6	< 5.4	< 5.2	< 6.9	< 6.7	< 8.6	< 8.1
Chloroethane	--	--	--	1.00E+04	3.33E+05	1.00E+07	µg/m³	< 4.9	< 4.8	< 4.2	< 4.0	< 5.0	< 4.9	< 6.7	< 6.2
Chloroform	5.30E-01	1.77E+01	5.30E+02	1.20E-01	4.00E+00	1.20E+02	µg/m³	**27**	< 3.8	**10**	< 1.8	**23**	< 3.9	**12**	< 2.8
Chloromethane	3.90E+02	1.30E+04	3.90E+05	9.40E+01	3.13E+03	9.40E+04	µg/m³	< 3.8	< 3.7	< 3.2	< 3.1	< 3.9	< 3.8	< 5.2	< 4.9
Cis-1,2-Dichloroethene	3.50E+01	1.17E+03	3.50E+04	8.30E+00	2.77E+02	8.30E+03	µg/m³	< 3.1	< 3.1	< 2.5	< 2.4	< 3.2	< 3.1	< 4.0	< 3.8
Cis-1,3-Dichloropropene	--	--	--	--	--	--	µg/m³	< 3.6	< 3.5	< 2.8	< 2.7	< 3.7	< 3.6	< 4.6	< 4.3
Ethylbenzene	4.90E+00	1.63E+02	4.90E+03	1.10E+00	1.63E+02	4.90E+03	µg/m³	< 3.4	< 3.4	< 1.6	< 1.6	< 3.5	< 3.4	< 2.6	< 2.5
Ethylene dibromide (dibromoethane, 1,2-)	2.00E-02	6.67E-01	2.00E+01	4.70E-03	1.57E-01	4.70E+00	µg/m³	< 6.1	< 5.9	< 4.8	< 4.6	< 6.2	< 6.1	< 7.8	< 7.3
Freon 114	--	--	--	--	--	--	µg/m³	< 5.5	< 5.4	< 4.4	< 4.2	< 5.6	< 5.5	< 7.1	< 6.6
Hexachlorobutadiene	5.60E-01	1.87E+01	5.60E+02	1.30E-01	4.33E+00	1.30E+02	µg/m³	< 20	< 19	< 17	< 16	< 20	< 20	< 27	< 25
Methyl Tert-Butyl Ether (MTBE)	4.70E+01	1.57E+03	4.70E+04	1.10E+01	1.57E+03	4.70E+04	µg/m³	< 6.7	< 6.5	< 5.7	< 5.4	< 6.8	< 6.7	< 9.1	< 8.5
Methylene Chloride	1.20E+03	4.00E+04	1.20E+06	1.00E+02	4.00E+04	1.20E+06	µg/m³	< 6.4	< 6.3	< 2.2	< 2.1	< 6.5	< 6.4	< 3.5	< 3.3
Tetrachloroethylene	2.00E+00	6.67E+01	2.00E+03	4.60E-01	1.53E+01	4.60E+02	µg/m³	< 5.4	< 5.2	**40**	**320**	**37**	**<u>1900</u>**	< 6.8	< 6.4
Toluene	1.30E+03	4.33E+04	1.30E+06	3.10E+02	1.03E+04	3.10E+05	µg/m³	18	16	6	24	< 3.0	21	11	14
Trans-1,2-Dichloroethene	3.50E+02	1.17E+04	3.50E+05	8.30E+01	2.77E+03	8.30E+04	µg/m³	< 3.1	< 3.1	< 2.5	< 2.4	< 3.2	< 3.1	< 4.0	< 3.8
Trichloroethylene	3.00E+00	1.00E+02	3.00E+03	4.80E-01	1.60E+01	4.80E+02	µg/m³	< 4.2	< 4.2	< 3.4	< 3.2	< 4.3	< 4.2	< 5.4	< 5.1
Vinyl Chloride	1.60E-01	5.33E+00	1.60E+02	9.50E-03	3.17E-01	9.50E+00	µg/m³	< 2.0	< 2.0	< 1.6	< 1.5	< 2.1	< 2.0	< 2.6	< 2.4
Vinylidene Chloride	3.10E+02	1.03E+04	3.10E+05	7.30E+01	2.43E+03	7.30E+04	µg/m³	< 3.1	< 3.1	< 2.5	< 2.4	< 3.2	< 3.1	< 4.0	< 3.8
Xylene, m&p	4.40E+02	1.47E+04	4.40E+05	1.00E+02	1.47E+04	4.40E+05	µg/m³	6.8	9.2	< 1.6	17	< 3.5	8.8	< 2.6	< 2.5
Xylene, o	4.40E+02	1.47E+04	4.40E+05	1.00E+02	1.47E+04	4.40E+05	µg/m³	< 3.4	< 3.4	< 1.6	5.3	< 3.5	< 3.4	< 2.6	< 2.5
All Other VOCs	--	--	--	--	--	--	µg/m³	ND	ND	ND	ND	ND	ND	ND	ND

Notes

AF = Attenuation Factor
EPA = U.S. Environmental Protection Agency
DTSC = Department of Toxic Substances Control
ft bgs = feet below ground surface
HERO = Human and Ecological Risk Office
J = estimated value
RSL = Regional Screening Level
SL = screening level
VOC = volatile organic compound
µg/m³ - micrograms per cubic meter
< X.X = Analyte was not detected above the indicated laboratory reporting limit
-- = No Standards available or sample not tested for specific compound

RBSLs are for ambient air adjusted by attenuation factors for soil gas as suggested in the guidance, with both commercial and residential screening criteria shown. RBSLs are based on DTSC-recommended values from HERO Note 3, with EPA RSLs utilized where HERO Note 3 values are not available. RBSLs are based on cancer or noncancer health effects. Cancer-based RBSLs are based on target cancer risk of 1E-06 (one per million). Noncancer-based RBSLs are based on target chronic noncancer hazard quotient of 1. For data screening, the lower of the cancer or noncancer value is utilized. June 2020 update utilized for screening.

BOLD data indicates that parameter was detected above the DTSC HERO Residential SL for Soil Gas using a 0.03 AF

<u>BOLD AND UNDERLINED</u> data indicates that parameter was detected above the DTSC HERO Residential SL for Soil Gas using a 0.001 AF

Yellow highlighted data indicates that parameter was detected above the DTSC HERO Commercial SL for Soil Gas using a 0.03 AF

Orange highlighted data indicates that parameter was detected above the DTSC HERO Commercial SL for Soil Gas using a 0.001 AF

ROUX

Table 4. Summary of Volatile Organic Compounds Detected in Soil Gas by TO-15
3801 Martin Luther King Junior Way, Oakland, California

							Sample ID:	RCD-5-5.0-SV	RCD-6-5.0-SV	RCD-6-10.0-SV	RCD-7-5.0-SV	RCD-7-10.0-SV	RCD-8-5.0-SV	RCD-8-10.0-SV
							Boring ID:	RCD-5	RCD-6	RCD-6	RCD-7	RCD-7	RCD-8	RCD-8
							Sample Date:	7/1/2020	7/1/2020	7/1/2020	7/2/2020	7/2/2020	7/2/2020	7/2/2020
							Sample Depth (ft bgs):	5	5	10	5	10	5	10
Parameter	DTSC HERO Note 3 Commercial Screening Levels Ambient Air - Cancer Risk	DTSC HERO Note 3 Commercial Screening Levels Soil Gas - AF 0.03	DTSC HERO Note 3 Commercial Screening Levels Soil Gas - AF 0.001	DTSC HERO Note 3 Residential Screening Levels Ambient Air - Cancer Risk	DTSC HERO Note 3 Residential Screening Levels Soil Gas - AF 0.03	DTSC HERO Note 3 Residential Screening Levels Soil Gas - AF 0.001	Unit							
1,1,1-Trichloroethane	4.40E+03	1.47E+05	4.40E+06	1.00E+03	3.33E+04	1.00E+06	µg/m3	< 4.3	< 3.9	< 1.6	< 4.0	< 19	< 4.3	< 3.7
2,2,4-Trimethylpentane	--	--	--	--	--	--	µg/m3	11	< 3.3	< 2.4	< 3.4	< 16	< 3.7	< 3.1
2-Butanone	2.20E+04	7.33E+05	2.20E+07	5.20E+03	7.33E+05	2.20E+07	µg/m3	26	19	18	< 5.0	< 24	< 5.4	13
4-Methyl-2-Pentanone	1.30E+04	4.33E+05	1.30E+07	3.10E+03	4.33E+05	1.30E+07	µg/m3	< 3.2	< 2.9	8.9	< 3.0	< 14	< 3.2	< 2.8
Acetone	1.40E+05	4.67E+06	1.40E+08	3.20E+04	4.67E+06	1.40E+08	µg/m3	120	150	84	84	< 27	160	69
Benzene	4.20E-01	1.40E+01	4.20E+02	9.70E-02	3.23E+00	9.70E+01	µg/m3	**18**	**5.3**	**22**	**8.9**	**25**	**11**	**25**
Bromodichloromethane	3.30E-01	1.10E+01	3.30E+02	7.60E-02	2.53E+00	7.60E+01	µg/m3	< 5.3	< 4.8	< 2.0	< 4.9	< 23	< 5.3	< 4.5
Carbon Disulfide	3.10E+03	1.03E+05	3.10E+06	7.30E+02	1.03E+05	3.10E+06	µg/m3	< 5.8	< 5.2	< 3.9	< 5.3	< 25	24	19
Carbon Tetrachloride	2.00E+00	6.67E+01	2.00E+03	4.70E-01	1.57E+01	4.70E+02	µg/m3	< 5.0	< 4.5	< 3.2	< 4.6	< 22	< 5.0	< 4.2
Chlorobenzene	2.20E+02	7.33E+03	2.20E+05	5.20E+01	7.33E+03	2.20E+05	µg/m3	< 3.6	< 3.3	< 1.4	< 3.3	< 16	< 3.6	< 3.1
Chlorodibromomethane	5.80E-01	1.93E+01	5.80E+02	1.30E-01	4.33E+00	1.30E+02	µg/m3	< 6.7	< 6.1	< 4.3	< 6.2	< 29	< 6.7	< 5.7
Chloroethane	--	--	--	1.00E+04	3.33E+05	1.00E+07	µg/m3	< 4.9	< 4.4	< 3.3	< 4.5	< 21	< 4.9	< 4.1
Chloroform	5.30E-01	1.77E+01	5.30E+02	1.20E-01	4.00E+00	1.20E+02	µg/m3	< 3.9	**9.6**	< 1.5	**17**	< 17	**27**	< 3.3
Chloromethane	3.90E+02	1.30E+04	3.90E+05	9.40E+01	3.13E+03	9.40E+04	µg/m3	< 3.8	< 3.4	< 2.6	< 3.5	< 16	< 3.8	< 3.2
Cis-1,2-Dichloroethene	3.50E+01	1.17E+03	3.50E+04	8.30E+00	2.77E+02	8.30E+03	µg/m3	< 3.1	< 2.8	< 2.0	< 2.9	57	< 3.1	< 2.7
Cis-1,3-Dichloropropene	--	--	--	--	--	--	µg/m3	< 3.6	< 3.2	< 2.3	< 3.3	< 16	< 3.6	< 3.0
Ethylbenzene	4.90E+00	1.63E+02	4.90E+03	1.10E+00	1.63E+02	4.90E+03	µg/m3	< 3.4	< 3.1	< 1.3	< 3.2	< 15	< 3.4	< 2.9
Ethylene dibromide (dibromoethane, 1,2-)	2.00E-02	6.67E-01	2.00E+01	4.70E-03	1.57E-01	4.70E+00	µg/m3	< 6.1	< 5.5	< 3.9	< 5.6	< 26	< 6.1	< 5.2
Freon 114	--	--	--	--	--	--	µg/m3	< 5.5	< 5.0	< 3.5	< 5.1	< 24	< 5.5	< 4.7
Hexachlorobutadiene	5.60E-01	1.87E+01	5.60E+02	1.30E-01	4.33E+00	1.30E+02	µg/m3	< 20	< 18	< 13	< 18	< 85	< 20	< 17
Methyl Tert-Butyl Ether (MTBE)	4.70E+01	1.57E+03	4.70E+04	1.10E+01	1.57E+03	4.70E+04	µg/m3	< 6.7	< 6.0	< 4.6	< 6.1	< 29	< 6.7	< 5.6
Methylene Chloride	1.20E+03	4.00E+04	1.20E+06	1.00E+02	4.00E+04	1.20E+06	µg/m3	< 6.4	< 5.8	< 1.8	< 5.9	< 28	< 6.4	< 5.4
Tetrachloroethylene	2.00E+00	6.67E+01	2.00E+03	4.60E-01	1.53E+01	4.60E+02	µg/m3	**260**	< 4.8	**85**	**350**	**<u>7700</u>**	**120**	**160**
Toluene	1.30E+03	4.33E+04	1.30E+06	3.10E+02	1.03E+04	3.10E+05	µg/m3	20	7.9	18	9.1	< 13	12	20
Trans-1,2-Dichloroethene	3.50E+02	1.17E+04	3.50E+05	8.30E+01	2.77E+03	8.30E+04	µg/m3	< 3.1	< 2.8	< 2.0	< 2.9	< 14	< 3.1	< 2.7
Trichloroethylene	3.00E+00	1.00E+02	3.00E+03	4.80E-01	1.60E+01	4.80E+02	µg/m3	< 4.2	< 3.8	< 2.7	**18**	**<u>680</u>**	< 4.2	< 3.6
Vinyl Chloride	1.60E-01	5.33E+00	1.60E+02	9.50E-03	3.17E-01	9.50E+00	µg/m3	< 2.0	< 1.8	< 1.3	< 1.8	< 8.7	< 2.0	< 1.7
Vinylidene Chloride	3.10E+02	1.03E+04	3.10E+05	7.30E+01	2.43E+03	7.30E+04	µg/m3	< 3.1	< 2.8	< 2.0	< 2.9	< 14	< 3.1	< 2.7
Xylene, m&p	4.40E+02	1.47E+04	4.40E+05	1.00E+02	1.47E+04	4.40E+05	µg/m3	11	< 3.1	12	< 3.2	< 15	< 3.4	6.4
Xylene, o	4.40E+02	1.47E+04	4.40E+05	1.00E+02	1.47E+04	4.40E+05	µg/m3	< 3.4	< 3.1	< 1.3	< 3.2	< 15	< 3.4	< 2.9
All Other VOCs	--	--	--	--	--	--	µg/m3	ND	ND	ND	ND	ND	ND	ND

Notes

AF = Attenuation Factor
EPA = U.S. Environmental Protection Agency
DTSC = Department of Toxic Substances Control
ft bgs = feet below ground surface
HERO = Human and Ecological Risk Office
J = estimated value

RSL = Regional Screening Level
SL = screening level
VOC = volatile organic compound
µg/m3 - micrograms per cubic meter
< X.X = Analyte was not detected ab
-- = No Standards available or sa

RBSLs are for ambient air adjusted by attenuation factors for soil gas as suggested in the guidance, with both commercial and residential screening criteria shown. RBSLs are based o recommended values from HERO Note 3, with EPA RSLs utilized where HERO Note 3 values are not available. RBSLs are based on cancer or noncancer health effects. Cancer-bas based on target cancer risk of 1E-06 (one per million). Noncancer-based RBSLs are based on target chronic noncancer hazard quotient of 1. For data screening, the lower of the canc value is utilized. June 2020 update utilized for screening.

BOLD data indicates that parameter was detected above the DTSC HERO Residential SL for Soil Gas using a 0.03 AF

<u>BOLD AND UNDERLINED</u> data indicates that parameter was detected above the DTSC HERO Residential SL for Soil Gas using a 0.001 AF

Yellow highlighted data indicates that parameter was detected above the DTSC HERO Commercial SL for Soil Gas using a 0.03 AF

Orange highlighted data indicates that parameter was detected above the DTSC HERO Commercial SL for Soil Gas using a 0.001 AF

ROUX

Table 5. Summary of Fixed Gases Detected in Soil Gas by ASTM-D1946
3801 Martin Luther King Junior Way, Oakland, California

Sample ID:		RCD-1-5.0-SV	RCD-1-10.0-SV	RCD-2-5.0-SV	RCD-2-10.0-SV	RCD-3-5.0-SV	RCD-3-10.0-SV	RCD-4-5.0-SV	RCD-4-10.0-SV	RCD-5-5.0-SV	RCD-6-5.0-SV	RCD-6-10.0-SV	RCD-7-5.0-SV	RCD-7-10.0-SV	RCD-8-5.0-SV	RCD-8-10.0-SV
Boring ID:		RCD-1	RCD-1	RCD-2	RCD-2	RCD-3	RCD-3	RCD-4	RCD-4	RCD-5	RCD-6	RCD-6	RCD-7	RCD-7	RCD-8	RCD-8
Sample Date:		7/2/2020	7/2/2020	7/2/2020	7/2/2020	7/1/2020	7/1/2020	7/2/2020	7/2/2020	7/1/2020	7/1/2020	7/1/2020	7/2/2020	7/2/2020	7/2/2020	7/2/2020
Sample Depth (ft bgs):		5	10	5	10	5	10	5	10	5	5	10	5	10	5	10
Parameter	Unit															
Helium	%	< 0.13	0.19	< 0.13	< 0.12	0.14	< 0.13	4	< 0.19	< 0.13	1	< 0.10	0.94	< 0.11	< 0.13	< 0.11
Oxygen	%	18	18	20	17	20	18	18	16	20	20	20	19	14	19	19
Methane	%	0.00038	0.001	< 0.00025	0.00052	< 0.00027	0.00047	0.00097	0.0066	< 0.00026	< 0.00024	0.0015	< 0.00024	0.00028	0.00032	0.0003
Carbon Dioxide	%	2.5	2	0.51	2.6	0.38	2.2	0.35	0.53	0.91	0.22	0.25	0.92	8.2	0.15	< 0.022

Notes

ft bgs = feet below ground surface
% = percent
< X.X = Analyte was not detected above the indicated laboratory reporting limit

ROUX

SOIL MANAGEMENT PLAN

VACANT PROPERTY
3801-3829 MARTIN LUTHER KING JUNIOR WAY
OAKLAND, CALIFORNIA 94609

PROJECT NO. 19272

Prepared for:

Ms. Alexandra Arjo
Resources for Community Development (RCD)
2220 Oxford Street
Berkeley, California 94704

Prepared by:

Essel Environmental Engineering & Consulting
1035 22nd Avenue, Suite 9
Oakland, California 94606
1-800-595-7616 Phone

November 8, 2019

SOIL MANAGEMENT PLAN
3801-3829 MARTIN LUTHER KING JUNIOR WAY
OAKLAND, CALIFORNIA 94609

Minh Ngo
Project Geologist

PROFESSIONAL GEOLOGIST
THOMAS A. SPARROWE
No. 5065
Exp 12/31/20
STATE OF CALIFORNIA

Thomas A. Sparrowe P.G.
Senior Geologist

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ATTACHMENTS

1.0 INTRODUCTION

This Construction Soil Management Plan (SMP) has been prepared by Essel Environmental Engineering & Consulting (Essel) on behalf of Resources for Community Development (RCD) for earthwork activities associated with the redevelopment project of 3801-3829 Martin Luther King Junior Way in Oakland, California (Figure 1) with Alameda County Assessor Parcel Numbers (APNs) 12-964-4, 12-964-5, 12-964-6, and 12-964-7 (Site). The Site is currently developed with two vacant two-story buildings and one vacant single-story building with associated undeveloped land. The redevelopment project ("Project") consists of (1) demolition of the existing structures; (2) grading and soil excavation for utilities, elevator shafts, and foundations; and (3) construction of a six-story, mixed-use residential building and a street-level parking garage.

1.1 SMP Purpose & Objectives

This SMP is designed to provide RCD and the construction team with guidance for the proper handling and management of contaminated soil during redevelopment activities.

The goals of this SMP are to provide detailed information regarding known environmental conditions at the Site and establish a decision-making structure to assist the construction team in the identification and management of contaminated media, when and if they are encountered. The objectives of this SMP are as follows:

- Communicate information to Site construction workers about Site environmental conditions;
- Present protocols for appropriate community protection;
- Present guidelines for health and safety precautions for on-Site workers who may access soil that could contain residual chemicals of concern;
- Present notification and reporting requirements;
- Present protocols for management of known contaminated soil generated during Site redevelopment activities; and
- Present contingency procedures in the event that localized areas of unanticipated chemically-affected soil or other subsurface features of environmental concern are encountered during earthwork or excavation activities;

2.0 RESPONSIBILITY FOR SMP IMPLEMENTATION

Representatives for the property Owner will oversee implementation of the SMP at the Site. A copy of this SMP will be maintained at the Site at all times. The Owner and General Contractor(s) will make all third-party subcontractors working at the Site aware of the requirements of the SMP, and provide an electronic copy and hard-copy to all subcontractors that are performing activities covered by this SMP and who may encounter suspect subsurface conditions during execution of their work.

The project Environmental Consultant will be present to assist the Owner and contractors with the implementation of this SMP when ground-disturbing activities are being conducted in areas where contamination is known or suspected or when unknown conditions are encountered.

2.1 Activities Covered by the SMP

The following activities constitute the work covered under this SMP.

- **Subsurface Construction or Repair** – any activity occurring beneath the grade level of existing or future ground surface;
- **Utility Line Work** – any subterranean inspection, excavation, or repair of electrical, telephone, water, sanitary sewer or storm drains occurring within or outside of existing vaults (conducted prior to excavation); and
- **Other** – other subgrade activities not expressly listed a love (e.g., deep landscaping work, sub-slab work, etc.)

2.2 RCD Construction Team Contact Information

Prior to the initiation of construction activities that are covered under this SMP, the Owner will confirm the Owner's project representative and project Environmental Consultant listed below. Regular and 24-hour emergency contact information for these individuals will be confirmed and updated as necessary. A project contact sheet will be provided to the General Contractor and posted in an accessible and suitable location at the Site.

Project Role	Company Name	Name	Contact Information
Owner Representative	RCD	Alexandra Arjo	(510) 841-4410; aarjo@rcdhousing.org
General Contractor			
Environmental Consultant	Essel Environmental	Minh Ngo	(510) 650-7730; mngo@esseltek.com

2.2 Worker Health and Safety

In addition to following the SMP, each Contractor and subcontractor is responsible for the safety of its employee and Site visitors including but not limited to adherence to a health and safety plan and use of property-trained personnel:

- **Preparation of a Site-Specific Health and Safety Plan (HASP)**. A HASP will be prepared for the project in accordance with California Occupational Safety and Health Administration (CAL-OSHA) Construction Safety Orders within Title 8 of the California Code of Regulations (CCR). The General Contractor is responsible for notifying subcontractors and visitors of pertinent environmental conditions to ensure adequate protection for workers and visitors while on Site. Subcontractors may either adopt the General Contractor's HASP or prepare their own HASP. In the event that unanticipated conditions occur at the Site, the HASP will be modified accordingly.
- **Use of Properly-Trained Personnel**. Each contractor engaged in contact and management of contaminated soil or groundwater will use properly trained personnel in accordance CCR, Title 29, Part 1910.120 Hazardous Waste Operations and Emergency Response (HAZWOPER) standards.

2.3 Community Protection During Site Redevelopment

Land use in the vicinity of the Site is mixed commercial and residential. A map of the land use in the immediate vicinity of the Site is presented on Figure 2. During the development of the Site, the Owner and contractors will implement measures to control potential risks to the surrounding community from fugitive dust emissions. These activities will be implemented when there is the potential for exposed soil to affect the nearby community. It is anticipated that following placement of hardscapes and building pads, air monitoring will not be required as there will not be exposed soil surfaces.

2.4 Agreement and Acknowledgement Statement

Prior to commencement of any Site activities that disturb the ground surface, the General Contractor and subcontractors of the Owner will read this plan and sign the Agreement and Acknowledgement Statement (Appendix A) to certify that they have read, understood and agreed to abide by its provisions.

3.0 AGENCY NOTIFICATION & REPORTING REQUIREMENTS

The Owner will notify the City of Oakland and other agencies as applicable during Site development activities in accordance with the protocols described below.

3.1 City of Oakland Notification

The Owner will notify the City of Oakland during Site redevelopment activities in accordance with the protocols below.

3.1.1 Twenty-four (24) Hour Notification

The City of Oakland will be notified within 24 hours of discovery if any of the following potentially hazardous conditions are encountered:

- Releases spills or releases of hazardous substances or petroleum hydrocarbons to soil or water that are considered, based on best professional judgement and/or physical evidence (including but not limited to olfactory, visual, field instrument, and lab data), to be an immediate threat to human health and the environment; and/or
- Discovery of unknown conditions (underground storage tanks, sumps, vaults, piping, etc.) or newly found contamination.

In the event of the discovery of USTs, vaults, hoists, & pipelines, the Alameda County Department of Environmental Health (ACDEH) must also be notified within 24 hours of the discovery.

3.1.2 Seventy-two (72) Hour Notification

The ACDEH Local Oversite Program for Hazardous Materials Releases (LOP) will be notified 72 hours in advance of ground disturbing activities in areas of known contamination or suspected contamination.

3.1.3 ACDEH LOP and CUPA Contact Information

The primary points of contact for the ACDEH LOP and Certified Unified Program Agency (CUPA) are provided below. All agency notifications must be made by phone and email. An ACDEH contact sheet will be provided to the General Contractor and posted in an accessible and suitable location at the Site.

ACDEH LOP Case Worker	
Paresh Khatri, ACDEH LOP Program Manager	(510) 777-2478; paresh.khatri@acgov.org
ACDEH CUPA	(510) 567-6700 dehalamedacers@acgov.org

3.2 Other Agency Notification

In addition to the ACDEH notification requirements discussed above, other agency notifications may be required. Contact information for other agency notifications that may be required is provided below. Prior to the initiation of construction activities that are covered under this SGMP, the Owner will confirm the contact information listed below. An agency contact sheet will be provided to the General Contractor and posted in an accessible and suitable location at the Site.

Conditions Posing an Immediate Threat. For life-threatening or serous hazardous materials incidents, the following number will be contacted immediately upon discovery.	
Local police, fire and rescue services	911
Releases to Water. For spills or releases of hazardous substances or petroleum hydrocarbons to surface water, the following agencies will be contacted immediately upon discovery.	
National Spill Response Center	(800) 424-8802
United States Coast Guard – San Francisco Sector (if spill is going to reach navigable waters)	(415) 399-3547
California Office of Emergency Services	(800) 852-7550; (916) 845-8911
California Regional Water Quality Control Board – San Francisco Bay Region	(510) 622-2300
Local Emergency Response Agency	911
VOC-Impacted Soil. If VOC-impacted soil is discovered during Site grading activities, the following agency will be notified.	
Bay Area Air Quality Management District (BAAQMD)	(415) 749-4900
Dust Complaints. For dust complaints during ground disturbing activities, the following agencies will be notified.	
City of Oakland Building Department	(510) 238-3941

3.3 RCD Record Keeping & Reporting Requirements

All soil excavation, disposal and import activities will be documented in daily field reports by the Contractor and/or Environmental Consultant and will be kept at the Site and made available to ACDEH upon request. Documentation will include at a minimum the following, as applicable:

- **Underground Structures** – type, contents, characterization, and destination (abandoned in place or disposed of off-Site);
- **Impacted Soil** – origin, volume, characterization, and destination (transported to temporary soil locations within the Site, disposed of off-Site, and/or re-used on Site);
- **Imported Soil** – origin, volume, characterization, and destination (location on-Site);
- **Off-site Disposal Records** – date, time, trucking company, driver and vehicles used for the trip, equipment decontamination and tarping, waste/material type, volume, copies of bills-of-lading, and hazardous waste manifests; and
- **Dust Complaint Logs** – time, name and contact information, compliant description, earthwork activities associated with complaint, and measures taken to mitigate dust;
- **Analytical Reports** – copies of waste characterization laboratory analytical results.

4.0 ENVIRONMENTAL SITE CONDITIONS

Soil may have been impacted at the Site from historic Site use and/or off-Site sources. A summary of known environmental conditions in soil and groundwater is provided below. Tabulated results of analytical data are provided in Appendix B.

4.1 Soil

Soil at the Site consists of artificial fill material and native clay, silty clay, clayey silt, sandy silt, silty sand, and gravelly clay. Known soil contamination includes the following:

- **Lead Impacts.** Lead exists in the 0- to 1-foot depth across the Site and in the soil stockpile in the northern portion of the Site and has been detected at concentrations that exceed both residential human health risk-based screening levels and/or hazardous waste screening criteria in numerous samples (Environmental Science, 2019; Essel, 2019). During earthwork activities, soil excavated to achieve Site grades and construct building foundations will be disposed of off-Site at a permitted landfill. Lead-impacted soil will be excavated and disposed of at an off-Site permitted landfill, and/or capped in place beneath the building foundation, hardscape, or clean fill material.
- **Pesticide Impacts.** Elevated concentrations of pesticides have been detected in Site soil at the 1-foot-depth in boring B6 and the soil stockpile in the northern portion of the Site. Pesticide-impacted soil will be excavated and disposed of at an off-Site permitted landfill, and/or capped in place beneath the building foundation, hardscape, or clean fill material.

4.2 Groundwater

Unconfined groundwater in the vicinity of the subject Site has been encountered at depths of approximately 6 to 9 feet below the existing ground surface (Impact Environmental Services, 2010). Groundwater has not been sampled at the Site.

4.3 Discovery of Unexpected Conditions

Due to the historic Site use as a residence, drug store, telecommunications office, barber shop, hair salon, stereo store, and hat store, redevelopment activities may reveal unexpected conditions such as previously unidentified areas of contamination or underground structures such as USTs, vaults, hoists, sumps, maintenance pits, pipelines, etc.

5.0 PRE-FIELD ACTIVITIES

The pre-field activities include a description of planning and organizational aspects of soil excavation required for excavation to begin.

5.1 Site Security and Access

During remedial activities, the Site will be secured to provide protection and safety to on-Site personnel and equipment, and to prevent unauthorized access to areas of remedial activity. A 6-foot high chain link fence will be constructed around the perimeter of the Site and will enclose the staging area and the work zones (*i.e.*, any exclusion, decontamination, and support zones). During non-working hours, the fencing will be fully closed and locked. During remedial activities, access will be restricted to authorized personnel only.

5.2 Traffic Control

Caution will be exercised during entrance and exiting of the work area to ensure safe and uninterrupted traffic flow. Entrance into and departure from the Site by trucks will be facilitated by a flagman, or comparable contractor personnel, as necessary. Once trucks have left the Site, they will follow specific haul routes to disposal facilities as described in the Transportation Plan, Section 9.4.2.

5.3 Excavation Permit

All necessary permits for removal activities, transportation, and/or air quality will be obtained prior to excavation. The permits will be kept on-Site and made available for inspection during working hours.

The procedures proposed for remediation activities will comply with federal, State and local rules and regulations, regardless of whether permit documents are required.

5.4 Notifications and Utility Clearance

RCD will notify the Bay Area Air Quality Management District (BAAQMD) of excavation activities at least five days prior to implementation. In addition, RCD will also notify the City of Oakland and ACDEH LOP of the soil excavation activities at least 72 hours prior to commencing work. The proposed excavation areas will be marked in white paint prior to contacting Underground Service Alert (USA) at least 48 hours prior to excavating, as required by law. A private utility locating service will be contracted prior to conducting the field activities to mark and/or clear proposed excavation locations relative to the presence and/or marked locations of potential subsurface utilities.

6.0 SOIL MANAGEMENT

Redevelopment activities include grading of the Site. Site grading will include removing the top 0 to 12 inches of Site material (pavement, fill material) and excavating soil in conjunction with installation of utility trenches, elevator shafts, and building foundations. Lead-impacted soil will be excavated under the observation of the Environmental Consultant in the areas shown on Figures 3 and 4 prior to completing general grading activities during Site redevelopment. Any excess soil generated during grading may be temporarily stockpiled on-Site and either re-distributed for re-compaction on-Site as part of Site grading activities or transported off-Site for disposal.

All soil management and handling activities will be conducted in accordance with applicable federal, state, and local regulations. During implementation of the project other data may be collected for profiling purposes and to further refine the quantities and classification of potential waste materials that may be generated.

6.1 Excavation of Lead-Contaminated Soil

Lead-impacted soil at the Site exceeds both residential human health risk-based screening levels and/or hazardous waste screening criteria in numerous samples (Appendix B). Excavation of lead-impacted soil will be conducted in the following general sequence:

- Develop staging areas, access paths for equipment, work zones, and decontamination areas for use during handling of contaminated soil to reduce the potential of tracking waste off-Site;
- Identify locations of perimeter air monitoring stations, as necessary, and begin monitoring to comply with BAAQMD regulations, the HASP, and the protocols in Section 10 of this SMP;
- Stockpile soil for characterization or direct load onto trucks for appropriate off-Site disposal.
- If required by landfills, characterize stockpiled soil by collecting samples using a pre-cleaned hand trowel and transfer into laboratory-supplied glass containers. One 4-point composite sample will be collected for every 200 cubic yards of material generated per disposal/accepting facility requirements.

- Following soil sample collection, the containers will be labeled for identification and immediately placed in a chilled, thermally insulated cooler containing bagged ice or blue ice. The cooler containing the samples will then be delivered under chain-of-custody protocol to a state-certified laboratory for analysis. Composite samples will be submitted, at a minimum, for laboratory analysis for Title 22 metals using U.S. EPA Test Method 6010B and other constituents required as part of waste characterization testing for off-Site disposal. If necessary, extractable metals tests (i.e., leaching test including waste extraction test [WET] and/or toxicity characteristic leaching procedure [TCLP] procedures) will be conducted on the samples with elevated metals concentrations to establish if the soil is hazardous based on their leaching characteristics.

6.2 Contingency Measures for Previously Unidentified Suspect Soils

The following contingency measures will be implemented in the event that previously unidentified suspected chemically-affected soil is identified during Site excavation. All contingency measures will be conducted by HAZWOPER-trained environmental professionals in accordance with the HASP.

Additionally, as a precaution, the Environmental Consultant will be present during excavation and grading activities in areas of subsurface anomaly detections in case unexpected contamination or subsurface structures are encountered.

6.2.1 Identification of Contaminated Soil

The Contractor will be instructed to report indicators of contaminated soil, in particular, petroleum hydrocarbons. The three primary physical indicators of petroleum-related contamination in soil include staining, sheen, and petroleum-like odor, as described below:

- **Staining:** Generally, soil that is impacted with petroleum hydrocarbons exhibits gray, black or green staining, although other contaminants and natural conditions may also cause staining.
- **Sheen:** Sheen is another indication of petroleum contamination. Soil exhibiting sheen may appear shiny and reflective. Sheens from heavily impacted soil may appear iridescent with rainbow-like colors.

- **Odor:** Soil impacted with petroleum products, volatile organics, and other types of contamination may release vapors when exposed to the atmosphere. These vapors can be interpreted as an odor. Odor can be subjective, and inhalation of vapors from impacted soil is harmful to human health. Therefore, odor is considered an inadvertent field indicator and should not be used for continuous screening of soil.

If soil exhibiting evidence of contamination is encountered during excavation, the Contractor will cease excavation activities in the area and notify the Environmental Consultant within 24 hours. The Contractor will not conduct any work in the area of concern or replace any known or suspected contaminated soil in the excavation area without prior approval by the ACDEH LOP.

6.2.2 Preliminary Assessment

Preliminary assessment of the previously unidentified suspect soil will include confirmation that access control measures installed by the General Contractor are adequate to provide necessary protection to on-Site workers and the public during the evaluation phase. Confirmation will consist of visual assessment of the installed barriers as well as monitoring of the air outside the control area.

Air sampling will be conducted around the perimeter of the secured area using a combination photoionization detector (PID) meter to measure volatile organic compounds (VOCs) in the breathing zone and a lower explosive limit (LEL)/oxygen (O_2) meter to measure concentrations of combustible gases and available oxygen. If the air sampling suggests that the control measures are improperly positioned to provide necessary protection to on-Site workers, the barriers will be relocated as necessary.

The Environmental Consultant will conduct a preliminary assessment to determine if the previously unidentified suspect soil is considered a significant risk to human health or the environment. If field observations suggest that the suspect conditions are *de minimis* and: (1) do not present a threat to human health or the environment; or (2) would generally not be subject of an enforcement action if brought to the attention of appropriate governmental agencies; then the Environmental Consultant will terminate the contingency plan process and release the suspect areas to the General Contractor.

6.2.3 Evaluation of Previously Unidentified Suspect Soil

If conditions in the suspect area are not considered *de minimis*, the Environmental Consultant will notify the ACDEH LOP on behalf of the Owner within 24 hours of discovery and evaluate the nature and extent of the potentially chemically-affected soil in accordance with the protocols below.

- **In-Situ Soil Samples.** An in-situ soil sample will be collected from the same location and depth as the previously unidentified suspect soil and 1-foot below this depth. Additional samples will also be collected at the same depths at a minimum of four step-out locations to assess soil conditions around the suspect sample location. The four step-out locations will be located approximately 5 feet to the north, south, east, and west of the suspect sample location. Each sample will be collected using a pre-cleaned hand trowel and transferred into laboratory-supplied glass containers and observed for evidence of odors and staining and screened for VOCs using a PID. If any of the in-situ soil samples show evidence of odors and staining or VOCs are detected above 10 parts per million by volume (ppmv), then environmental sample(s) will be retained for analyses.
- **Stockpiled Soil Samples.** If previously unidentified suspect soil is stockpiled on-Site, samples will be obtained using a pre-cleaned hand trowel and transferred into laboratory-supplied glass containers. One 4-point composite sample will be collected for every 200 cubic yards of material generated per disposal/accepting facility requirements.
- **Laboratory Analysis.** Following soil sample collection, the containers will be labeled for identification and immediately placed in a chilled, thermally insulated cooler containing bagged ice or blue ice. The cooler containing the samples will then be delivered under chain-of-custody protocol to a state-certified laboratory. Discrete and composite samples will be submitted, at a minimum, for laboratory analysis of total petroleum hydrocarbons quantified as gasoline (TPH-g) and VOCs by United States Environmental Protection Agency (U.S. EPA) Test Method 8260B and total petroleum hydrocarbons quantified as diesel (TPH-d) and motor oil (TPH-mo) by U.S. EPA Test Method 8015M. All soil samples submitted for analysis by U.S. EPA Method 8260B will be collected in accordance with U.S. EPA Method 5035 using Terracore™ (or equivalent) samplers. Samples may also be analyzed for Title 22 metals using U.S. EPA Test Method 6010B or other

constituents as determined by the Environmental Consultant and the ACDEH LOP or as part of waste characterization testing for off-Site disposal. If necessary, extractable metals tests (i.e., leaching test including waste extraction test [WET] and/or toxicity characteristic leaching procedure [TCLP] procedures) will be conducted on the samples with elevated total metals concentrations to establish if the soils are hazardous based on their leaching characteristics.

After the evaluation is complete, the Environmental Consultant will provide the Owner, General Contractor and the ACDEH LOP with conclusions regarding potential risks of the suspect material to human health and the environment as well as recommendations for proper removal and disposal of the affected soil. All soil removal work will be approved by the ACDEH LOP prior to implementation. If VOC-affected soil is encountered, notification will be provided to BAAQMD as required in the guidelines and notification requirements set by Regulation 8, Rule 40 of the BAAQMD Rules and Regulations for aeration of contaminated soil.

6.4 Reuse of Concrete & Soil Importation

Reuse of crushed concrete or use of imported fill material will be characterized and approved by ACDEH prior to being placed at the Site in accordance with the ACDEH August 1, 2018 *Fill Characterization Material Guidance* and the New Jersey Department of Environmental Protection *Guidance for Characterization of Concrete and Clean Material Certification for Recycling* (updated January 12, 2010). Discrete samples will be collected from the import source for characterization and specific laboratory analyses will be based on the fill source characteristics. The analytical results of the import soil samples will be compared to applicable screening criteria to evaluate whether the material is suitable for import to the Site.

7.0 CONTINGENCY MEAUSURES FOR DISCOVERY OF UNEXPECTED UNDERGROUND STRUCTURES

If any previously unidentified or unknown underground structures including tanks, vaults, sumps, containment structures, separators, or piping that has previously contained or has the potential to contain hazardous materials is encountered during Site grading activities, the ACDEH LOP and CUPA will be notified within 24 hours and consulted on appropriate next steps. USTs may be identified during grading and Site excavation activities by the presence of vent pipes that extend above the ground surface, product distribution piping that leads to the UST, fill pipes, backfill materials, or the underground structure itself. Other buried structures may not have features that extend above ground surface and could be discovered only after contact with construction equipment.

The removal or burying of any of these structures without prior acknowledgement and approval form ACDEH is prohibited. Discovered structures will be assessed as follows:

- The structure will be inspected to assess whether it contains any indication of chemical residuals or free-phase liquids other than water. This assessment will be conducted by the Environmental Consultant and will be based on visual evidence and the results of vapor monitoring using a PID. Under no circumstances will any personnel enter an unknown subsurface structure at any time. If chemicals are not indicated within the structure by the above-referenced means and with ACDEH approval the structure may be removed or abandoned in place in a safe manner by the contractor;
- If liquids or solids are present within the structure, measures will be taken to contain the liquids to avoid spills to the subsurface. Samples will be collected and submitted to a California-certified laboratory for analysis. Liquids or solids may be temporarily drummed, or liquids may be collected by vacuum truck, while analysis is pending. Based on analytical results, the liquids or solids will be disposed of under the direction of the Environmental Consultant in accordance with all applicable environmental laws and disposal requirements;
- If contaminated liquid or solids are present in the structure, the structure will be inspected for physical integrity following removal of the contaminated media. The Environmental Consultant will document the results of this inspection, including an estimation of the

volume and former use of the structure.

- If the physical inspection of the structure suggests that chemicals may have been released to the underlying soils additional environmental investigations of the underlying soils will be conducted to assess whether a release sufficient to warrant removal has occurred.
    - If, based on the opinion of the Environmental Consultant and ACDEH, it is assessed that the structure is intact, that subsurface releases of the chemicals to the underlying soils likely did not occur, and no free-phase liquids or chemical residues remain inside, removal of the structure may not be required for environmental reasons.
    - Otherwise, with ACDEH approval, the structure will be excavated and disposed of at the direction of the Environmental Professional. Once the structure is removed, soils adjacent to and beneath the structure will be assessed for contamination through visual observation and organic vapor analysis and the results documented. If soils are determined to be “contaminated” with VOCs in the context of BAAQMD Rule 8-40, the appropriate response will be determined in consultation with ACDEH.

ACDEH may require further response actions based on the discovery of hazardous materials that pose an unreasonable risk to human health and safety or the environment.

8.0 GROUNDWATER MANAGEMENT

The depth to groundwater at the Site has typically been encountered at depths between 6 and 9 ft bgs. As the excavation is at most approximately 5 feet (for elevator pits), construction dewatering is not anticipated. If dewatering of the excavation will be necessary during construction activities, a batch wastewater discharge permit will be obtained from the East Bay Municipal Utility District (EBMUD) for discharging water encountered during construction activities to the sanitary sewer system.

Construction de-watering effluent, if generated, shall be pumped into holding tanks and sampled and analyzed for the parameters required for the selected discharge point, such as the storm drain or sanitary sewer. If dewatering effluent is to be discharged to the storm drain, a National Pollutant Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board. Permits will be obtained from the City of Oakland Public Works Department and/or the East Bay Municipal Utility District (EBMUD) if dewatering effluent is discharged to the City of Oakland sanitary sewer system.

Chemical testing will be performed in accordance with the receiving facility's requirements prior to discharge. If concentrations exceed the limits established for the discharge point, the dewatering effluent will either will be (1) transported off-Site for disposal at a licensed disposal facility or (2) treated and discharged following sampling and analysis to confirm the success of treatment.

9.0 WASTE MANAGEMENT

9.1 Soil Characterization Prior to Off-Site Disposal

Soil that has been pre-characterized by in-situ soil testing and is intended for off-Site disposal can be loaded directly into trucks for transport to the receiving facility once the appropriate off-Site disposal location and permitting has been completed. Some soil may need to be placed in temporary on-Site stockpiles because: (1) they require further characterization prior to off-site disposal; (2) short-term storage is necessary until haul trucks are available to transport the soil off-site for disposal; or (3) the need for processing or sorting prior to landfilling. If soil is not adequately characterized to directly load and haul, then it may be necessary to stockpile and sample. Stockpiled soil will be characterized as required by the receiving facility. At a minimum, stockpiled soil shall be characterized using the October 2001 DTSC Fill Advisory Guidance (included as Appendix C). In the event very elevated data are found in a four-point composite sample, the Environmental Consultant may elect, in consultation with the Owner, to have the four individual subsamples run for that specific compound in an attempt to isolate the soils containing the worst impacts for disposal.

9.2 Soil Stockpile Management

Soil that is placed in temporary stockpiles will be well maintained at all times to prevent runon/runoff and fugitive dust emissions. All stockpiled soil will be placed on impermeable plastic sheeting (minimum 10-mil-thick) with a berm around the perimeter of the stockpile. The plastic sheeting and berm will prevent the runoff of soil and potential contaminants to surrounding areas. The berm will be constructed with hay bales, dimensional lumber, or other equivalent methods. The bottom plastic sheeting will be lapped over the berm materials, and the soil stockpile will be covered with plastic sheeting to prevent erosion or leaching of contaminants to underlying soil and prevent exposure to precipitation and wind. Plastic sheeting that covers the soil stockpile will be secured using sandbags or equivalent. Following removal, the soil stockpile area will be restored to a pre-stockpile condition. Residual plastic or debris will also be disposed of following stockpile removal.

9.3 Decontamination Procedures

In order to prevent residual contamination from leaving the Site by construction equipment and personnel during remedial excavation activities, the following decontamination procedures will be followed:

- Prior to loading excavated materials into trucks, plastic sheeting will be placed on the ground such that any spilled material will be prevented from contacting the ground surface. Upon completion of loading, any debris will be placed in the transportation vessel and the plastic sheeting will be reused or disposed.
- To minimize the spread of contaminated soil, equipment will be cleaned prior to movement out of active work zones. The equipment wheels/tires will be cleaned over plastic sheeting by means of shovels and stiff-bristled brooms or brushes until they are fully cleaned. Upon completion of cleaning, any debris will be placed in the appropriate transportation vessel and the plastic sheeting will be folded and disposed. Equipment exiting the Site will be inspected and logged for compliance with the Site decontamination requirements.
- Personal protective equipment, such as disposable coveralls, will be removed and discarded in the contamination reduction zone. In order to decontaminate reusable items such as work boots, a two-stage decontamination process will be used. This process will include washing in a detergent solution with a stiff-bristled brush and rinsing in clean water. The rinsate water will be distributed over contaminated soil (to be exported) for dust control purposes.

9.4 Off-Site Soil Disposal & Transportation Plan

Following acceptance of the excavated soil at an appropriate-licensed disposal facility, the soil will be loaded in licensed haul trucks (end-dumps or transfers) and transported off the Site following appropriate California and federal waste manifesting procedures. The appropriate waste manifest documentation will be provided to truck drivers hauling the affected soil off-Site.

Transportation equipment will be chosen to safely transport the expected volumes of soil, taking into consideration the types of roads to be traveled and their loading capacity. Routine truck maintenance and repairs will be performed at the contractor's premises prior to picking up loads of waste material from the Site.

As each truck is filled, an inspection will be made to verify that the waste soil is securely covered, to the extent practicable, and that the tires of the haul trucks are reasonably free of accumulated soil prior to leaving the site. During loading, dust and odor emissions will be monitored and mitigated as necessary. During transportation, the hauling trucks will be equipped to fully cover all soil and debris, such as with a heavy tarpaulin. A street sweeper will be made available, as needed, to keep the loading area clean. The soil will be wetted, as necessary, to reduce the potential for dust generation during loading and transportation activities.

A detailed log of the loads hauled from the Site will be maintained. The log will include, at a minimum, the date and the time trucks were loaded and off-loaded, the destination, size (volume and weight) of the load, description of contents, name and signature of the hauler, and name and signature of the contractor's representative. The waste will be off-loaded for treatment or disposal in a manner consistent with current Federal, State, and local regulations. Shipments of hazardous waste will be tracked with the appropriate hazardous waste manifests.

9.4.1 Off-Site Disposal Facilities

If soil is classified as hazardous waste by State and federal standards, it will be disposed of at the Class I Kettleman Hills Landfill in Kettleman City, California, a licensed and approved facility.

If soil is classified as non-hazardous waste by State and Federal standards, it will likely be disposed of at a Class II licensed landfill facility such as:

- Waste Management's Altamont Landfill in Livermore, California;
- Republic Services' Vasco Road Landfill in Livermore, California; or
- Allied Waste's Forward Landfill in Manteca, California.

9.4.2 Transportation Plan

All transportation activities will be performed in strict compliance with all regulations and ordinances. Hauling contractor(s) used to transport non-hazardous or hazardous waste will be fully licensed and permitted by the State of California. For hazardous waste haulers, the selected transportation company will be certified by the State of California as a hazardous waste hauler, and appropriately permitted to haul contaminated waste material. All Department of Transportation (DOT) and California Highway Patrol (CHP) safety regulations will be strictly followed by both hazardous and non-hazardous waste haulers.

Transportation routes will be developed to minimize transporting the affected soil through residential areas. The affected soil will be transported via surface streets to the closest suitable freeway, which is Interstate 580. The proposed routes for transportation on Interstate 580 are as follows:

- <u>To Interstate 80 West</u>: Leaving the site along MLK Jr. Way, travel south approximately 1-mile to West Grand Avenue, turn right and travel north on Isabel Avenue approximately 1.7-miles and use the appropriate ramp onto I-80 West.
- <u>To Interstate 580 East</u>: Leaving the site along MLK Jr. Way, travel south approximately 0.2-miles to 36th Street, turn right and travel west approximately 0.1-miles to West Street, turn left and travel south approximately 315-feet to 35th Street, turn left and travel approximately 40-feet and use the appropriate ramp onto I-580 East.

The remainder of the freeway route(s) will be established upon selection of the appropriate landfill(s).

9.5 Wastewater and Groundwater Management Protocols

Wastewater generated during Site redevelopment, such as decontamination liquids, will be temporarily stored on-Site. Decontamination water will be profiled and transported to an appropriate disposal or recycling facility.

If a saturated zone is encountered during earthwork activities that produces accumulated water, it will be temporarily containerized on-Site within portable aboveground industrial holding tanks. Holding tanks will be staged on the existing hardscape (i.e. concrete or asphalt) where feasible.

Collected wastewater and groundwater will be transferred into a vacuum truck or 55-gallon steel drums for off-Site transportation and disposal at an appropriate waste facility.

9.6 Spill Response Plan

In the event of a spill, the Contractor will be responsible and prepared to respond in a safe and efficient manner, specific to the particular spill situation. Standards will be set and consistent procedures will be used for handling of spills, whether they are on-Site spills or spills occurring during transportation. Haulers will have an Emergency Spill Contingency Plan (ESCP) to ensure that all drivers and dispatchers know their responsibilities in the unlikely event that an accidental spill occurs while transporting contaminated material off-Site. The drivers and dispatchers will be required to know the procedures for emergency spill response. The ESCP will meet or exceed all Federal, State, and County regulations currently in effect. The provisions of the ESCP will be strictly adhered to, in order to ensure continued protection of the public safety and the environment. The HASP will address the handling of on-Site spills.

10.0 Dust and Odor Emissions

During excavation activities, depending on soil and weather conditions, there is potential to generate airborne dust and fugitive emissions. Standard dust and fugitive emissions control measures will be followed during the ground disturbing activities to comply with OSHA and BAAQMD rules and accomplish the following goals:

- Reduce the potential for health impacts to workers;
- Reduce the potential for health impacts to facility neighbors;
- Prevent violations of ambient air quality standards;
- Minimize nuisance dust complaints from facility neighbors; and
- Minimize the migration of contaminants adhered to fugitive dust particles outside the Site.

10.1 Erosion, Dust, and Odor Control Measures

Once the pre-construction ground surface is stripped from the Site, the exposed soil will become susceptible to erosion by wind and water. Therefore, erosion control measures and dust control measures will in place before construction begins. Emission (dust) control measures will at a minimum comply with those established by OSHA and the BAAQMD for construction-related activities. Dust control measures will be based on "Best Management Practices" and will be used throughout all phases of construction.

10.1.1 Construction Mitigation Measures

The following basic construction mitigation measures will be implemented in accordance with recommendations for all proposed projects in the BAAQMD California Environmental Quality Act Air Quality Guidelines (BAAQMD, 2017):

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered at least two times per day;
- All haul trucks transporting soil, sand, or other loose material off-Site will be covered;
- All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited;

- All vehicle speeds on unpaved roads will be limited to 15 miles per hour (mph);
- All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used;
- Idling times will be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure CCR Title 13, Section 2485). Clear signage will be provided for construction workers at all access points;
- All construction equipment will be maintained and properly tuned in accordance with manufacturer‘s specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation; and
- A publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints will be posted. This person will respond and take corrective action within 48 hours. The BAAQMD’s phone number will also be visible to ensure compliance with applicable regulations.

Dust level monitoring of air will be conducted to evaluate the potential exposure to Site personnel and to off-Site downwind receptors. The presence of airborne dust will be evaluated through the use of real time personal sampling equipment and perimeter air sampling. If the difference between the upwind and downwind dust monitoring levels exceeds 50 micrograms per cubic meter ($\mu g/m^3$), additional dust control methods (i.e., applying additional water to disturbed areas) will be implemented.

10.1.2 Dust Suppression Measures

If dust is excessive, some or all of the following mitigation procedures may be implemented:

- Active areas adjacent to residences may need to be kept damp at all times.
- Apply water or (non-toxic) soil stabilizers to unpaved access roads, parking areas, and staging areas.
- Sweep (with water sweepers) paved access roads, parking areas, and staging areas.
- Cover or otherwise stabilize exposed soil stockpiles.

- Suspend construction activities that cause visible dust plumes and odors to extend beyond the limits of the Site.

10.1.3 Odor and Vapor Suppression Measures

By controlling the dust as described above, the emission of odor and vapors will be reduced to levels that likely will not pose a risk to the health of the public and Site workers. The water spray used to control dust will also significantly reduce the emissions of any potential volatiles that may be present in the soil. The selective loading and transportation of impacted soils could minimize the use of soil stockpiling, further reducing potential emissions of volatiles. Any active stockpile of contaminated soil or exposed excavation left overnight at the Site will be properly covered with plastic so emissions of volatiles will be minimized.

If odor is excessive and vapor emissions are detected, some or all of the following mitigation procedures may be implemented:

- Use of chemical suppressants mixed with water and applied using various applications such as spray or mist;
- Use of plastic sheeting to cover the sidewalls of the trench during non-active remedial activities will minimize the migration of VOCs and odors;
- Alternative work sequencing, such that excavation of soil with potential odor during mid-day or afternoon (during hot weather) is avoided;
- Any highly odorous soil could be segregated and placed inside a roll-off bin equipped with a lid. This will minimize the amount of highly odorous soil during loading; and
- Balancing the excavation with transportation so that the need for large stockpiles is reduced.

Other emissions include exhaust from remediation equipment. The equipment proposed for the Site redevelopment will be maintained properly so that exhaust emissions will be within acceptable standards.

10.2 Air Monitoring

To the extent feasible, the presence of airborne contaminants will be evaluated through the use of portable monitoring equipment. Information gathered will be used to ensure the adequacy of the levels of protection being employed at the Site and may be used as the basis for upgrading or downgrading levels of personal protection, at the discretion of the Site Safety Officer. In addition, this sampling equipment will be utilized to monitor the potential for the migration of contaminants off-Site (i.e. fence line monitoring). Such monitoring will incorporate off-Site receptor type, wind direction, work tasks being performed, etc.

The following air sampling equipment will be utilized for site monitoring:

- Personal sampling pumps with appropriate sample collection media; and
- Dust monitors.

The above instruments will serve as the primary instruments for personal exposure monitoring. They will be utilized to fully characterize potential employee exposure and the need for equipment upgrades/downgrades.

10.2.1 Integrated Industrial Hygiene Sampling

Integrated Industrial Hygiene (IH) sampling for airborne contaminants and dust will be conducted during the excavation process and/or loading operation. This IH sampling will be performed to properly characterize potential employee exposures and/or to establish baseline levels. Sampling may include personnel monitoring and fence line sampling. The duration of such monitoring will be determined based upon analytical results, regulatory requirements, etc.

10.2.2 Real-Time Air Monitoring During Excavation of Contaminated Soil

Dust monitoring will also be conducted to characterize the potential for exposure to Site personnel during disruption of contaminated soil using a direct-reading dust monitor. Continuous monitoring will also be performed during operations that have not previously been characterized. After initial Site screening, monitoring will be conducted periodically or anytime Site conditions might be altered (i.e. weather, drilling, excavation, spills, etc.).

Results of monitoring information will be recorded, and will include time, date, location operations, and any other conditions that may contribute to potential exposures. Maintenance and calibration information will be maintained and made available upon request. The monitoring equipment will be calibrated in accordance with the manufacturer's specifications, and the records of such maintained with the project HASP.

Real-time air monitoring for respirable dust will be performed during the first three days of excavation of contaminated soil. The objective of the perimeter air-monitoring program is to protect the health and safety of the nearby community and to document the effectiveness of the dust control measures.

The Site HSO will determine the air monitoring locations based on Site operations and the location of areas that could be adversely impacted by air emissions. In general, real-time monitoring will be conducted downwind and around the perimeter of relevant activities. Monitoring locations will be documented on a monitoring log, along with any concentrations detected.

The dust standard will be based on the PM10 ambient air quality standards adopted by BAAQMD, which specifies a ceiling level of no more than 50 micrograms per cubic meter ($\mu g/m^3$) difference between upwind and downwind sampling locations. The ceiling level of 50 $\mu g/m^3$ represents the Bay Area 24-hour time-weighted average (TWA) standard for 10-micron diameter particulate matter (the PM10 24-hour standard).

The perimeter of the work area will be monitored while excavation of contaminated soil is being conducted. If any readings exceed action levels, work will be stopped, engineering controls will be implemented, and the work and monitoring schedule will be adjusted until background levels are reached.

Real-time dust monitors will be used to measure mass concentrations of airborne dust and provide respirable dust, expressed as concentration of particulates smaller than 10 microns (PM10) correlated measurements. A handheld respirable air monitor (mini-RAM) will be used to provide real-time data on total dust levels as PM10. Real-time worker dust monitoring will be performed continuously during work activities where soil disturbance is anticipated, downwind of active excavations. Measurements of real-time and TWA of airborne particulate concentrations will be recorded using a Monitoring Instruments for the Environment, Inc. (MIE) RAM, model PDR-1000 or equivalent equipment. The miniRAM measures the concentration of airborne particulate matter using a high sensitivity nephelometer (photometer) using a light scatter sensor. The sensitivity of the miniRAM is reported to range from 0.001 milligrams per cubic meter (mg/m^3) to 400 mg/m^3. The miniRAM will be calibrated daily in the supplied calibration pouch.

Real-time monitoring will consist of the following activities:

- Determine the predominant wind direction;
- Place one instrument upwind of Site operations for ambient sampling;
- Place one or more instrument(s) downwind of Site operations, at the Site perimeter;
- Position the instrument probe near the normal breathing zone and monitor for approximately five minutes after instrument readings have stabilized; and
- Record the following observations and readings in real-time:
    - Location;
    - Time;
    - Site activity;
    - Readings;
    - Visual observations of dust;
    - Site conditions, including current weather conditions; and
    - Odors and/or other miscellaneous observations.

11.0 STORMWATER MANAGEMENT

Other environmental controls may be required in the event that anticipated conditions at the Site change. In the event that remediation activities occur during the rainy season, then water management procedures will be implemented in addition to probable modifications of other plans, such as the HASP. The following procedures will be implemented at the Site during the rainy season:

- The weather forecast will be monitored. During the days heavy rain is forecasted, excavation activities may be stopped;
- The boundary of the remediation area will be properly bermed to prevent stormwater from entering or leaving the remediation area;
- Stormwater entering the remediation area from non-impacted areas and stormwater originating within the excavated area will be pumped to settlement tanks and treated prior to discharge under permit;
- The excavation will be conducted in small sections so the exposed excavated area can be covered immediately if heavy rains occur;
- Procedures will be used to prevent wet soil from sticking to the tires of trucks used to haul soil off Site. These procedures may include plastic sheeting at the loading area, a tire wash at Site egress paths, and/or a stabilized gravel construction entrance; and
- Plastic sheeting will be used extensively to cover the area of excavation during non-working hours.

In general, the excavation will be kept as dry as possible in order to minimize the waste generated and the backfilling (as necessary) of the excavation can be conducted promptly. Stormwater best management practices (BMPs) will be followed in accordance with the contractors Storm Water Pollution Prevention Plan (SWPPP) to be prepared for the Site. The BMPs for the Site development activities should include: use of fiber rolls; inlet protection; stabilized construction entrance; landscape and paving; street cleaning and catch basin cleaning.

12.0 REFERENCES

Alameda County Department of Environmental Health, *Fill Material Characterization Guidance*, Local Oversight Program, August 1, 2018.

Bay Area Air Quality Management District, *California Environmental Quality Act – Air Quality Guidelines*, May 2017.

Department of Toxic Substances Control, *Information Advisory – Clean Imported Fill Material*, October 2001.

Environmental Service, *Phase I Environmental Site Assessment of 3801-3829 Martin Luther King Jr. Way in Oakland, California*, Project No. 2019-017, August 23, 2019.

Essel Environmental Engineering & Consulting, *Report – Soil Characterization, Soil Stockpile Sampling, and Limited Soil Vapor Survey, Vacant Property, 3801-3829 Martin Luther King Junior Way, Oakland, California 94609*, November 7, 2019.

Impact Environmental Services, Second & Fourth Quarter 2009 Groundwater Monitoring & Groundwater Treatment Status Report – 3701 Martin Luther King Jr. Way, Oakland, California, February 18, 2010.

New Jersey Department of Environmental Protection, *Guidance for Characterization of Concrete and Clean Material Certification for Recycling*, Solid and Hazardous Waste Management Program, January 12, 2010.

REFERENCE(S)
United States Geological Survey
Oakland West Quadrangle
California
7.5-minute Series Topographic Map
Scale 1:24,000, 2018.

N

APPROXIMATE SCALE (MILES)

0 0.5

CLIENT
RCD

PROJECT
SOIL MANAGEMENT PLAN

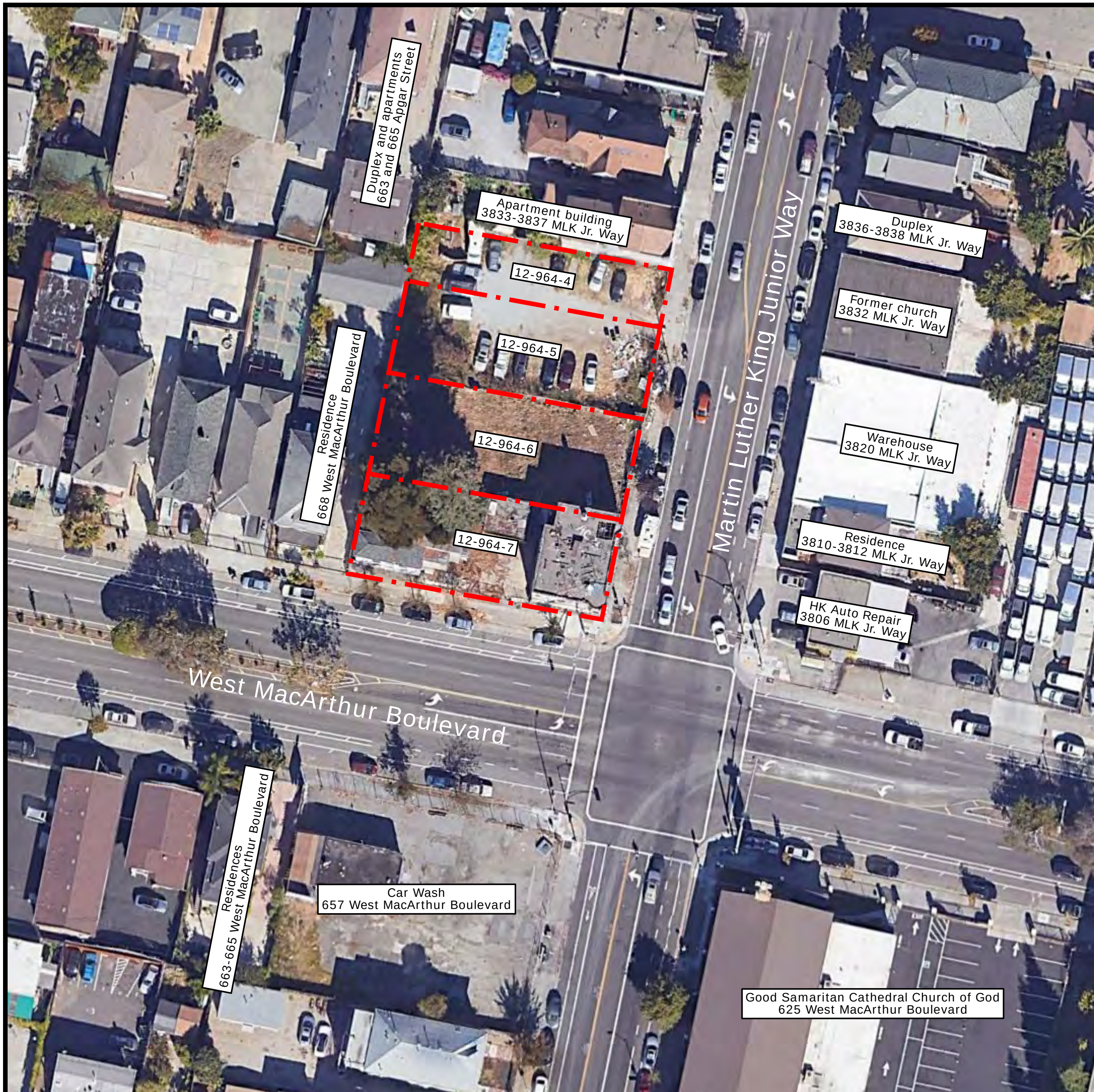
ADDRESS
3801 - 3829 MARTIN LUTHER KING JUNIOR WAY
OAKLAND, CALIFORNIA 94609

TITLE
TOPOGRAPHIC MAP

CONSULTANT
essel
ENVIRONMENTAL ENGINEERING & CONSULTING

DATE	NOVEMBER 2019
PREPARED BY	MN
PROJECT NO.	19272

FIGURE 1



LEGEND

APPROXIMATE SITE BOUNDARY

REFERENCE(S)
Google Earth, 2019.

N

Approximate direction of groundwater flow

APPROXIMATE SCALE (FEET)
0 100

CLIENT
RCD

PROJECT
SOIL MANAGEMENT PLAN

ADDRESS
3801 - 3829 MARTIN LUTHER KING JUNIOR WAY
OAKLAND, CALIFORNIA 94609

TITLE
SITE MAP

CONSULTANT
essel
ENVIRONMENTAL ENGINEERING & CONSULTING

DATE	NOVEMBER 2019
PREPARED BY	MN
PROJECT NO.	19272

FIGURE 2

LEGEND

APPROXIMATE SITE BOUNDARY

SV1 SOIL VAPOR PROBE

B1 SOIL BORING

SS1 SOIL STOCKPILE SAMPLE

APPROXIMATE CALIFORNIA TITLE 22 HAZARDOUS WASTE FOOTPRINT (0 to 1 ft bgs)

RESULT = above Tier 1 ESL
RESULT = above CA Title 22 hazardous threshold
Pb = lead;
STLC = soluble threshold limit concentration;
TCLP = toxic characteristic leaching procedure
Units: depth (feet); Pb (mg/kg); STLC/TCLP (mg/L)

REFERENCE(S)
Google Earth, 2019.

N

Approximate direction of groundwater flow

APPROXIMATE SCALE (FEET)
0 50

CLIENT
RCD

PROJECT
SOIL MANAGEMENT PLAN

ADDRESS
3801 - 3829 MARTIN LUTHER KING JUNIOR WAY
OAKLAND, CALIFORNIA 94609

TITLE
SOIL DISPOSAL CLASSIFICATION FROM 0 TO 1 FT BGS

CONSULTANT
essel ENVIRONMENTAL ENGINEERING & CONSULTING

DATE	NOVEMBER 2019
PREPARED BY	MN
PROJECT NO.	19272

FIGURE 3

LEGEND

APPROXIMATE SITE BOUNDARY

SV1 SOIL VAPOR PROBE

B1 SOIL BORING

APPROXIMATE CLASS II SOIL FOOTPRINT (1 to 5 ft bgs)

RESULT = above Tier 1 ESL
Pb = lead; V = vanadium;
STLC = soluble threshold limit concentration;
TCLP = toxic characteristic leaching procedure
Units: depth (feet); Pb (mg/kg); STLC/TCLP (mg/L)

REFERENCE(S)
Google Earth, 2019.

N

Approximate direction of groundwater flow

APPROXIMATE SCALE (FEET)

0 50

CLIENT
RCD

PROJECT
SOIL MANAGEMENT PLAN

ADDRESS
3801 - 3829 MARTIN LUTHER KING JUNIOR WAY
OAKLAND, CALIFORNIA 94609

TITLE
SOIL DISPOSAL CLASSIFICATION FROM 1 TO 5 FT BGS

CONSULTANT
essel
ENVIRONMENTAL ENGINEERING & CONSULTING

DATE NOVEMBER 2019

PREPARED BY MN

PROJECT NO. 19272

FIGURE 4

APPENDIX A

AGREEMENT AND ACKNOWLEDGEMENT STATEMENT

APPENDIX A

AGREEMENT AND ACKNOWLEDGMENT STATEMENT
Resources for Community Development (RCD)
3801-3829 Martin Luther King Junior Way
Oakland, California 94609

Soil Management Plan Agreement

All project personnel and subcontractors are required to sign the following agreement prior to conducting work at the site.

1. I have read and fully understand the plan and my individual responsibilities.

2. I agree to abide by the provisions of the plan.

Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date
Name	Signature
Company	Date

(Add additional sheets if necessary)

APPENDIX B

LABORATORY ANALYTICAL DATA TABLES

TABLE 1
Concentrations of Total Petroleum Hydrocarbons and Volatile Organic Compounds in Soil Samples
3801-3829 Martin Luther King Junior Way, Oakland, California

Boring Number	Date Sampled	Sample Number	Sample Depth (feet)	Total Petroleum Hydrocarbons			Volatile Organic Compounds									
				Gasoline	Diesel	Motor Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Naphthalene	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
B1	10/22/19	B1-4	4	<1.0	<1.0	**6.2**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0050	<0.0050	<0.00025
B2	10/22/19	B2-5	5	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0050	<0.0050	<0.00025
B3	10/22/19	B3-3	3	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.0020**	<0.0050	<0.0050	<0.00025
B4	10/22/19	B4-0.5	0.5	<1.0	<1.0	**10**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0050	<0.0050	<0.00025
B5	10/22/19	B5-2	2	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.0020**	<0.0050	<0.0050	<0.00025
B6	10/22/19	B6-1	1	<1.0	**1.2**	**14**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.0010**	<0.0050	<0.0050	<0.00025
Soil Stockpile	10/22/19	SS1	-	<1.0	**18**	**250**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0050	<0.0050	<0.00025
Tier 1 Environmental Screening Level				**100**	**260**	**1,600**	**0.025**	**3.2**	**0.43**	**2.1**	**0.028**	**0.042**	**0.08**	**0.085**	**0.19**	**0.0015**

Analytical results and screening levels are in milligrams per kilogram = parts per million.
Detectable concentrations are in bold font and shaded gray.
Detectable concentrations equal to or greater than corresponding environmental screening levels.
MTBE = methyl tertiary butyl ether
Other volatile organic compounds included in United States Environmental Protection Agency Method 8260B that are not shown were not detected.
< = less than the laboratory reporting limit shown.
-- = screening level not available.
Tier 1 Environmental Screening Levels from San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, January 2019 (Rev. 1).

TABLE 2
Concentrations of Semi-Volatile Organic Compounds in Soil Samples
3801-3829 Martin Luther King Junior Way, Oakland, California

Boring Number	Date Sampled	Sample Number	Sample Depth (feet)	Acenapthene	Acenaphthylene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Bis(2-ethylhexyl) phthalate	Chrysene	Dibenzo(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd) pyrene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Phenol	Pyrene
B1	10/22/19	B1-4	4	<0.0013	**0.0027**	<0.0013	**0.0079**	**0.0077**	**0.008**	**0.0082**	**0.0030**	**0.010**	**0.0055**	<0.0025	<0.0025	**0.0083**	<0.0025	**0.0053**	<0.0025	**0.0068**	<0.0050	<0.0050	**0.0093**
B2	10/22/19	B2-5	5	<0.0013	<0.0013	<0.0013	<0.0050	<0.0025	<0.0063	<0.0025	<0.0013	<0.0050	<0.0025	<0.0025	<0.0025	<0.0013	<0.0025	<0.0025	<0.0025	<0.0013	<0.0050	**0.27**	<0.0025
B3	10/22/19	B3-3	3	<0.0013	<0.0013	<0.0013	<0.0050	<0.0025	<0.0063	<0.0025	<0.0013	<0.0050	<0.0025	<0.0025	<0.0025	<0.0013	<0.0025	<0.0025	<0.0025	<0.0013	<0.0050	**0.027**	<0.0025
B4	10/22/19	B4-0.5	0.5	<0.0013	**0.0023**	**0.0021**	**0.010**	**0.0076**	**0.0090**	**0.0079**	**0.0041**	**0.049**	**0.0074**	<0.0025	**0.0093**	**0.012**	<0.0025	**0.0052**	**0.041**	**0.024**	**0.012**	<0.0050	**0.013**
B5	10/22/19	B5-2	2	<0.0013	<0.0013	<0.0013	<0.0050	<0.0025	<0.0063	<0.0025	<0.0013	<0.0050	<0.0025	<0.0025	<0.0025	<0.0013	<0.0025	<0.0025	<0.0025	<0.0013	<0.0050	**0.13**	<0.0025
B6	10/22/19	B6-1	1	**0.0018**	**0.022**	**0.0088**	**0.074**	**0.090**	**0.1**	**0.058**	**0.031**	**0.26**	**0.078**	**0.011**	**0.011**	**0.13**	<0.0025	**0.047**	**0.0033**	**0.0045**	**0.053**	**0.28**	**0.13**
Soil Stockpile	10/22/19	SS1	-	<0.026	**0.014**	**0.022**	**0.25**	**0.24**	**0.37**	**0.099**	**0.15**	**0.53**	**0.26**	**0.028**	**0.047**	**0.12**	<0.050	**0.086**	<0.0050	**0.0027**	**0.030**	<0.010	**0.16**
Tier 1 Environmental Screening Level				**12**	**6.4**	**1.9**	**0.63**	**0.11**	**1.1**	**2.5**	**2.8**	**0.80**	**2.2**	**0.11**	**–**	**0.69**	**6.0**	**0.48**	**0.88**	**0.042**	**7.8**	**0.16**	**45**

Analytical results and screening levels are in milligrams per kilogram = parts per million.

Detectable concentrations are in bold face font and shaded gray.

Detectable concentrations equal to or greater than corresponding environmental screening levels.

Other semi-volatile organic compounds included in United States Environmental Protection Agency Method 8270C that are not shown were not detected.

< = less than the laboratory reporting limit shown.

-- = screening level not available.

Tier 1 Environmental Screening from San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, January 2019 (Rev. 1).

TABLE 3
Concentrations of Organochlorine Pesticides and Polychlorinated Biphenyls in Soil Samples
3801-3829 Martin Luther King Junior Way, Oakland, California

				Organochlorine Pesticides										Polychlorinated Biphenyls (PCBs)							
Boring Number	Date Sampled	Sample Number	Sample Depth (feet)	Chlordane (technical)	alpha-Chlordane	gamma-Chlordane	Dieldrin	4,4'-DDD	4,4'-DDE	4,4'-DDT	Endosulfan I	Heptachlor	Heptachlor epoxide	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
B1	10/22/19	B1-4	4	<0.0025	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B2	10/22/19	B2-5	5	<0.0025	**0.00012**	<0.00010	<0.00010	<0.00010	<0.00010	**0.00011**	<0.00010	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B3	10/22/19	B3-3	3	<0.0025	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	**0.00017**	<0.00010	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B4	10/22/19	B4-0.5	0.5	<0.0025	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	**0.00062**	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B5	10/22/19	B5-2	2	<0.0025	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B6	10/22/19	B6-1	1	<0.0025	**0.0015**	**0.0011 P**	**0.0022**	**0.0028**	**0.011**	**0.021**	<0.00010	<0.00010	**0.00013 P**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Soil stockpile	10/22/19	SS1	-	**0.22**	**0.017**	**0.018**	**0.0064**	**0.0056 P**	**0.069**	**0.16**	<0.00010	**0.00039**	**0.0022**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Tier 1 Environmental Screening Levels				**0.0085**	**--**	**--**	**0.00046**	**2.7**	**0.33**	**0.0011**	**--**	**0.12**	**0.00018**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**0.23**

Analytical results, screening levels, and threshold concentrations are in milligrams per kilogram = parts per million.

Detectable concentrations are in bold font and shaded gray.

Detectable concentrations equal to or greater than corresponding environmental screening levels.

Other organochlorine pesticides included in United States Environmental Protection Agency Method 8081A that are not shown were not detected.

DDD = dichlorodiphynyldichloroethane

DDE = dichlorodiphynyldichloroethene

DDT = dichlorodiphynyltrichloroethane

< = less than the laboratory reporting limit shown.

-- = not available.

Tier 1 Environmental Screening Levels from San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, January 2019 (Rev. 1).

TABLE 4
Concentrations of Inorganic Elements in Soil Samples
3801-3829 Martin Luther King Junior Way, Oakland, California

Boring Number	Date Sampled	Sample Number	Sample Depth (feet)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B1	10/22/19	B1-4	4	<0.50	**2.5**	**110**	<0.50	<0.25	**19**	**13**	**62**	**41**	**0.077**	**0.58**	**14**	<0.50	<0.50	<0.50	**120**	**75**
B2	10/22/19	B2-5	5	<0.50	**6.2**	**130**	**0.53**	<0.25	**59/<0.10**	**5.0**	**16**	**6.7**	<0.050	**0.61**	**42**	<0.50	<0.50	<0.50	**50**	**31**
B3	10/22/19	B3-3	3	<0.50	**7.6**	**270**	**0.76**	<0.25	**61/0.12**	**14**	**25**	**35**	<0.050	**0.89**	**61**	<0.50	<0.50	<0.50	**61**	**82**
B4	10/22/19	B4-0.5	0.5	**0.60**	**3.0**	**140**	<0.50	**0.42**	**39**	**4.7**	**18**	**250/7.9/0.19**	**0.180**	<0.50	**26**	<0.50	<0.50	<0.50	**27**	**160**
B5	10/22/19	B5-2	2	<0.50	**8.4**	**260**	**0.71**	<0.25	**65/0.12**	**12**	**29**	**16**	**0.072**	**0.93**	**59**	<0.50	<0.50	<0.50	**66**	**68**
B6	10/22/19	B6-1	1	**0.94**	**5.4**	**200**	<0.50	**0.46**	**42**	**7.5**	**26**	**190/1.3/<0.10**	**0.24**	**0.52**	**35**	<0.50	<0.50	<0.50	**38**	**150**
Soil stockpile	10/22/19	SS1	-	**3.0**	**15**	**560**	**0.73**	**1.40**	**79/0.56**	**35**	**69**	**330/9.4/<0.10**	**0.42**	**1.9**	**80**	<0.50	<0.50	<0.50	**81**	**450**
Tier 1 Environmental Screening Level				**11**	**11***	**390**	**5.0**	**1.9**	**160**	**23**	**180**	**32**	**13**	**6.9**	**86**	**2.4**	**25**	**0.78**	**18**	**340**
Total Threshold Limit Concentration (TTLC)				**500**	**500**	**10,000**	**75**	**100**	**2,500**	**8,000**	**2,500**	**1,000**	**20**	**3,500**	**2,000**	**100**	**500**	**700**	**2,400**	**5,000**
Soluble Threshold Limit Concentration (STLC)				**15**	**5.0**	**100**	**0.75**	**1.0**	**5.0**	**80**	**25**	**5.0**	**0.2**	**350**	**20**	**1.0**	**5.0**	**7.0**	**24**	**250**
Toxic Characteristic Leaching Procedure (TCLP)				**--**	**5.0**	**100**	**--**	**1.0**	**5.0**	**--**	**--**	**5.0**	**0.2**	**--**	**--**	**1.0**	**5.0**	**--**	**--**	**--**

Analytical results, screening levels, and threshold limit concentrations are in milligrams per kilogram = parts per million.

Detectable concentrations are in bold font and shaded gray.

Detectable concentrations equal to or greater than corresponding environmental screening or background levels.

Resource Conservation and Recovery Act (RCRA) hazardous soil concentration (Title 40 Code of Federal Regulations).

California hazardous soil concentration (Title 22 California Code of Regulations).

< = less than the laboratory reporting limit shown.

2,600/88/9.7 = total dry weight concentration/soluble concentration in waste extraction test solution/soluble concentration in toxic characteristic leaching procedure solutior

* = background concentration (Duverge, 2011)

-- = not available.

Tier 1 Environmental Screening Levels from San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, January 2019 (Rev. 1).

Reference:

Duverge, D. J., 2011, Establishing background arsenic in soil of the urbanized San Francisco bay region. San Francisco State University, Master of Science Thesis, 77 p., Decembe

TABLE 5
Concentrations of Volatile Organic Compounds in Soil Vapor Samples
3801-3829 Martin Luther King Junior Way, Oakland, California

Soil Probe	SV1	SV2	SV3	Tier 1 Environmental Screening Level
Date Sampled	10/22/19	10/22/19	10/22/19	
Sample Number	SV1	SV2	SV3	
Depth of Sample (feet)	6.5	6.5	6.5	
Analyte				
Benzene	**31**	**14**	**25**	3.2
Toluene	<0.14	**25**	**50**	10,000
Ethylbenzene	**11**	**6.1**	**9.5**	37
m,p-xylene	**10**	**5.7 J**	**7.8 J**	3,500
o-xylene	**6.4**	**3.3 J**	**4.7**	3,500
Tetrachloroethene	**2.3 J**	**86**	**190**	15
Trichloroethene	<0.21	<0.21	<0.21	16
cis-1,2-dichloroethene	<0.25	<0.25	<0.25	280
Vinyl chloride	<0.052	<0.052	<0.052	0.32
Acetone	**150**	**81**	**170**	1,000,000
Cyclohexane	**43**	**36**	**53**	--
Carbon disulfide	**79**	<0.22	<0.22	--
Dichlorodifluoromethane	<0.18	**14**	<0.18	--
4-ethyltoluene	<0.25	**3.1 J**	<0.25	--
Heptane	**27**	**7.7**	**25**	--
Hexane	<0.43	<0.43	**26**	--
Methyl isobutyl ketone (MIBK)	**28 J**	**9.2 J**	**19 J**	14,000
Styrene	**3.2 J**	**1.0 J**	**2.0 J**	31,000
Tetrahydrofuran	<0.25	<0.25	**2.4 J**	--
Trichlorofluoromethane	**2.1 J**	<0.24	<0.24	--
1,3,5-trimethylbenzene	**2.2 J**	**2.3 J**	<0.49	--
1,2,4-trimethylbenzene	**11**	**6.8**	**8.0**	--
Vinyl acetate	<0.18	**10**	<0.18	--
Isopropyl alcohol (leak check tracer)	<0.55	<0.55	<0.55	--

Concentrations and screening levels are in micrograms per cubic meter.
Detectable concentrations are in bold font and shaded gray.
Concentrations greater than applicable screening levels are in bold font and shaded yellow.
All other volatile organic compounds included in the TO-14/TO-15 analysis and not shown were not detected.
< = less than the laboratory reporting limit or method detection limit shown.
* = non detectable results are relative to the method detection limits (minimum detection limit of analysis)
J = estimated concentration between the higher reporting limit and the lower method detection limit.
-- = no value available or not applicable.
Tier 1 Environmental Screening Levels from San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, January 2019 (Rev. 1).

APPENDIX C

OCTOBER 2001 DTSC FILL ADVISORY GUIDANCE

Information Advisory
Clean Imported Fill Material

October 2001

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

It is DTSC's mission to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

State of California

California Environmental Protection Agency

Executive Summary

This fact sheet has been prepared to ensure that inappropriate fill material is not introduced onto sensitive land use properties under the oversight of the DTSC or applicable regulatory authorities. Sensitive land use properties include those that contain facilities such as hospitals, homes, day care centers, and schools. This document only focuses on human health concerns and ecological issues are not addressed. It identifies those types of land use activities that may be appropriate when determining whether a site may be used as a fill material source area. It also provides guidelines for the appropriate types of analyses that should be performed relative to the former land use, and for the number of samples that should be collected and analyzed based on the estimated volume of fill material that will need to be used. The information provided in this fact sheet is not regulatory in nature, rather is to be used as a guide, and in most situations the final decision as to the acceptability of fill material for a sensitive land use property is made on a case-by-case basis by the appropriate regulatory agency.

Introduction

The use of imported fill material has recently come under scrutiny because of the instances where contaminated soil has been brought onto an otherwise clean site. However, there are currently no established standards in the statutes or regulations that address environmental requirements for imported fill material. Therefore, the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) has prepared this fact sheet to identify procedures that can be used to minimize the possibility of introducing contaminated soil onto a site that requires imported fill material. Such sites include those that are undergoing site remediation, corrective action, and closure activities overseen by DTSC or the appropriate regulatory agency. These procedures may also apply to construction projects that will result in sensitive land uses. The intent of this fact sheet is to protect people who live on or otherwise use a sensitive land use property. By using this fact sheet as a guide, the reader will minimize the chance of introducing fill material that may result in potential risk to human health or the environment at some future time.

Overview

Both natural and manmade fill materials are used for a variety of purposes. Fill material properties are commonly controlled to meet the necessary site specific engineering specifications. Because most sites requiring fill material are located in or near urban areas, the fill materials are often obtained from construction projects that generate an excess of soil, and from demolition debris (asphalt, broken concrete, etc.). However, materials from those types of sites may or may not be appropriate, depending on the proposed use of the fill, and the quality of the assessment and/or mitigation measures, if necessary. Therefore, unless material from construction projects can be demonstrated to be free of contamination and/or appropriate for the proposed use, the use of that material as fill should be avoided.

Selecting Fill Material

In general, the fill source area should be located in nonindustrial areas, and not from sites undergoing an environmental cleanup. Nonindustrial sites include those that were previously undeveloped, or used solely for residential or agricultural purposes. If the source is from an agricultural area, care should be taken to insure that the fill does not include former agricultural waste process byproducts such as manure or other decomposed organic material. Undesirable sources of fill material include industrial and/or commercial sites where hazardous ma-

Potential Contaminants Based on the Fill Source Area

Fill Source:	Target Compounds
Land near to an existing freeway	Lead (EPA methods 6010B or 7471A), PAHs (EPA method 8310)
Land near a mining area or rock quarry	Heavy Metals (EPA methods 6010B and 7471A), asbestos (polarized light microscopy), pH
Agricultural land	Pesticides (Organochlorine Pesticides: EPA method 8081A or 8080A; Organophosphorus Pesticides: EPA method 8141A; Chlorinated Herbicides: EPA method 8151A), heavy metals (EPA methods 6010B and 7471A)
Residential/acceptable commercial land	VOCs (EPA method 8021 or 8260B, as appropriate and combined with collection by EPA Method 5035), semi-VOCs (EPA method 8270C), TPH (modified EPA method 8015), PCBs (EPA method 8082 or 8080A), heavy metals including lead (EPA methods 6010B and 7471A), asbestos (OSHA Method ID-191)

**The recommended analyses should be performed in accordance with USEPA SW-846 methods (1996). Other possible analyses include Hexavalent Chromium: EPA method 7199*

Recommended Fill Material Sampling Schedule

Area of Individual Borrow Area	Sampling Requirements
2 acres or less	Minimum of 4 samples
2 to 4 acres	Minimum of 1 sample every 1/2 acre
4 to 10 acres	Minimum of 8 samples
Greater than 10 acres	Minimum of 8 locations with 4 subsamples per location

Volume of Borrow Area Stockpile	Samples per Volume
Up to 1,000 cubic yards	1 sample per 250 cubic yards
1,000 to 5,000 cubic yards	4 samples for first 1000 cubic yards +1 sample per each additional 500 cubic yards
Greater than 5,000 cubic yards	12 samples for first 5,000 cubic yards + 1 sample per each additional 1,000 cubic yards

terials were used, handled or stored as part of the business operations, or unpaved parking areas where petroleum hydrocarbons could have been spilled or leaked into the soil. Undesirable commercial sites include former gasoline service stations, retail strip malls that contained dry cleaners or photographic processing facilities, paint stores, auto repair and/or painting facilities. Undesirable industrial facilities include metal processing shops, manufacturing facilities, aerospace facilities, oil refineries, waste treatment plants, etc. Alternatives to using fill from construction sites include the use of fill material obtained from a commercial supplier of fill material or from soil pits in rural or suburban areas. However, care should be taken to ensure that those materials are also uncontaminated.

Documentation and Analysis

In order to minimize the potential of introducing contaminated fill material onto a site, it is necessary to verify through documentation that the fill source is appropriate and/or to have the fill material analyzed for potential contaminants based on the location and history of the source area. Fill documentation should include detailed information on the previous use of the land from where the fill is taken, whether an environmental site assessment was performed and its findings, and the results of any testing performed. It is recommended that any such documentation should be signed by an appropriately licensed (CA-registered) individual. If such documentation is not available or is inadequate, samples of the fill material should be chemically analyzed. Analysis of the fill material should be based on the source of the fill and knowledge of the prior land use.

Detectable amounts of compounds of concern within the fill material should be evaluated for risk in accordance with the DTSC Preliminary Endangerment Assessment (PEA) Guidance Manual. If metal analyses are performed, only those metals (CAM 17 / Title 22) to which risk levels have been assigned need to be evaluated. At present, the DTSC is working to establish California Screening Levels (CSL) to determine whether some compounds of concern pose a risk. Until such time as these CSL values are established, DTSC recommends that the DTSC PEA Guidance Manual or an equivalent process be referenced. This guidance may include the Regional Water Quality Control Board's (RWQCB) guidelines for reuse of non-hazardous petroleum hydrocarbon contaminated soil as applied to Total Petroleum Hydrocarbons (TPH) only. The RWQCB guidelines should not be used for volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCS). In addition, a standard laboratory data package, including a summary of the QA/QC (Quality Assurance/Quality Control) sample results should also accompany all analytical reports.

When possible, representative samples should be collected at the borrow area while the potential fill material is still in place, and analyzed prior to removal from the borrow area. In addition to performing the appropriate analyses of the fill material, an appropriate number of samples should also be determined based on the approximate volume or area of soil to be used as fill material. The table above can be used as a guide to determine the number of samples needed to adequately characterize the fill material when sampled at the borrow site.

Alternative Sampling

A Phase I or PEA may be conducted prior to sampling to determine whether the borrow area may have been impacted by previous activities on the property. After the property has been evaluated, any sampling that may be required can be determined during a meeting with DTSC or appropriate regulatory agency. However, if it is not possible to analyze the fill material at the borrow area or determine that it is appropriate for use via a Phase I or PEA, it is recommended that one (1) sample per truckload be collected and analyzed for all compounds of concern to ensure that the imported soil is uncontaminated and acceptable. (See chart on Potential Contaminants Based on the Fill Source Area for appropriate analyses). This sampling frequency may be modified upon consultation with the DTSC or appropriate regulatory agency if all of the fill material is derived from a common borrow area. However, fill material that is not characterized at the borrow area will need to be stockpiled either on or off-site until the analyses have been completed. In addition, should contaminants exceeding acceptance criteria be identified in the stockpiled fill material, that material will be deemed unacceptable and new fill material will need to be obtained, sampled and analyzed. Therefore, the DTSC recommends that all sampling and analyses should be completed prior to delivery to the site to ensure the soil is free of contamination, and to eliminate unnecessary transportation charges for unacceptable fill material.

Composite sampling for fill material characterization may or may not be appropriate, depending on quality and homogeneity of source/borrow area, and compounds of concern. Compositing samples for volatile and semivolatile constituents is not acceptable. Composite sampling for heavy metals, pesticides, herbicides or PAH's from unanalyzed stockpiled soil is also unacceptable, unless it is stockpiled at the borrow area and originates from the same source area. In addition, if samples are composited, they should be from the same soil layer, and not from different soil layers.

When very large volumes of fill material are anticipated, or when larger areas are being considered as borrow areas, the DTSC recommends that a Phase I or PEA be conducted on the area to ensure that the borrow area has not been impacted by previous activities on the property. After the property has been evaluated, any sampling that may be required can be determined during a meeting with the DTSC.

For further information, call Richard Coffman, Ph.D., R.G., at (818) 551-2175.

REPORT
SOIL CHARACTERIZATION, SOIL STOCKPILE SAMPLING, AND LIMITED SOIL VAPOR SURVEY

VACANT PROPERTY
3801-3829 MARTIN LUTHER KING JUNIOR WAY
OAKLAND, CALIFORNIA 94609

PROJECT NO. 19272

Prepared for:

Ms. Alexandra Arjo
Resources for Community Development (RCD)
2220 Oxford Street
Berkeley, California 94704

Prepared by:

Essel Environmental Consulting
1035 22nd Avenue, Suite 9
Oakland, California 94606
1-800-595-7616 Phone

November 8, 2019

REPORT
SOIL CHARACTERIZATION, SOIL STOCKPILE SAMPLING, AND LIMITED SOIL VAPOR SURVEY
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OAKLAND, CALIFORNIA 94609

Minh Ngo
Project Geologist

PROFESSIONAL GEOLOGIST
THOMAS A. SPARROWE
No. 5065
Exp 12/31/20
STATE OF CALIFORNIA

Thomas A. Sparrowe P.G.
Senior Geologist

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VACANT PROPERTY
3801-3829 MARTIN LUTHER KING JUNIOR WAY
OAKLAND, CALIFORNIA 94609

1.0 INTRODUCTION

At the request of Ms. Alexandra Arjo of Resources for Community Development (RCD), Essel Environmental Engineering & Consulting (Essel) performed a soil characterization, soil stockpile sampling, and limited soil vapor survey at a vacant property located at 3801-3829 Martin Luther King Junior Way (MLK Jr. Way) in Oakland, California (Site). The soil characterization and the soil stockpile sampling were performed to evaluate options for proper off-Site disposal of shallow soil to be removed from the Site. The soil vapor survey was performed to investigate the suspected encroachment of contaminant vapors from a former north-adjacent dry-cleaning operation and to evaluate the potential for vapor intrusion health risk in a future residential building.

The scope of work for soil characterization included advancing six small diameter borings to depths of 5 feet below the ground surface, collecting representative soil samples, and analyzing the samples for various organic compounds and inorganic elements as required by landfills. The scope of work for the soil stockpile sampling included collecting one representative soil sample and analyzing the sample for various organic compounds and inorganic elements. The scope of work to assess the potential vapor encroachment and intrusion conditions included advancing three small-diameter borings to depths of 7 feet (ft) below the ground surface (bgs), collecting representative soil vapor samples, and analyzing the samples for volatile organic compounds (VOCs).

1.1 Site Location, Description, and Planned Development

The Site is located on the northern corner of the intersection of Martin Luther King Junior Way and West MacArthur Boulevard and is identified as Alameda County Assessor's Parcel Numbers (APNs) 12-964-4, 12-964-5, 12-964-6, and 12-964-7. The rectangular-shaped property encompasses an area of approximately 21,250 square feet (0.49 acres). Undeveloped land occupies the northern two-thirds of the Site and the remaining one-third of the property is occupied by two vacant two-story buildings and a vacant one-story building. Chain-link fencing bounds the southwestern, southeastern, and northeastern sides of the Site and wooden fencing bounds the northwestern side of the Site adjacent to residential structures. Figures 1 and 2 show the location and general features of the Site and vicinity.

Essel understands that RCD propose to redevelop the property with a six-story apartment building. The ground floor of the building will consist of a street-level parking garage with stairwells, two elevator shafts, lobby, maintenance room, electrical room, boiler room, bike storage room, management offices, and two commercial retail spaces. Depths of excavations for foundation footings and utilities are anticipated to vary from 0 to 5 ft bgs; hence the total depth of the soil borings.

1.2 Previous Environmental Work

1.2.1 Phase I Environmental Site Assessment and Phase II Investigation

Environmental Service performed a Phase I Environmental Site Assessment (ESA) dated August 23, 2019 to identify recognized environmental conditions (RECs) associated with the Site and as part of RCD's due diligence effort toward redeveloping the property. Historical records reviewed during the assessment indicated the Site was developed with three houses by 1902. The former house at 3801 Grove Street (present-day 3801 Martin Luther King Junior [MLK Jr.] Way) was replaced with two flats and a store between 1903 and 1910. The former house at 3809 Grove Street (present-day 3823 MLK Jr. Way) was demolished circa 1975 and was not replaced. The former house at 3813 Grove Street (present-day 3829 MLK Jr. Way) was replaced with a store between 1912 and 1930 and was demolished sometime between 2006 and 2007. The current buildings have been used for a drug store, Pacific Telephone and Telegraph, barber shop, hair salon, stereo store, hat store, and residences.

The Phase I ESA also indicated that the north-adjacent property (3833-3855 Martin Luther King Junior Way) was occupied by Minute Kleen Polish Manufacturing and A.A. Harris cleaners & presser in 1928, Jacob Pearlman cleaners & presser in 1935, and U C Cleaners in 1969. Cleaners and presser operations appear to have occupied the adjoining parcel from 1911 to 1935 and from 1967 to 1969. Additionally, one soil stockpile of approximately 1 to 2 cubic yards was observed during the Site reconnaissance. Based on these findings, Environmental Service recommended a Phase II investigation to rule out the potential for residual concentrations of volatile organic compounds (VOCs) in soil vapor in the northern portion of the Site and sampling of the observed stockpile.

Environmental Science collected 19 soil samples on June 14, 2017 and August 9, 2019 to preliminarily screen near-surface soil (0 to 6 inches) for lead and organochlorine pesticides. Lead was detected at concentrations above the most recent San Francisco Bay Regional Water Quality Control Board Tier 1 environmental screening levels (ESLs) in all 19 soil samples. Wet extraction tests (WET) were not performed on these samples; therefore, the soil was not adequately characterized for off-Site disposal. The pesticide dieldrin was detected above its corresponding Tier 1 ESL in two of the 19 soil samples. Based on these results, Environmental Science recommended drafting a Soil Management Plan for proper handling and landfill disposal of soil excavated for the foundation and utilities.

2.0 FIELD AND LABORATORY WORK

Field work for this investigation included advancing seven borings and sampling soil from the borings for laboratory analysis, sampling soil from a soil stockpile for laboratory analysis, and advancing three borings to install soil vapor probes and sampling soil vapor from the probes for laboratory analysis. The following sections provide descriptions of the field and laboratory tasks performed.

2.1 Permit, Utility Clearance, and Health and Safety

Essel submitted separate Drilling Permit Applications for the soil borings and soil vapor probes to the Alameda County Public Works Agency (ACPWA) and the ACPWA approved the permits (No. W2019-0776 and W2019-0777) on October 16, 2019. Copies of the two permits are included in Appendix A. Essel marked the proposed boring locations and notified Underground Service Alert North 811 (USA North) of the planned drilling activities more than 48 hours before drilling began. The ticket number provided by USA North for this procedure was X929001303-00X. Essel subcontracted with the local affiliate of Ground Penetrating Radar Systems (GPRS) to clear the proposed boring locations with respect to underground utilities or other obstructions. On October 17, 2019, GPRS used ground-penetrating radar and electromagnetic equipment to scan the subsurface and did not identify buried utilities or objects at the marked boring locations.

Essel prepared a Site-specific Health and Safety Plan (HASP) for the project and the HASP was available at the Site during field activities. Essel's project manager conducted a health and safety tailgate meeting before beginning field work to brief subcontractor personnel regarding potential on-Site hazards that might be encountered during field activities.

2.2 Locations of Borings

Seven soil borings (B1 through B7) and three soil vapor borings (SV1 through SV3) were advanced at the Site to provide subsurface soil and soil vapor information. Boring locations are described below and depicted on Figure 3:

- Soil borings B1 through B4 are centrally located within an approximately equally spaced 60 ft by 60 ft grid pattern (as allowed by Site constraints) at the property.
- Soil boring B5 is located in the northern portion of the southwestern grid due to the presence of a building and limited overhead clearance due to trees.
- Soil boring B6 is located near the boundary of two grid boxes due to limited access between two existing structures.
- Soil boring B7 was advanced in the northwestern corner of the east-central grid box in the event the drill rig could not access boring B4 due to vegetation overgrowth. Soil samples were collected, but were not analyzed.
- Soil stockpile sample (SS1) is located in the northern portion of the Site near soil vapor probe SV3.
- Borings for temporary soil vapor probes, SV1 through SV3 were installed in a triangular pattern in the northern portion of the Site to evaluate the lateral extent of contamination (if any).

2.3 Drilling Borings and Sampling Soil

Environmental Control Associates, Inc. of Aptos, California (C-57 license number 695970) used a Geoprobe 5410, truck-mounted direct-push drill rig to advance borings B1 through B7 and the borings for temporary soil vapor probes SV1 through SV3 on October 22, 2019. Borings B1 through B7 were advanced to a total depth of 5 ft bgs. The borings for soil vapor probes SV1 through SV3 were advanced to 7 feet below grade. The borings were advanced using a 2½-inch-outside-diameter, hollow steel rod.

Continuous soil cores were collected from the ten borings using the hollow steel rod (core barrel) fitted with a 1¼-inch-outside-diameter by 4-foot-long, clear plastic (acetate) sleeve. The acetate sleeve was removed from the core barrel after each sampling interval and replaced with a clean plastic sleeve for the next lower sampling interval. Soil cores contained in the plastic sleeves were screened in the field for evidence of contaminants, the sediments were identified and described, and selected samples were retained for laboratory analysis. Soil stockpile sample SS1 was collected using a clean hand trowel and soil was placed into an 8-ounce glass jar with a Teflon-sealed cap.

Samples were screened for volatile organic vapor concentrations using a photoionization detector (PID). Readings were collected by placing soil samples and the tip of the PID in a plastic bag, disturbing the soil within the bag, and waiting a minimum of 30 seconds before recording the measured organic vapor concentrations on field boring logs. Field screening also included visual observation of the soil for discoloration and noting any odors in the soil.

Soil encountered during drilling was described and classified using the Unified Soil Classification System (USCS). Boring logs for B1 through B7 and SV1 through SV3 present descriptions of the sediments encountered in the boreholes, PID readings, and the depth intervals at which soil samples were collected for laboratory analysis. The USCS and borings logs are included in Appendix B.

Essel retained one to two soil samples from each boring for possible laboratory analysis. Samples were variously collected at depths of 0.5, 1, 2, 3, 4, and 5 feet to represent the earth materials encountered. A minimum 6-inch-long section of the plastic sleeve was cut at the selected sample depth and the ends of each sleeve were covered with Teflon sheets and sealed with plastic caps. Each sample was then labeled and placed on ice in a cooler pending delivery to the laboratory. Essel prepared Chain-of-Custody forms for the soil samples and these forms accompanied the samples to the laboratory. Copies of the Chain-of-Custody forms are included in Appendix C.

2.4 Soil Vapor Probe Installation and Sampling

The boreholes for soil vapor probes SV1 through SV3 were advanced to respective total depths of 7 ft bgs. The temporary vapor probes consisted of a stainless-steel filter screen inserted into ¼-inch-diameter Teflon tubing. The filter screen was suspended at a depth of 6.5 feet below grade using a length of ¾-inch-diameter polyvinyl chloride pipe as a guide to center the tubing in the borehole. Vapor probes were constructed by placing 6 inches of clean sand (Monterey #3) below and 6 inches of clean sand above the filter screen. Granular bentonite crumbles (Cetco #8) were placed on top of the sand in 1-foot-thick lifts; the first lift was placed dry and each succeeding lift was hydrated with clean water to provide an airtight seal above the sand and filter screen and around the tubing to the ground surface. The top end of the tubing, which extended above grade, was capped with a valve to prevent atmospheric air from entering the probe hole. Boring logs in Appendix B present the construction diagrams for soil vapor probes SV1 through SV3.

Vapor probes were installed at least 2 hours before sampling took place to allow subsurface conditions to equilibrate and the hydrated bentonite seal to set. The soil vapor sampling system for each vapor probe consisted of a 1-liter (L) sampling Summa canister and a manifold that included a valve, vacuum gauge, and flow controller. The testing laboratory supplied the sampling equipment and had evacuated each Summa canister to a negative pressure (vacuum) of approximately 30-inches of mercury.

Manifolds were connected to the tubing of the soil vapor probes using Swagelok fittings and were connected to the 1-L sampling Summa canisters with quick disconnect fittings. Before sampling, Essel performed a shut-in test of the aboveground manifold assemblies to check for potential leaks. The shut-in tests were performed for a period slightly longer than 1 minute and no loss of vacuum was observed in the sampling assemblies. As a leak check, isopropyl alcohol was sprayed onto a rag and placed around the tubing where it exited from the borehole. Prior to sampling, the soil vapor probes were purged of approximately 1 L of volume.

The valve on each manifold was opened to begin sampling and vapor samples were collected at a controlled flow rate of 150 milliliters per minute. Soil vapor sampling was completed when the vacuum gauges indicated that the negative pressure in the Summa canisters was between 2 to 5 inches of mercury. At the completion of sampling, the valves on the manifolds were closed and the manifold assemblies were disconnected from the sample canisters. Essel documented sampling work on field sheets and a Chain-of-Custody form, which accompanied the samples to the laboratory. A copy of the Chain-of-Custody form is included in Appendix D.

2.5 Backfill of Soil and Vapor Probe Boreholes

After drilling and sampling, the Teflon tubing was removed from soil vapor probes SV1 through SV3 and the soil vapor borings were over-drilled to their respective total depths to remove the fill material (sand and bentonite), as directed by the ACPWA. Borings B1 through B7 and SV1 through SV3 were backfilled with neat cement slurry from the total depth of the boring to the surface grade. A representative of the ACPWA was present to observe backfilling of the boreholes.

2.6 Laboratory Analyses

The soil investigation was performed to characterize earth materials for potential organic and inorganic contaminants within the target depth of excavation. The analytical protocol for soil samples was selected to meet the requirements of the anticipated disposal site facilities.

A total of 15 soil samples were delivered to McCampbell Analytical, Inc. (McCampbell [Laboratory Certificate No. 1644]) in Pittsburg, California for analysis. Essel requested that McCampbell analyze seven of the samples and hold the remaining samples pending the results of the initial sample analyses. McCampbell analyzed the samples for:

- total petroleum hydrocarbons as gasoline (TPH-g) using United States Environmental Protection Agency (USEPA) Method 8015Bm;
- total petroleum hydrocarbons as diesel (TPH-d) and total petroleum hydrocarbons as motor oil (TPH-mo) using USEPA Method 8015B;
- volatile organic compounds (VOCs) using USEPA Method 8260B;
- semi-volatile organic compounds (SVOCs) and polycyclic aromatic hydrocarbons/ polynuclear aromatic hydrocarbons (PAHs/PNAs) using USEPA Method 8270C;
- organochlorine pesticides using USEPA Method 8081A;
- polychlorinated biphenyls (PCBs [arochlors]) using USEPA Method 8082; and
- 17 persistent and bioaccumulative toxic metals and metalloids (CAM 17 metals) using USEPA Method 6020.

Based on initial laboratory analytical results, six of the seven soil samples from borings B1 through B6 were further tested for soluble chromium and lead. The six samples were subjected to the waste extraction test (WET) and the toxicity characteristic leaching procedure (TCLP) and the extract solutions were variously analyzed for the above-referenced analytes. The additional testing was performed to evaluate whether or not the soil samples would be considered hazardous under state and federal criteria.

Three soil vapor samples were delivered to SunStar Laboratories, Inc. (SunStar [Certificate No. 2250]) in Lake Forest, California for analysis. SunStar analyzed the three soil vapor samples for VOCs, including the leak check tracer isopropyl alcohol using USEPA Methods TO-15 or TO-14.

3.0 RESULTS OF INVESTIGATION

3.1 Geology and Groundwater

Earth materials encountered to the 7-foot depth in borings B1 through B7 and the borings for soil vapor probes SV1 through SV3 consisted primarily of units of clay, with subordinate units of sand and silt. Asphalt and loose sand and gravel fill were present from the ground surface to depths of 6 to 12 inches below the ground surface. Dark brown, plastic clay was encountered in the ten borings between the base of the fill and depths of 3 to 5 ft bgs and this unit is underlain to at least 7 feet below grade by a brown silty clay to clayey silt. Silty sand was encountered from 5 to 6 ft bgs and gravelly clay was encountered from 6 to 7 ft bgs in soil vapor probe boring SV3. Groundwater was not encountered within the 5- to 7-foot total depths of the 10 borings.

3.2 Field Evidence of Contaminants

No field evidence of organic compound impact to soil was noted at the time the 10 borings were advanced. Photoionization detector readings of organic vapors in the soil cores did not exceed 0.0 parts per million, which were equivalent to ambient (background) levels. No obvious discoloration of soil was observed, and no petroleum or solvent odors were noted in the soil cores collected from the borings.

3.3 Laboratory Analytical Results for Soil

One or two soil samples from borings B1 through B6 and stockpile sample SS1 were analyzed for a range of organic compounds and inorganic elements. The seven samples were variously collected at depths of ½, 1, 2, 3, 4, and 5 ft bgs to assess the vertical and lateral distribution of potential contaminants in the soil.

Following are discussions of the laboratory analytical results. Detected concentrations are compared to the most recent Tier 1 environmental screening levels (ESLs) that have been developed by the San Francisco Bay Regional Water Quality Control Board (2019). The Tier 1 ESLs are the most stringent of the ESLs and are based on the most sensitive receptor (human health from ingestion or contact, human nuisance odor, impact to terrestrial habitats, or leaching to groundwater) of a particular contaminant. Where applicable, the analytical results are also compared to the contaminant's total threshold limit concentration (TTLC), soluble threshold limit concentration (STLC), and toxicity characteristic leaching procedure (TCLP) threshold concentration, which are used to assess whether the soil is considered hazardous per California and federal regulations.

3.3.1 Total Petroleum Hydrocarbons

TPH-g was not detected above its laboratory reporting limit in the seven samples. TPH-d and TPH-mo were detected in four of the seven soil samples submitted for laboratory analysis. TPH-d was detected in two of the seven soil samples (boring B6 and SS1) at low concentrations of 1.2 and 18 milligrams per kilogram (mg/kg); and TPH-mo was detected in four soil samples (borings B1, B4, and B6 and SS1) at low concentrations of 6.2, 10, 14, and 250 mg/kg, respectively.

The detected concentrations were compared to the Tier 1 ESLs. The concentrations of 18 mg/kg TPH-d and 250 mg/kg TPH-mo detected in soil stockpile sample SS1 were the highest detected in the seven soil samples. None of the total petroleum hydrocarbon concentrations detected in the soil samples were equal to or greater than their corresponding ESLs. The results of analyses of the soil samples for TPH-g, TPH-d, and TPH-mo are presented in Table 1 and the laboratory analytical report is included in Appendix C.

3.3.2 Volatile Organic Compounds

One VOC was detected in three of the seven soil samples submitted for laboratory analysis. The dry-cleaning solvent tetrachloroethene (PCE) was found at low concentrations ranging from 0.0010 to 0.0020 mg/kg in the one-, two-, and three-foot depth soil samples from borings B6, B5, and B3, respectively. No other VOCs were detected above their corresponding laboratory reporting limits. The PCE concentrations detected in the soil samples were well below their corresponding Tier 1 ESL. The results of analyses of the soil samples for VOCs are presented in Table 1 and the laboratory analytical report is included in Appendix C.

3.3.3 Semi-Volatile Organic Compounds (SVOCs)

One to 19 constituents of SVOCs were variously detected in the seven soil samples analyzed. Nearly all the detected compounds are polynuclear aromatic hydrocarbons (PNAs). Two of the seven samples contained phenol at concentrations of 0.27 and 0.28 mg/kg in soil samples collected from borings B2 and B6, respectively, above its Tier 1 ESL of 0.16 mg/kg. Benzo(a)pyrene was also detected above its Tier 1 ESL at a concentration of 0.24 mg/kg in the soil stockpile sample. The remaining detectable concentrations of SVOCs were below their corresponding Tier 1 ESLs. Analytical test results of the soil samples for SVOCs are presented in Table 2. Appendix C contains a copy of the laboratory analytical report.

3.3.4 Organochlorine Pesticides and Polychlorinated Biphenyls

Ten organochlorine (OC) pesticides were detected in five of the seven soil samples analyzed. Chlordane (technical), dieldrin, dichlorodiphenyltrichloroethane (DDT), and heptachlor epoxide were detected above their corresponding Tier 1 ESLs in the 1-foot depth soil sample from boring B6 and the soil stockpile sample. Detectable concentrations of the isomers alpha-chlordane and gamma-chlordane, dichlorodiphenyldichloroethane (DDD), dichlorodiphenyldichloroethene (DDE), endosulfan I, and heptachlor were below their corresponding Tier 1 ESL. OC pesticides were not detected in the 4- and 2-foot-depth soil samples collected from borings B1 and B5.

Analytical results of the seven soil samples for PCBs show that none were detected above the laboratory reporting limit. Table 3 presents the analytical results of the soil samples for organochlorine pesticides and PCBs. Appendix C contains a copy of the laboratory analytical report.

3.3.5 Inorganic Elements

Metals and metalloids are naturally occurring elements in rocks and soil and a number of these elements were found in soil samples collected from the borings. Elements detected in all seven soil samples included arsenic, barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc. Antimony, beryllium, cadmium, mercury, and molybdenum were variously detected in three to six soil samples. Selenium, silver, and thallium were not detected in any of the seven soil samples analyzed.

Concentrations of arsenic, barium, cobalt, lead, vanadium, and zinc were detected above their corresponding Tier 1 ESLs in the soil stockpile sample (SS1). Concentrations of lead and vanadium were detected above their corresponding Tier 1 ESLs in soil samples from borings B1, B3, B4, and B6. The elevated concentrations of lead range between 35 to 330 mg/kg, above the Tier 1 ESL of 32 mg/kg. All seven soil samples submitted for laboratory analysis detected elevated concentrations of vanadium. The 2019 Tier 1 ESL for vanadium of 18 mg/kg is based on a new terrestrial habitat category and is significantly lower than the previous Tier 1 ESL of 390 mg/kg, which was based on human health risk from direct exposure.

Arsenic was detected in all seven soil samples at concentrations ranging from 2.5 to 15 mg/kg. These concentrations are above the Tier 1 ESL of 0.0067 mg/kg. The narrow range of concentrations in the 10 samples suggest that arsenic is naturally occurring and not likely related to contaminants released as a result of human activities. Duvergé (2011) conducted a statistical study of arsenic concentrations in alluvial soils in the San Francisco Bay region and found the mean background concentration to be 4.61 mg/kg and the 99th percentile upper limit concentration to be 11 mg/kg. The upper limit concentration is considered to represent a naturally occurring concentration. The maximum arsenic concentration of 15 mg/kg was detected in the soil stockpile sample (SS1).

Based on the laboratory results for the metals, Essel requested that six of the seven soil samples be tested for soluble chromium (four samples) and lead (three samples) to assess whether the samples were hazardous under state and federal regulations. The samples were subjected to the WET and the TCLP and the extract solutions were analyzed for the above elements. Analytical results show the following:

- In sample B2-5 (5-foot-depth in boring B2), chromium was not detected in the WET extract.
- In sample B3-3 (3-foot-depth in boring B3), the soluble concentration of chromium in the WET extract was below the corresponding STLC threshold concentration.
- In sample B4-0.5 (0.5-foot-depth in boring B4), the soluble concentration of lead in the WET extract was above the corresponding STLC threshold concentration and below the corresponding TCLP threshold concentration.
- In sample B5-2 (2-foot-depth in boring B5), the soluble concentration of chromium in the WET extract was below the corresponding STLC threshold concentration.
- In sample B6-1 (1-foot-depth in boring B6), the soluble concentration of lead in the WET extract was below the corresponding STLC threshold concentration and was not detected in the TCLP extract.
- In sample SS1 (soil stockpile sample), soluble chromium was detected in the WET extract at a concentration less than the corresponding STLC; soluble lead was detected in the WET extract above the corresponding STLC threshold concentration and was not detected in the TCLP extract.

The results of analysis of the extract solutions indicate that the 0.5-foot-depth soil sample at boring B4 and the soil stockpile sample are hazardous per the California Title 22 criteria. The four other soil samples tested for soluble elements are not hazardous for the above listed inorganic elements.

Table 4 presents the results of analyses of soil samples for the inorganic elements and the further analyses of the extract solutions for barium, chromium, copper, and lead. Appendix C contains a copy of the laboratory analytical report.

3.4 Laboratory Analytical Results for Soil Vapor

Soil-vapor samples collected from vapor probes SV1, SV2, and SV3 were analyzed for VOCs including the leak check tracer isopropyl alcohol. Following is a discussion of the laboratory analytical results.

3.4.1 Volatile Organic Compounds

In northern soil vapor probe SV1, the gasoline constituent benzene was detected at a concentration of 31 $\mu g/m^3$, which is above its Tier 1 ESL for vapor intrusion human health risk of 3.2 $\mu g/m^3$. In northeastern soil vapor probe SV2, benzene and PCE were detected above their corresponding Tier 1 ESLs at concentrations of 14 and 86 $\mu g/m^3$, respectively. In east-central soil vapor probe SV3, benzene and PCE were detected above their corresponding Tier 1 ESLs at concentrations of 25 and 190 $\mu g/m^3$, respectively. Various gasoline constituents and non-chlorinated solvents were detected in the three soil vapor probes; however, these concentrations are below their corresponding Tier 1 ESLs for vapor intrusion.

Table 5 presents the results of analyses of the soil vapor samples. Appendix D contains a copy of the laboratory analytical report.

4.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

4.1 Findings

Following is a summary of the findings of the soil characterization and limited soil-vapor survey.

- Historical records reviewed in the Phase I ESA indicates the Site was first developed with three houses by 1902. The southernmost house was redeveloped with the two-present day flats and a store between 1903 and 1910. The central house was demolished circa 1975 and has remained vacant, undeveloped land since. The northernmost house was replaced between 1912 and 1930, demolished sometime between 2006 and 2007, and has remained undeveloped.
- Adjacent and surrounding land was and is a mix of residential and commercial properties that included cleaners and presser operations, gasoline service stations, automobile repair businesses. The north-adjacent cleaner operation is hydrologically up-gradient of the subject Site and occupied the adjoining parcel from 1911 to 1935 and from 1967 to 1969. A vapor encroachment condition at the Site could not be ruled out based on the proximity of the former cleaner operation and the potential for chlorinated solvents to remain in the subsurface of that property.
- Soil borings B1 through B7and SV1 through SV3 were advanced to depths of 5 to 7 feet below the ground surface and one soil sample was collected from an unknown soil stockpile in October 2019. Seven soil samples from borings B1 through B6 and SS1 were analyzed for a range of organic compounds and inorganic elements and the detected concentrations were compared to applicable regulatory criteria to evaluate appropriate disposal options.
    - o Total petroleum hydrocarbons in the diesel and motor oil range were detected in four of the seven soil samples submitted for laboratory analysis. No total petroleum hydrocarbons in the gasoline range were detected above its respective laboratory reporting limit.

- The dry-cleaning solvent, tetrachloroethene, was detected in three of the seven soil samples submitted for laboratory analysis. The compound was found at low concentrations ranging from 0.0010 to 0.0020 mg/kg, which are below its corresponding Tier 1 ESL. No other VOCs were detected above their corresponding laboratory reporting limits.
- A number of semi-volatile organic compounds were detected, primarily polynuclear aromatic hydrocarbons (PNAs). Benzo(a)pyrene and phenol were detected above their respective Tier 1 ESLs in borings B2, B6, and in soil stockpile sample SS1. No other detected concentrations of SVOCs were above their corresponding Tier 1 ESLs.
- The organochlorine pesticides chlordane (technical), dieldrin, DDT, and heptachlor epoxide were detected above their corresponding Tier 1 ESLs. No other detected concentrations of pesticides were above their corresponding Tier 1 ESLs.
- No polychlorinated biphenyls were detected in the seven soil samples analyzed.
- A number of inorganic elements were detected in the soil samples, with elevated concentrations of arsenic, barium, cobalt, lead, vanadium, and zinc. The soluble concentrations of lead in the 0.5-foot-depth sample from boring B4 and the soil stockpile sample (SS1) is greater than the applicable state threshold criteria for a hazardous concentration. Arsenic was detected at concentrations greater than the corresponding Tier 1 ESL but below the generally accepted background concentration in soil for the San Francisco Bay region, with the exception of the soil stockpile sample. All soil samples contained vanadium at concentrations greater than the Tier 1 ESL; however, the relatively uniform concentrations detected in the seven soil samples suggest this element is at naturally occurring concentrations in the soil.

- Soil vapor probes SV1 through SV3 were installed and sampled to evaluate potential encroachment of dry-cleaning solvents from the former north-adjacent cleaners and presser operation and evaluate on-Site vapor intrusion health risk in a future mixed-use building. The gasoline constituent benzene was detected at a concentration greater than the corresponding Tier 1 ESL in the northern soil vapor probe SV1. Benzene and the chlorinated solvent tetrachloroethene were detected above the corresponding Tier 1 ESLs in the northeastern and east-central soil vapor probes SV2 and SV3. Other detected compounds were at concentrations below the applicable Tier 1 ESLs.

4.2 Conclusions

Based on the findings of this investigation, Essel concludes the following:

- The minor presence of diesel and motor oil petroleum hydrocarbons and polynuclear aromatic hydrocarbons in the shallow soil appears to be derived from automobile parking on the undeveloped vacant land.
- The presence of phenol and pesticides may be related to the use of pesticides and/or herbicides to control overgrowth in the undeveloped areas of the Site.
- Except in the vicinity of boring B5, soil from the ground surface to 5 feet below grade is likely not suitable for off-Site disposal at an unregulated disposal site.
  - Soil in the 0- to 0.5-foot-depth interval across the Site is considered Class II material and may potentially meet the criteria for a California hazardous waste;

however, WET extraction tests were not performed by Environmental Science (2019) during the initial soil investigation.

    - Soil in the 0.5- to 5-foot-depth interval in the vicinities of borings B1, B2, B3, and B6 may be considered to be Class II material, based on the detections of benzo(a) pyrene, phenol, chlordane (technical), dieldrin, DDT, heptachlor epoxide, lead, and vanadium above their corresponding Tier 1 ESLs.
    - The soil stockpile meets the criteria for a California hazardous material, based on soluble lead in the WET extract at a concentration greater than the STLC of 5.0 milligrams per liter.

- The presence of tetrachloroethene in soil vapor at the location of northeastern and central soil vapor probes SV2 and SV3 suggests encroachment of dry-cleaning solvents from the former north-adjacent cleaners and presser operation. The presence of benzene in all three soil vapor probes (SV1 through SV3) also indicates a potential exists for vapor intrusion health risk to future occupants of a mixed-use building.

4.3 Recommendations

Essel offers the following recommendations, based on the information obtained during this investigation.

- Forward the laboratory analytical results of the soil characterization to applicable disposal sites, as desired, to obtain decisions on waste material acceptance or whether additional characterization is necessary.
- Consider the design and installation of a vapor barrier and passive venting system beneath the future building to mitigate the potential for vapor intrusion health risk.

Limitations to this investigation are included in Appendix E.

5.0 REFERENCES CITED

Environmental Service, *Phase I Environmental Site Assessment of 3801-3829 Martin Luther King Jr. Way in Oakland, California*, Project No. 2019-017, August 23, 2019.

Duvergé, D. J., *Establishing background arsenic in soil of the urbanized San Francisco bay region*. San Francisco State University, Master of Science Thesis, 77 p., December 2011.

San Francisco Bay Regional Water Quality Control Board, 2019, *Environmental screening levels, Tier 1 ESLs*. http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.shtml. January 24, Revision 1.

TABLE 1
Concentrations of Total Petroleum Hydrocarbons and Volatile Organic Compounds in Soil Samples
3801-3829 Martin Luther King Junior Way, Oakland, California

Boring Number	Date Sampled	Sample Number	Sample Depth (feet)	Total Petroleum Hydrocarbons			Volatile Organic Compounds									
				Gasoline	Diesel	Motor Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Naphthalene	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
B1	10/22/19	B1-4	4	<1.0	<1.0	**6.2**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0050	<0.0050	<0.00025
B2	10/22/19	B2-5	5	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0050	<0.0050	<0.00025
B3	10/22/19	B3-3	3	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.0020**	<0.0050	<0.0050	<0.00025
B4	10/22/19	B4-0.5	0.5	<1.0	<1.0	**10**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0050	<0.0050	<0.00025
B5	10/22/19	B5-2	2	<1.0	<1.0	<5.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.0020**	<0.0050	<0.0050	<0.00025
B6	10/22/19	B6-1	1	<1.0	**1.2**	**14**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.0010**	<0.0050	<0.0050	<0.00025
Soil Stockpile	10/22/19	SS1	-	<1.0	**18**	**250**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0050	<0.0050	<0.00025
Tier 1 Environmental Screening Level				**100**	**260**	**1,600**	**0.025**	**3.2**	**0.43**	**2.1**	**0.028**	**0.042**	**0.08**	**0.085**	**0.19**	**0.0015**

Analytical results and screening levels are in milligrams per kilogram = parts per million.

Detectable concentrations are in bold font and shaded gray.

Detectable concentrations equal to or greater than corresponding environmental screening levels.

MTBE = methyl tertiary butyl ether

Other volatile organic compounds included in United States Environmental Protection Agency Method 8260B that are not shown were not detected.

< = less than the laboratory reporting limit shown.

-- = screening level not available.

Tier 1 Environmental Screening Levels from San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, January 2019 (Rev. 1).

TABLE 2
Concentrations of Semi-Volatile Organic Compounds in Soil Samples
3801-3829 Martin Luther King Junior Way, Oakland, California

Boring Number	Date Sampled	Sample Number	Sample Depth (feet)	Acenapthene	Acenaphthylene	Anthracene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Bis(2-ethylhexyl) phthalate	Chrysene	Dibenzo(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Fluorene	Indeno(1,2,3-cd) pyrene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Phenol	Pyrene
B1	10/22/19	B1-4	4	<0.0013	**0.0027**	<0.0013	**0.0079**	**0.0077**	**0.008**	**0.0082**	**0.0030**	**0.010**	**0.0055**	<0.0025	<0.0025	**0.0083**	<0.0025	**0.0053**	<0.0025	**0.0068**	<0.0050	<0.0050	**0.0093**
B2	10/22/19	B2-5	5	<0.0013	<0.0013	<0.0013	<0.0050	<0.0025	<0.0063	<0.0025	<0.0013	<0.0050	<0.0025	<0.0025	<0.0025	<0.0013	<0.0025	<0.0025	<0.0025	<0.0013	<0.0050	**0.27**	<0.0025
B3	10/22/19	B3-3	3	<0.0013	<0.0013	<0.0013	<0.0050	<0.0025	<0.0063	<0.0025	<0.0013	<0.0050	<0.0025	<0.0025	<0.0025	<0.0013	<0.0025	<0.0025	<0.0025	<0.0013	<0.0050	**0.027**	<0.0025
B4	10/22/19	B4-0.5	0.5	<0.0013	**0.0023**	**0.0021**	**0.010**	**0.0076**	**0.0090**	**0.0079**	**0.0041**	**0.049**	**0.0074**	<0.0025	**0.0093**	**0.012**	<0.0025	**0.0052**	**0.041**	**0.024**	**0.012**	<0.0050	**0.013**
B5	10/22/19	B5-2	2	<0.0013	<0.0013	<0.0013	<0.0050	<0.0025	<0.0063	<0.0025	<0.0013	<0.0050	<0.0025	<0.0025	<0.0025	<0.0013	<0.0025	<0.0025	<0.0025	<0.0013	<0.0050	**0.13**	<0.0025
B6	10/22/19	B6-1	1	**0.0018**	**0.022**	**0.0088**	**0.074**	**0.090**	**0.1**	**0.058**	**0.031**	**0.26**	**0.078**	**0.011**	**0.011**	**0.13**	<0.0025	**0.047**	**0.0033**	**0.0045**	**0.053**	**0.28**	**0.13**
Soil Stockpile	10/22/19	SS1	-	<0.026	**0.014**	**0.022**	**0.25**	**0.24**	**0.37**	**0.099**	**0.15**	**0.53**	**0.26**	**0.028**	**0.047**	**0.12**	<0.050	**0.086**	<0.0050	**0.0027**	**0.030**	<0.010	**0.16**
Tier 1 Environmental Screening Level				**12**	**6.4**	**1.9**	**0.63**	**0.11**	**1.1**	**2.5**	**2.8**	**0.80**	**2.2**	**0.11**	**--**	**0.69**	**6.0**	**0.48**	**0.88**	**0.042**	**7.8**	**0.16**	**45**

Analytical results and screening levels are in milligrams per kilogram = parts per million.

Detectable concentrations are in bold face font and shaded gray.

Detectable concentrations equal to or greater than corresponding environmental screening levels.

Other semi-volatile organic compounds included in United States Environmental Protection Agency Method 8270C that are not shown were not detected.

< = less than the laboratory reporting limit shown.

-- = screening level not available.

Tier 1 Environmental Screening from San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, January 2019 (Rev. 1).

TABLE 3
Concentrations of Organochlorine Pesticides and Polychlorinated Biphenyls in Soil Samples
3801-3829 Martin Luther King Junior Way, Oakland, California

Boring Number	Date Sampled	Sample Number	Sample Depth (feet)	Organochlorine Pesticides										Polychlorinated Biphenyls (PCBs)							
				Chlordane (technical)	alpha-Chlordane	gamma-Chlordane	Dieldrin	4,4'-DDD	4,4'-DDE	4,4'-DDT	Endosulfan I	Heptachlor	Heptachlor epoxide	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
B1	10/22/19	B1-4	4	<0.0025	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B2	10/22/19	B2-5	5	<0.0025	**0.00012**	<0.00010	<0.00010	<0.00010	<0.00010	**0.00011**	<0.00010	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B3	10/22/19	B3-3	3	<0.0025	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	**0.00017**	<0.00010	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B4	10/22/19	B4-0.5	0.5	<0.0025	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	**0.00062**	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B5	10/22/19	B5-2	2	<0.0025	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B6	10/22/19	B6-1	1	<0.0025	**0.0015**	**0.0011 P**	**0.0022**	**0.0028**	**0.011**	**0.021**	<0.00010	<0.00010	**0.00013 P**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Soil stockpile	10/22/19	SS1	-	**0.22**	**0.017**	**0.018**	**0.0064**	**0.0056 P**	**0.069**	**0.16**	<0.00010	**0.00039**	**0.0022**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Tier 1 Environmental Screening Levels				**0.0085**	**--**	**--**	**0.00046**	**2.7**	**0.33**	**0.0011**	**--**	**0.12**	**0.00018**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**0.23**

Analytical results, screening levels, and threshold concentrations are in milligrams per kilogram = parts per million.

Detectable concentrations are in bold font and shaded gray.

Detectable concentrations equal to or greater than corresponding environmental screening levels.

Other organochlorine pesticides included in United States Environmental Protection Agency Method 8081A that are not shown were not detected.

DDD = dichlorodiphynyldichloroethane

DDE = dichlorodiphynyldichloroethene

DDT = dichlorodiphynyltrichloroethane

< = less than the laboratory reporting limit shown.

-- = not available.

Tier 1 Environmental Screening Levels from San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, January 2019 (Rev. 1).

TABLE 4
Concentrations of Inorganic Elements in Soil Samples
3801-3829 Martin Luther King Junior Way, Oakland, California

Boring Number	Date Sampled	Sample Number	Sample Depth (feet)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
B1	10/22/19	B1-4	4	<0.50	2.5	110	<0.50	<0.25	19	13	62	41	0.077	0.58	14	<0.50	<0.50	<0.50	120	75
B2	10/22/19	B2-5	5	<0.50	6.2	130	0.53	<0.25	59/<0.10	5.0	16	6.7	<0.050	0.61	42	<0.50	<0.50	<0.50	50	31
B3	10/22/19	B3-3	3	<0.50	7.6	270	0.76	<0.25	61/0.12	14	25	35	<0.050	0.89	61	<0.50	<0.50	<0.50	61	82
B4	10/22/19	B4-0.5	0.5	0.60	3.0	140	<0.50	0.42	39	4.7	18	250/7.9/0.19	0.180	<0.50	26	<0.50	<0.50	<0.50	27	160
B5	10/22/19	B5-2	2	<0.50	8.4	260	0.71	<0.25	65/0.12	12	29	16	0.072	0.93	59	<0.50	<0.50	<0.50	66	68
B6	10/22/19	B6-1	1	0.94	5.4	200	<0.50	0.46	42	7.5	26	190/1.3/<0.10	0.24	0.52	35	<0.50	<0.50	<0.50	38	150
Soil stockpile	10/22/19	SS1	-	3.0	15	560	0.73	1.40	79/0.56	35	69	330/9.4/<0.10	0.42	1.9	80	<0.50	<0.50	<0.50	81	450
Tier 1 Environmental Screening Level				11	11*	390	5.0	1.9	160	23	180	32	13	6.9	86	2.4	25	0.78	18	340
Total Threshold Limit Concentration (TTLC)				500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
Soluble Threshold Limit Concentration (STLC)				15	5.0	100	0.75	1.0	5.0	80	25	5.0	0.2	350	20	1.0	5.0	7.0	24	250
Toxic Characteristic Leaching Procedure (TCLP)				--	5.0	100	--	1.0	5.0	--	--	5.0	0.2	--	--	1.0	5.0	--	--	--

Analytical results, screening levels, and threshold limit concentrations are in milligrams per kilogram = parts per million.

Detectable concentrations are in bold font and shaded gray.

Detectable concentrations equal to or greater than corresponding environmental screening or background levels.

Resource Conservation and Recovery Act (RCRA) hazardous soil concentration (Title 40 Code of Federal Regulations).

California hazardous soil concentration (Title 22 California Code of Regulations).

< = less than the laboratory reporting limit shown.

2,600/88/9.7 = total dry weight concentration/soluble concentration in waste extraction test solution/soluble concentration in toxic characteristic leaching procedure solutior

* = background concentration (Duverge, 2011)

-- = not available.

Tier 1 Environmental Screening Levels from San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, January 2019 (Rev. 1).

Reference:

Duverge, D. J., 2011, Establishing background arsenic in soil of the urbanized San Francisco bay region. San Francisco State University, Master of Science Thesis, 77 p., Decembe

TABLE 5
Concentrations of Volatile Organic Compounds in Soil Vapor Samples
3801-3829 Martin Luther King Junior Way, Oakland, California

Soil Probe	SV1	SV2	SV3	Tier 1 Environmental Screening Level
Date Sampled	10/22/19	10/22/19	10/22/19	
Sample Number	SV1	SV2	SV3	
Depth of Sample (feet)	6.5	6.5	6.5	
Analyte				
Benzene	**31**	**14**	**25**	3.2
Toluene	<0.14	**25**	**50**	10,000
Ethylbenzene	**11**	**6.1**	**9.5**	37
m,p-xylene	**10**	**5.7 J**	**7.8 J**	3,500
o-xylene	**6.4**	**3.3 J**	**4.7**	3,500
Tetrachloroethene	**2.3 J**	**86**	**190**	15
Trichloroethene	<0.21	<0.21	<0.21	16
cis-1,2-dichloroethene	<0.25	<0.25	<0.25	280
Vinyl chloride	<0.052	<0.052	<0.052	0.32
Acetone	**150**	**81**	**170**	1,000,000
Cyclohexane	**43**	**36**	**53**	--
Carbon disulfide	**79**	<0.22	<0.22	--
Dichlorodifluoromethane	<0.18	**14**	<0.18	--
4-ethyltoluene	<0.25	**3.1 J**	<0.25	--
Heptane	**27**	**7.7**	**25**	--
Hexane	<0.43	<0.43	**26**	--
Methyl isobutyl ketone (MIBK)	**28 J**	**9.2 J**	**19 J**	14,000
Styrene	**3.2 J**	**1.0 J**	**2.0 J**	31,000
Tetrahydrofuran	<0.25	<0.25	**2.4 J**	--
Trichlorofluoromethane	**2.1 J**	<0.24	<0.24	--
1,3,5-trimethylbenzene	**2.2 J**	**2.3 J**	<0.49	--
1,2,4-trimethylbenzene	**11**	**6.8**	**8.0**	--
Vinyl acetate	<0.18	**10**	<0.18	--
Isopropyl alcohol (leak check tracer)	<0.55	<0.55	<0.55	--

Concentrations and screening levels are in micrograms per cubic meter.
Detectable concentrations are in bold font and shaded gray.
Concentrations greater than applicable screening levels are in bold font and shaded yellow.
All other volatile organic compounds included in the TO-14/TO-15 analysis and not shown were not detected.
< = less than the laboratory reporting limit or method detection limit shown.
* = non detectable results are relative to the method detection limits (minimum detection limit of analysis)
J = estimated concentration between the higher reporting limit and the lower method detection limit.
-- = no value available or not applicable.
Tier 1 Environmental Screening Levels from San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, January 2019 (Rev. 1).

REFERENCE(S)
United States Geological Survey
Oakland West Quadrangle
California
7.5-minute Series Topographic Map
Scale 1:24,000, 2018.

N

APPROXIMATE SCALE (MILES)

0 0.5

CLIENT
RCD

PROJECT
SOIL CHARACTERIZATION,
SOIL STOCKPILE SAMPLING, AND
LIMITED SOIL VAPOR SURVEY

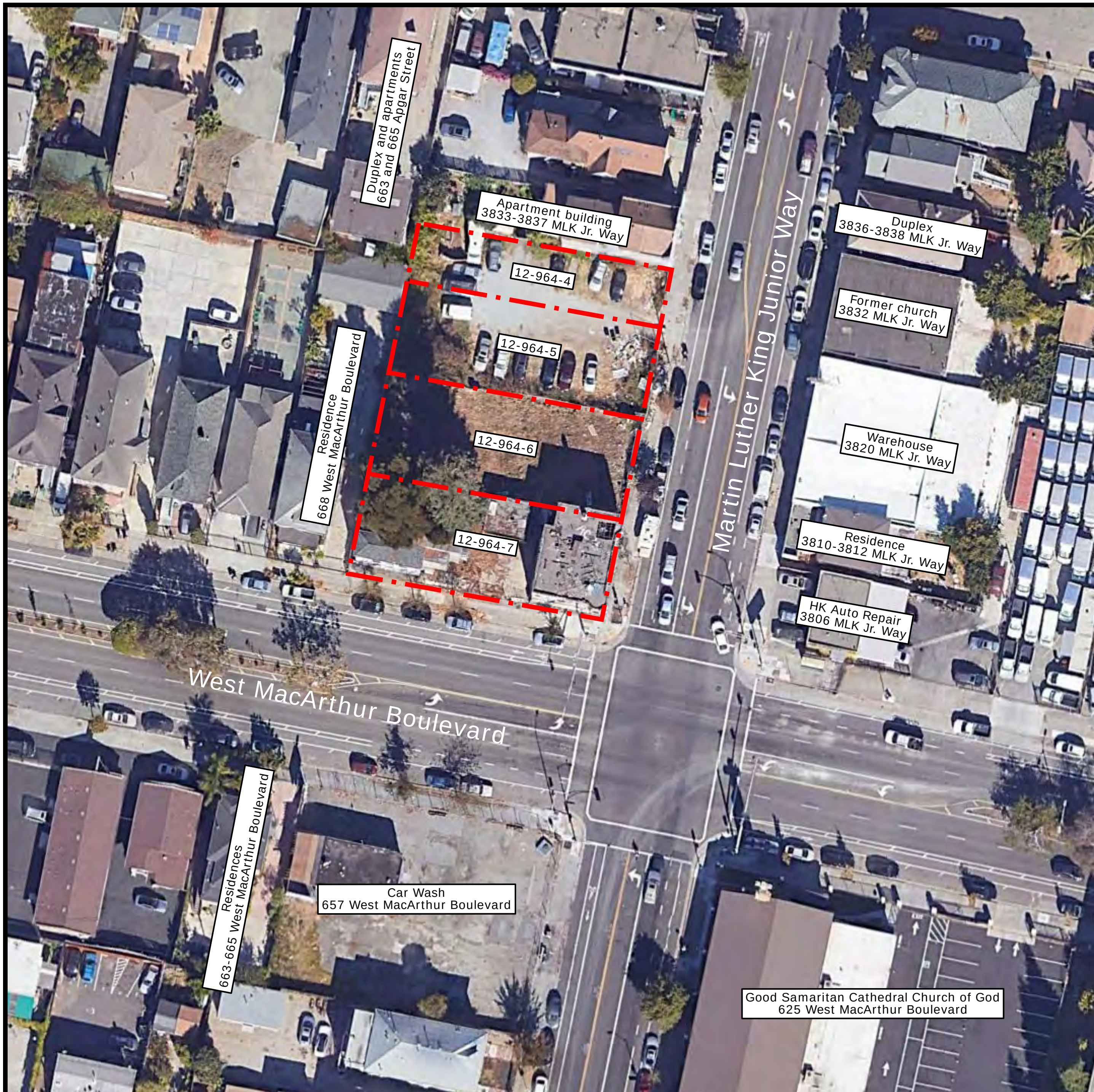
ADDRESS
3801 - 3829 MARTIN LUTHER KING JUNIOR WAY
OAKLAND, CALIFORNIA 94609

TITLE
TOPOGRAPHIC MAP

CONSULTANT
essel
ENVIRONMENTAL ENGINEERING & CONSULTING

DATE	NOVEMBER 2019
PREPARED BY	MN
PROJECT NO.	19272

FIGURE 1



LEGEND

APPROXIMATE SITE BOUNDARY

REFERENCE(S)
Google Earth, 2019.

N

Approximate direction of groundwater flow

APPROXIMATE SCALE (FEET)
0 100

CLIENT
RCD

PROJECT
SOIL CHARACTERIZATION, SOIL STOCKPILE SAMPLING, AND LIMITED SOIL VAPOR SURVEY

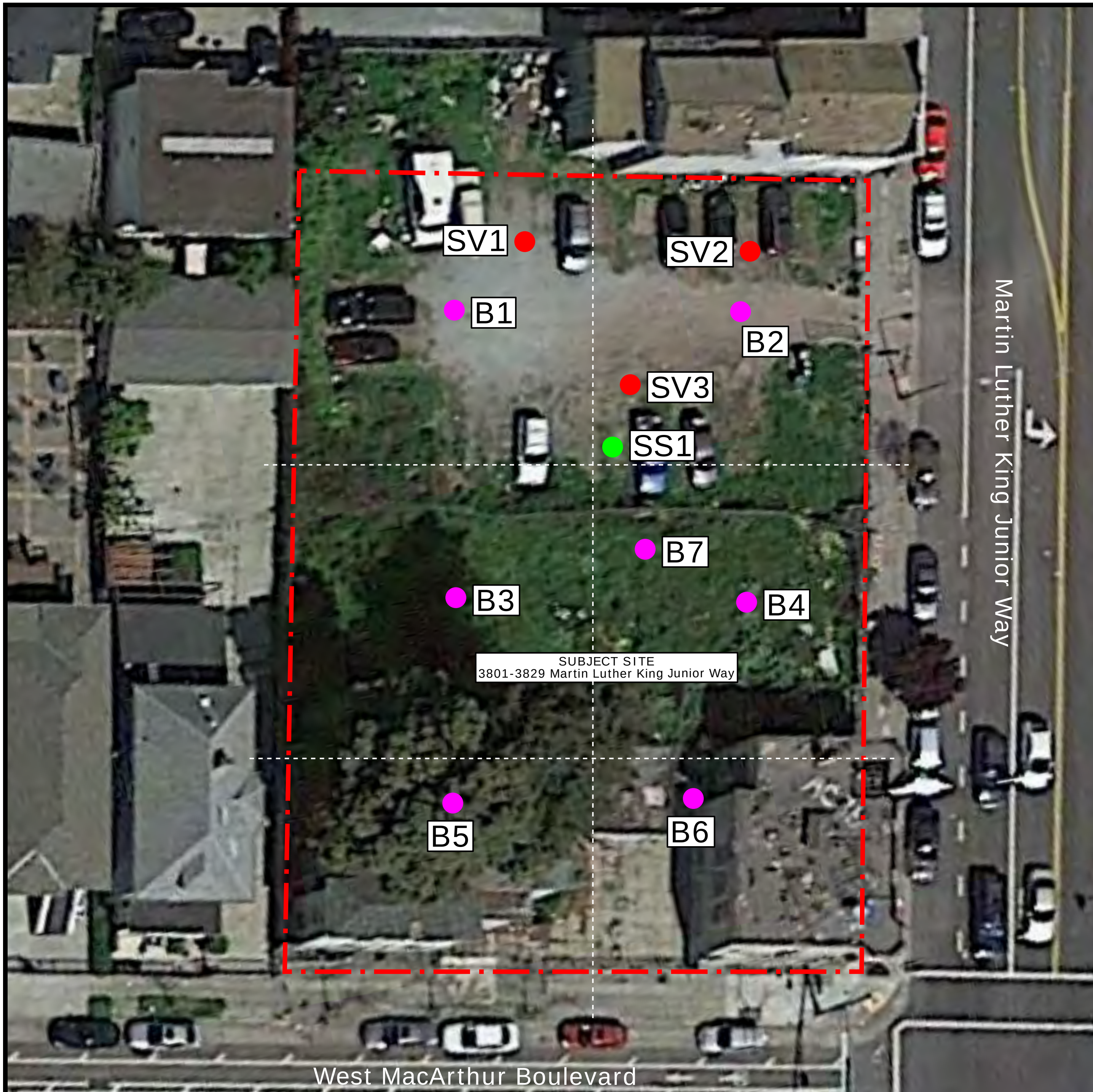
ADDRESS
3801 - 3829 MARTIN LUTHER KING JUNIOR WAY
OAKLAND, CALIFORNIA 94609

TITLE
SITE MAP

CONSULTANT
essel ENVIRONMENTAL ENGINEERING & CONSULTING

DATE NOVEMBER 2019
PREPARED BY MN
PROJECT NO. 19272

FIGURE 2



LEGEND

APPROXIMATE SITE BOUNDARY

SV1 SOIL VAPOR PROBE

B1 SOIL BORING

SS1 SOIL STOCKPILE SAMPLE

REFERENCE(S)
Google Earth, 2019.

N

Approximate direction of groundwater flow

APPROXIMATE SCALE (FEET)

0 50

CLIENT
RCD

PROJECT
SOIL CHARACTERIZATION,
SOIL STOCKPILE SAMPLING, AND
LIMITED SOIL VAPOR SURVEY

ADDRESS
3801 - 3829 MARTIN LUTHER KING
JUNIOR WAY
OAKLAND, CALIFORNIA 94609

TITLE
PROPOSED BORING LOCATIONS

CONSULTANT
essel
ENVIRONMENTAL ENGINEERING & CONSULTING

DATE	OCTOBER 2019
PREPARED BY	MN
PROJECT NO.	19272

FIGURE 3

APPENDIX A

DRILLING PERMITS

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 10/16/2019 By jamesy

Permit Numbers: W2019-0776 to W2019-0777
Permits Valid from 10/25/2019 to 10/25/2019

Application Id: 1571179480425
City of Project Site: Oakland
Site Location: 3823 Martin Luther King Jr Way, Oakland, CA 94609, USA
Project Start Date: 10/25/2019
Completion Date: 10/25/2019
Assigned Inspector: Contact Sam Brathwaite at (925) 570-7609 or sbrathwaite@groundzonees.com

Applicant: Essel Environmental Engineering & Consulting - Minh Ngo
1035 22nd Avenue, Suite 9, Oakland, CA 94606
Phone: 510-650-7730

Property Owner: Longfellow Corner L.P.
2220 Oxford Street, Berkeley, CA 94704
Phone: 510-841-4410 x330

Client: Alexandra Arjo
2220 Oxford Street, Berkeley, CA 94704
Phone: 510-841-4410 x330

	Total Due:	$530.00
Receipt Number: WR2019-0487	**Total Amount Paid:**	$530.00
Payer Name : Minh Ngo	Paid By: VISA	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only (soil and water only) - 6 Boreholes
Driller: Environmental Control Associates - Lic #: 695970 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2019-0776	10/16/2019	01/23/2020	6	2.00 in.	5.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or

waterways or be allowed to move off the property where work is being completed.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

7. NOTE:
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

Borehole(s) for Investigation-Vapor Sampling 24 to 48 hours only - 3 Boreholes
Driller: Environmental Control Associates - Lic #: 695970 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2019-0777	10/16/2019	01/23/2020	3	2.00 in.	7.00 ft

Specific Work Permit Conditions

1. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

2. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned.

4. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to,

property damage, personal injury and wrongful death.

5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

7. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

8. NOTE:
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Temp Vapor wells shall not be converted to monitoring Vapor wells, without a seperate permit application process.

10. Vapor monitoring wells constructed with tubing shall be decomissioned by complete removal of tubing, grout seal, and fill material of sand or bentonite. Fill material may be removed by hand auger if material can be removed completely or by overdrilling the borehole to total depth.

Vapor monitoring wells constructed with pvc pipe less than 2" shall be overdrilled to total depth.

Vapor monitoring wells constructed with 2" pvc pipe or larger may be grouted by tremie pipe (any depth) or pressure grouted (less than 30', 25 psi for 5 min).

APPENDIX B

BORING LOGS

UNIFIED SOIL CLASSIFICATION SYSTEM

COARSE-GRAINED SOILS (more than 50% of material is larger than No. 200 sieve size.)			
Major Divisions	Code	Symbol	Description
GRAVELS More than 50% of coarse fraction larger than No. 4 sieve size	GW		Well-graded gravels, gravel-sand mixtures, little or no fines
	GP		Poorly-graded gravels,gravel-sand mixtures, little or no fines
	GM		Silty gravels, gravel-sand-silt mixtures
	GC		Clayey gravels, gravel-sand-clay mixtures
SANDS More than 50% of coarse fraction smaller than No. 4 sieve size	SW		Well-graded sands, gravelly sands, little or no fines
	SP		Poorly-graded sands, gravelly sands, little or no fines
	SM		Silty sands, sand-silt mixtures
	SC		Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (50% or more of material is smaller than No. 200 sieve size.)			
SILTS AND CLAYS Liquid limit less than 50%	ML		Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts with slight plasticity
	CL		Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts with slight plasticity
	OL		Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit 50% or greater	MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
	CH		Inorganic clays of high plasticity, fat clays
	OH		Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS	PT		Peat and other highly organic soils

ADDITIONAL BORING LOG SYMBOLS

Symbol	Description
	No sample recovered
	Concrete
	Fill material, loose asphalt, concrete
	Geologic unit contact
	Approximate geologic unit contact
	Depth through which boring was advanced
	Sample retained for analysis
	Initial water level observed in boring
	Static water level observed in boring/well
PID	Photoionization Detector (readings in ppm)

WELL DIAGRAM SYMBOLS

Symbol	Description
	Neat cement
	Hydrated granular bentonite
	Dry granular bentonite
	Sand pack
	Blank PVC
	Machine-slotted PVC

PERCENT BY WEIGHT DESIGNATION

Trace	0-5 percent
Some	5-15 percent
With	15-30 percent
-y (i.e., sandy)	30-45 percent

WATER CONTENT (COHESIVE SOILS)

w<PL	Material is estimated to be drier than the Plastic Limit (cannot be rolled to a thread diameter of 4 mm)
w~PL	Material is estimated to be close to the Plastic Limit (can be rolled to a thread diameter between 2-4 mm)
w>PL	Material is estimated to be wetter than the Plastic Limit (can be rolled to a thread diameter less than 2 mm)

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PROJECT NO.	PREPARED BY	REPORT DATE
19272	MN	November 2019

PROJECT
Soil Characterization, Soil Stockpile Sampling, and Limited Soil Vapor Survey

ADDRESS
3801-3829 Martin Luther King Jr. Way
Oakland, California 94609

BORING LOG

TOTAL DEPTH: 5 feet DIAMETER OF BORING: 2 inches
DRILLING COMPANY: Environmental Control Associates, Inc.
DRILLING METHOD: Direct-push, GeoProbe 5410
LOGGED BY: Minh Ngo
PERMIT NO./AGENCY: W2019-0776 to W2019-0777 / ACPWA
NOTES: Borehole was backfilled with neat cement slurry. No groundwater was encountered.

DATE(S): October 22, 2019
CASING TYPE/DIAMETER: N/A
SCREEN TYPE/SLOT SIZE: N/A
SCREENED INTERVAL (FT): N/A
SAND TYPE: N/A INTERVAL (FT): N/A
BENTONITE TYPE: N/A INTERVAL (FT): N/A
GROUT TYPE: Type II-V Portland Cement INTERVAL (FT): 0-5

SAMPLE INFORMATION				GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WELL DIAGRAM/ REMARKS
SAMPLE ID	PID (ppm)	DEPTH (feet)	USCS Code			
					Loose asphalt and gravel fill.	
B1-0.5	0.0		CH		CLAY; dark brown, damp, cohesive, w>PL, very stiff.	
B1-4						
		5			Bottom of borehole at 5 feet.	
		10				
		15				
		20				

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ADDRESS
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Oakland, California 94609

BORING ID
B1

BORING LOG

TOTAL DEPTH: 5 feet DIAMETER OF BORING: 2 inches
DRILLING COMPANY: Environmental Control Associates, Inc.
DRILLING METHOD: Direct-push, GeoProbe 5410
LOGGED BY: Minh Ngo
PERMIT NO./AGENCY: W2019-0776 to W2019-0777 / ACPWA
NOTES: Borehole was backfilled with neat cement slurry. No groundwater was encountered.

DATE(S): October 22, 2019
CASING TYPE/DIAMETER: N/A
SCREEN TYPE/SLOT SIZE: N/A
SCREENED INTERVAL (FT): N/A
SAND TYPE: N/A INTERVAL (FT): N/A
BENTONITE TYPE: N/A INTERVAL (FT): N/A
GROUT TYPE: Type II-V Portland Cement INTERVAL (FT): 0-5

SAMPLE INFORMATION				GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WELL DIAGRAM/ REMARKS
SAMPLE ID	PID (ppm)	DEPTH (feet)	USCS Code			
					Loose sand and gravel fill.	
	0.0		CH		CLAY; dark brown, damp, cohesive, w>PL, very stiff.	
			CL		CLAY; trace fine- to medium-grained, subrounded to angular gravel; brown, damp, cohesive, w>PL, stiff.	
B2-5	0.0	5				
					Bottom of borehole at 5 feet.	
		10				
		15				
		20				

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PROJECT NO.	PREPARED BY	REPORT DATE
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PROJECT
Soil Characterization, Soil Stockpile Sampling, and Limited Soil Vapor Survey

ADDRESS
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Oakland, California 94609

BORING ID
B2

BORING LOG

TOTAL DEPTH: 5 feet DIAMETER OF BORING: 2 inches
DRILLING COMPANY: Environmental Control Associates, Inc.
DRILLING METHOD: Direct-push, GeoProbe 5410
LOGGED BY: Minh Ngo
PERMIT NO./AGENCY: W2019-0776 to W2019-0777 / ACPWA
NOTES: Borehole was backfilled with neat cement slurry. No groundwater was encountered.

DATE(S): October 22, 2019
CASING TYPE/DIAMETER: N/A
SCREEN TYPE/SLOT SIZE: N/A
SCREENED INTERVAL (FT): N/A
SAND TYPE: N/A INTERVAL (FT): N/A
BENTONITE TYPE: N/A INTERVAL (FT): N/A
GROUT TYPE: Type II-V Portland Cement INTERVAL (FT): 0-5

SAMPLE ID	PID (ppm)	DEPTH (feet)	USCS Code	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WELL DIAGRAM/ REMARKS
					Loose sand and gravel fill.	
B3-5	0.0		CH		CLAY; dark brown, damp, cohesive, w>PL, very stiff.	
B3-5		5	CL		SILTY CLAY; brown, damp, cohesive, w~PL, stiff.	
					Bottom of borehole at 5 feet.	
		10				
		15				
		20				

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PROJECT
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ADDRESS
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Oakland, California 94609

BORING ID
B3

BORING LOG

TOTAL DEPTH: 5 feet DIAMETER OF BORING: 2 inches
DRILLING COMPANY: Environmental Control Associates, Inc.
DRILLING METHOD: Direct-push, GeoProbe 5410
LOGGED BY: Minh Ngo
PERMIT NO./AGENCY: W2019-0776 to W2019-0777 / ACPWA
NOTES: Borehole was backfilled with neat cement slurry. No groundwater was encountered.

DATE(S): October 22, 2019
CASING TYPE/DIAMETER: N/A
SCREEN TYPE/SLOT SIZE: N/A
SCREENED INTERVAL (FT): N/A
SAND TYPE: N/A INTERVAL (FT): N/A
BENTONITE TYPE: N/A INTERVAL (FT): N/A
GROUT TYPE: Type II-V Portland Cement INTERVAL (FT): 0-5

SAMPLE ID	PID (ppm)	DEPTH (feet)	USCS Code	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WELL DIAGRAM/ REMARKS
B4-0.5					Loose sand fill.	
	0.0		CH		CLAY; dark brown, damp, cohesive, w>PL, very stiff. @ 4.5 feet: color changes to brown	
		5			Bottom of borehole at 5 feet.	
		10				
		15				
		20				

BORING LOG

TOTAL DEPTH: 5 feet DIAMETER OF BORING: 2 inches
DRILLING COMPANY: Environmental Control Associates, Inc.
DRILLING METHOD: Direct-push, GeoProbe 5410
LOGGED BY: Minh Ngo
PERMIT NO./AGENCY: W2019-0776 to W2019-0777 / ACPWA
NOTES: Borehole was backfilled with neat cement slurry. No groundwater was encountered.

DATE(S): October 22, 2019
CASING TYPE/DIAMETER: N/A
SCREEN TYPE/SLOT SIZE: N/A
SCREENED INTERVAL (FT): N/A
SAND TYPE: N/A INTERVAL (FT): N/A
BENTONITE TYPE: N/A INTERVAL (FT): N/A
GROUT TYPE: Type II-V Portland Cement INTERVAL (FT): 0-5

SAMPLE INFORMATION				GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WELL DIAGRAM/ REMARKS
SAMPLE ID	PID (ppm)	DEPTH (feet)	USCS Code			
					Loose sand and gravel fill.	
B5-2					CLAY; dark brown, damp, cohesive, w>PL, very stiff.	
	0.0		CH			
B5-4						
		5			Bottom of borehole at 5 feet.	
		10				
		15				
		20				

BORING LOG

TOTAL DEPTH: 5 feet   DIAMETER OF BORING: 2 inches
DRILLING COMPANY: Environmental Control Associates, Inc.
DRILLING METHOD: Direct-push, GeoProbe 5410
LOGGED BY: Minh Ngo
PERMIT NO./AGENCY: W2019-0776 to W2019-0777 / ACPWA
NOTES: Borehole was backfilled with neat cement slurry. No groundwater was encountered.

DATE(S): October 22, 2019
CASING TYPE/DIAMETER: N/A
SCREEN TYPE/SLOT SIZE: N/A
SCREENED INTERVAL (FT): N/A
SAND TYPE: N/A   INTERVAL (FT): N/A
BENTONITE TYPE: N/A   INTERVAL (FT): N/A
GROUT TYPE: Type II-V Portland Cement   INTERVAL (FT): 0-5

SAMPLE INFORMATION				GRAPHIC LOG	LITHOLOGIC DESCRIPTION	WELL DIAGRAM/ REMARKS
SAMPLE ID	PID (ppm)	DEPTH (feet)	USCS Code			
					Loose sand fill.	
B6-1	0.0		CH		CLAY; dark brown, damp, cohesive, w>PL, very stiff. @ 4.5 feet: color change to brown	
		5			Bottom of borehole at 5 feet.	
		10				
		15				
		20				

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BORING ID
B6

BORING LOG

TOTAL DEPTH: 5 feet DIAMETER OF BORING: 2 inches
DRILLING COMPANY: Environmental Control Associates, Inc.
DRILLING METHOD: Direct-push, GeoProbe 5410
LOGGED BY: Minh Ngo
PERMIT NO./AGENCY: W2019-0776 to W2019-0777 / ACPWA
NOTES: Borehole was backfilled with neat cement slurry. No groundwater was encountered.

DATE(S): October 22, 2019
CASING TYPE/DIAMETER: N/A
SCREEN TYPE/SLOT SIZE: N/A
SCREENED INTERVAL (FT): N/A
SAND TYPE: N/A INTERVAL (FT): N/A
BENTONITE TYPE: N/A INTERVAL (FT): N/A
GROUT TYPE: Type II-V Portland Cement INTERVAL (FT): 0-5

SAMPLE ID	PID (ppm)	DEPTH (feet)	USCS Code	LITHOLOGIC DESCRIPTION	WELL DIAGRAM/ REMARKS
B7-0.5				Loose sand fill.	
B7-4	0.0		CH	CLAY; dark brown, damp, cohesive, w>PL, very stiff.	
		5	ML	CLAYEY SILT; brown, damp, cohesive, w<PL, stiff.	
				Bottom of borehole at 5 feet.	
		10			
		15			
		20			

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BORING ID
B7

PAGE

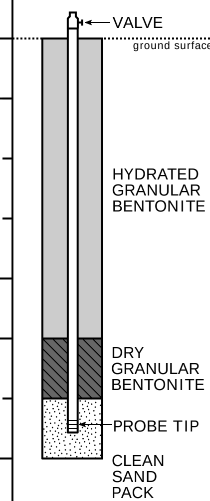
BORING LOG

TOTAL DEPTH: 7 feet DIAMETER OF BORING: 2 inches
DRILLING COMPANY: Environmental Control Associates, Inc.
DRILLING METHOD: Direct-push, GeoProbe 5410
LOGGED BY: Minh Ngo
PERMIT NO./AGENCY: W2019-0776 to W2019-0777 / ACPWA
NOTES: ECA removed the teflon tubing, over-drilled the borehole, and backfilled with neat cement slurry. No groundwater was encountered.

DATE(S): October 22, 2019
CASING TYPE/DIAMETER: N/A
SCREEN TYPE/SLOT SIZE: N/A
SCREENED INTERVAL (FT): N/A
SAND TYPE: Monterey #3 INTERVAL (FT): 6-7
BENTONITE TYPE: Cetco #8 INTERVAL (FT): 0-6
GROUT TYPE: Type II-V Portland Cement INTERVAL (FT): 0-7

SAMPLE ID	PID (ppm)	DEPTH (feet)	USCS Code	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
		0–1			Loose asphalt dust; fine-grained, subrounded to subangular; fine-grained, rounded sand fill material.
	0.0	1–4	CH		CLAY; dark brown, damp, cohesive, w>PL, very stiff.
	0.0	4–7 (5)	CL		CLAY; brown, moist, some fine- to coarse-grained, rounded to subrounded gravel; trace fine- to medium-grained, rounded to subrounded sand; cohesive, w>PL, stiff.
		10, 15, 20			Bottom of borehole at 7 feet.

WELL DIAGRAM/ REMARKS



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BORING ID
SV1

PAGE
8 of 10

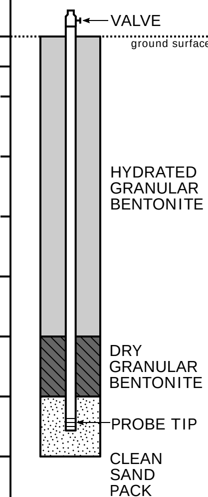
BORING LOG

TOTAL DEPTH: 7 feet DIAMETER OF BORING: 2 inches
DRILLING COMPANY: Environmental Control Associates, Inc.
DRILLING METHOD: Direct-push, GeoProbe 5410
LOGGED BY: Minh Ngo
PERMIT NO./AGENCY: W2019-0776 to W2019-0777 / ACPWA
NOTES: ECA removed the teflon tubing, over-drilled the borehole, and backfilled with neat cement slurry. No groundwater was encountered.

DATE(S): October 22, 2019
CASING TYPE/DIAMETER: N/A
SCREEN TYPE/SLOT SIZE: N/A
SCREENED INTERVAL (FT): N/A
SAND TYPE: Monterey #3 INTERVAL (FT): 6-7
BENTONITE TYPE: Cetco #8 INTERVAL (FT): 0-6
GROUT TYPE: Type II-V Portland Cement INTERVAL (FT): 0-7

SAMPLE ID	PID (ppm)	DEPTH (feet)	USCS Code	LITHOLOGIC DESCRIPTION
				Loose sand and gravel fill.
	0.0		CH	CLAY; dark brown, damp, cohesive, w>PL, very stiff.
		5	CL	CLAYEY SILT; some fine- to coarse-grained, rounded to subangular sand; trace fine-grained, rounded gravel; brown, damp, cohesive, w<PL, stiff.
	0.0		CL	SANDY CLAY; fine- to medium-grained, rounded to subrounded sand; brown, damp, cohesive, w>PL, stiff.
				Bottom of borehole at 7 feet.
		10		
		15		
		20		

WELL DIAGRAM/ REMARKS



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PROJECT
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ADDRESS
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BORING ID
SV2

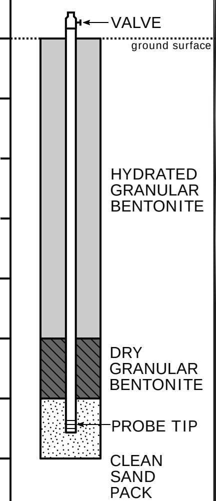
BORING LOG

TOTAL DEPTH: 7 feet DIAMETER OF BORING: 2 inches
DRILLING COMPANY: Environmental Control Associates, Inc.
DRILLING METHOD: Direct-push, GeoProbe 5410
LOGGED BY: Minh Ngo
PERMIT NO./AGENCY: W2019-0776 to W2019-0777 / ACPWA
NOTES: ECA removed the teflon tubing, over-drilled the borehole, and backfilled with neat cement slurry. No groundwater was encountered.

DATE(S): October 22, 2019
CASING TYPE/DIAMETER: N/A
SCREEN TYPE/SLOT SIZE: N/A
SCREENED INTERVAL (FT): N/A
SAND TYPE: Monterey #3 INTERVAL (FT): 6-7
BENTONITE TYPE: Cetco #8 INTERVAL (FT): 0-6
GROUT TYPE: Type II-V Portland Cement INTERVAL (FT): 0-7

SAMPLE ID	PID (ppm)	DEPTH (feet)	USCS Code	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
					Concrete dust; light brown sand fill.
	0.0		CH		CLAY; dark brown, damp, cohesive, w>PL, very stiff.
			CL		CLAY; trace fine-grained, subangular sand; brown, damp, cohesive, w>PL, stiff.
		5	SM		SILTY SAND; fine-grained, rounded sand; light brown, damp, non-cohesive, loose.
	0.0		CL		GRAVELLY CLAY; fine- to coarse-grained, subrounded to angular gravel; light orangish brown, damp, cohesive, w<PL, stiff.
					Bottom of borehole at 7 feet.
		10			
		15			
		20			

WELL DIAGRAM/ REMARKS



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ADDRESS
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BORING ID
SV3

APPENDIX C

CHAIN-OF-CUSTODY FORMS
AND
LABORATORY ANALYTICAL REPORTS
FOR
SOIL SAMPLES

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1910B43

Report Created for: Essel Environmental Consulting

1035 22nd Avenue, Suite 9
Oakland, CA 94606

Project Contact: Minh Ngo
Project P.O.:
Project: 19272; RCD; 3823 MLK Jr Way Oakland

Project Received: 10/23/2019

Analytical Report reviewed & approved for release on 10/30/2019 by:

Susan Thompson
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

Glossary of Terms & Qualifier Definitions

Client: Essel Environmental Consulting
Project: 19272; RCD; 3823 MLK Jr Way Oakland
WorkOrder: 1910B43

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 μm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Essel Environmental Consulting
Project: 19272; RCD; 3823 MLK Jr Way Oakland
WorkOrder: 1910B43

Analytical Qualifiers

J	Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
P	Agreement between quantitative confirmation results exceed method recommended limits
S	Spike recovery outside accepted recovery limits
a2	Sample diluted due to cluttered chromatogram
c1	Surrogate recovery outside of the control limits due to the dilution of the sample.
c2	Surrogate recovery outside of the control limits due to matrix interference.
c4	Surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
e2	Diesel range compounds are significant; no recognizable pattern
e7	Oil range compounds are significant

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F2	LCS/LCSD recovery and/or RPD/RSD is out of acceptance criteria.
F3	The surrogate standard recovery and/or RPD is outside of acceptance limits.

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	10/25/19	**Analytical Method:**	SW8081A/8082
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	1910B43-001A	Soil	10/22/2019 08:30	GC40 10251916.d	187709

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	10/25/2019 12:40
a-BHC	ND	0.00010	1	10/25/2019 12:40
b-BHC	ND	0.00030	1	10/25/2019 12:40
d-BHC	ND	0.00020	1	10/25/2019 12:40
g-BHC	ND	0.00010	1	10/25/2019 12:40
Chlordane (Technical)	ND	0.0025	1	10/25/2019 12:40
a-Chlordane	**0.0010**	0.00010	1	10/25/2019 12:40
g-Chlordane	**0.00088**	0.00010	1	10/25/2019 12:40
p,p-DDD	**0.0025**	0.00010	1	10/25/2019 12:40
p,p-DDE	**0.020**	0.00010	1	10/25/2019 12:40
p,p-DDT	**0.047**	0.00050	5	10/29/2019 22:46
Dieldrin	**0.0020**	0.00010	1	10/25/2019 12:40
Endosulfan I	**0.00062**	0.00010	1	10/25/2019 12:40
Endosulfan II	ND	0.00010	1	10/25/2019 12:40
Endosulfan sulfate	ND	0.00010	1	10/25/2019 12:40
Endrin	ND	0.00010	1	10/25/2019 12:40
Endrin aldehyde	ND	0.00010	1	10/25/2019 12:40
Endrin ketone	ND	0.00010	1	10/25/2019 12:40
Heptachlor	ND	0.00010	1	10/25/2019 12:40
Heptachlor epoxide	ND	0.00010	1	10/25/2019 12:40
Hexachlorobenzene	ND	0.0010	1	10/25/2019 12:40
Hexachlorocyclopentadiene	ND	0.0020	1	10/25/2019 12:40
Methoxychlor	ND	0.00020	1	10/25/2019 12:40
Toxaphene	ND	0.0050	1	10/25/2019 12:40
Aroclor1016	ND	0.0050	1	10/25/2019 12:40
Aroclor1221	ND	0.0050	1	10/25/2019 12:40
Aroclor1232	ND	0.0050	1	10/25/2019 12:40
Aroclor1242	ND	0.0050	1	10/25/2019 12:40
Aroclor1248	ND	0.0050	1	10/25/2019 12:40
Aroclor1254	ND	0.0050	1	10/25/2019 12:40
Aroclor1260	ND	0.0050	1	10/25/2019 12:40
PCBs, total	ND	0.0050	1	10/25/2019 12:40

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	90	20-145	10/25/2019 12:40

Analyst(s): CN

Analytical Comments: a2

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	10/25/19	**Analytical Method:**	SW8081A/8082
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	1910B43-005A	Soil	10/22/2019 08:30	GC40 10251917.d	187709

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00010	1	10/25/2019 12:54
a-BHC	ND		0.00010	1	10/25/2019 12:54
b-BHC	ND		0.00030	1	10/25/2019 12:54
d-BHC	ND		0.00020	1	10/25/2019 12:54
g-BHC	ND		0.00010	1	10/25/2019 12:54
Chlordane (Technical)	ND		0.0025	1	10/25/2019 12:54
a-Chlordane	**0.0015**		0.00010	1	10/25/2019 12:54
g-Chlordane	**0.0011**	P	0.00010	1	10/25/2019 12:54
p,p-DDD	**0.0028**		0.00010	1	10/25/2019 12:54
p,p-DDE	**0.011**		0.00010	1	10/25/2019 12:54
p,p-DDT	**0.021**		0.00010	1	10/25/2019 12:54
Dieldrin	**0.0022**		0.00010	1	10/25/2019 12:54
Endosulfan I	ND		0.00010	1	10/25/2019 12:54
Endosulfan II	ND		0.00010	1	10/25/2019 12:54
Endosulfan sulfate	ND		0.00010	1	10/25/2019 12:54
Endrin	ND		0.00010	1	10/25/2019 12:54
Endrin aldehyde	ND		0.00010	1	10/25/2019 12:54
Endrin ketone	ND		0.00010	1	10/25/2019 12:54
Heptachlor	ND		0.00010	1	10/25/2019 12:54
Heptachlor epoxide	**0.00013**	P	0.00010	1	10/25/2019 12:54
Hexachlorobenzene	ND		0.0010	1	10/25/2019 12:54
Hexachlorocyclopentadiene	ND		0.0020	1	10/25/2019 12:54
Methoxychlor	ND		0.00020	1	10/25/2019 12:54
Toxaphene	ND		0.0050	1	10/25/2019 12:54
Aroclor1016	ND		0.0050	1	10/25/2019 12:54
Aroclor1221	ND		0.0050	1	10/25/2019 12:54
Aroclor1232	ND		0.0050	1	10/25/2019 12:54
Aroclor1242	ND		0.0050	1	10/25/2019 12:54
Aroclor1248	ND		0.0050	1	10/25/2019 12:54
Aroclor1254	ND		0.0050	1	10/25/2019 12:54
Aroclor1260	ND		0.0050	1	10/25/2019 12:54
PCBs, total	ND		0.0050	1	10/25/2019 12:54

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	87	20-145	10/25/2019 12:54

Analyst(s): CN

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	10/25/19	**Analytical Method:**	SW8081A/8082
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	1910B43-006A	Soil	10/22/2019 08:30	GC40 10251918.d	187709

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00010	1	10/25/2019 13:08
a-BHC	ND		0.00010	1	10/25/2019 13:08
b-BHC	ND		0.00030	1	10/25/2019 13:08
d-BHC	ND		0.00020	1	10/25/2019 13:08
g-BHC	ND		0.00010	1	10/25/2019 13:08
Chlordane (Technical)	**0.22**		0.025	10	10/29/2019 23:01
a-Chlordane	**0.017**		0.00010	1	10/25/2019 13:08
g-Chlordane	**0.018**		0.00010	1	10/25/2019 13:08
p,p-DDD	**0.0056**	P	0.00010	1	10/25/2019 13:08
p,p-DDE	**0.069**		0.0010	10	10/29/2019 23:01
p,p-DDT	**0.16**		0.0010	10	10/29/2019 23:01
Dieldrin	**0.0064**		0.00010	1	10/25/2019 13:08
Endosulfan I	ND		0.00010	1	10/25/2019 13:08
Endosulfan II	ND		0.00010	1	10/25/2019 13:08
Endosulfan sulfate	ND		0.00010	1	10/25/2019 13:08
Endrin	ND		0.00010	1	10/25/2019 13:08
Endrin aldehyde	ND		0.00010	1	10/25/2019 13:08
Endrin ketone	ND		0.00010	1	10/25/2019 13:08
Heptachlor	**0.00039**		0.00010	1	10/25/2019 13:08
Heptachlor epoxide	**0.0022**		0.00010	1	10/25/2019 13:08
Hexachlorobenzene	ND		0.0010	1	10/25/2019 13:08
Hexachlorocyclopentadiene	ND		0.0020	1	10/25/2019 13:08
Methoxychlor	ND		0.00020	1	10/25/2019 13:08
Toxaphene	ND		0.0050	1	10/25/2019 13:08
Aroclor1016	ND		0.0050	1	10/25/2019 13:08
Aroclor1221	ND		0.0050	1	10/25/2019 13:08
Aroclor1232	ND		0.0050	1	10/25/2019 13:08
Aroclor1242	ND		0.0050	1	10/25/2019 13:08
Aroclor1248	ND		0.0050	1	10/25/2019 13:08
Aroclor1254	ND		0.0050	1	10/25/2019 13:08
Aroclor1260	ND		0.0050	1	10/25/2019 13:08
PCBs, total	ND		0.0050	1	10/25/2019 13:08

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	84	20-145	10/25/2019 13:08

Analyst(s): CN

Analytical Comments: a2,c1,c4

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	10/25/19	**Analytical Method:**	SW8081A/8082
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B5-2	1910B43-007A	Soil	10/22/2019 08:30	GC20 10291935.D	187709

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	10/29/2019 20:00
a-BHC	ND	0.00010	1	10/29/2019 20:00
b-BHC	ND	0.00030	1	10/29/2019 20:00
d-BHC	ND	0.00020	1	10/29/2019 20:00
g-BHC	ND	0.00010	1	10/29/2019 20:00
Chlordane (Technical)	ND	0.0025	1	10/29/2019 20:00
a-Chlordane	ND	0.00010	1	10/29/2019 20:00
g-Chlordane	ND	0.00010	1	10/29/2019 20:00
p,p-DDD	ND	0.00010	1	10/29/2019 20:00
p,p-DDE	ND	0.00010	1	10/29/2019 20:00
p,p-DDT	ND	0.00010	1	10/29/2019 20:00
Dieldrin	ND	0.00010	1	10/29/2019 20:00
Endosulfan I	ND	0.00010	1	10/29/2019 20:00
Endosulfan II	ND	0.00010	1	10/29/2019 20:00
Endosulfan sulfate	ND	0.00010	1	10/29/2019 20:00
Endrin	ND	0.00010	1	10/29/2019 20:00
Endrin aldehyde	ND	0.00010	1	10/29/2019 20:00
Endrin ketone	ND	0.00010	1	10/29/2019 20:00
Heptachlor	ND	0.00010	1	10/29/2019 20:00
Heptachlor epoxide	ND	0.00010	1	10/29/2019 20:00
Hexachlorobenzene	ND	0.0010	1	10/29/2019 20:00
Hexachlorocyclopentadiene	ND	0.0020	1	10/29/2019 20:00
Methoxychlor	ND	0.00020	1	10/29/2019 20:00
Toxaphene	ND	0.0050	1	10/29/2019 20:00
Aroclor1016	ND	0.0050	1	10/29/2019 20:00
Aroclor1221	ND	0.0050	1	10/29/2019 20:00
Aroclor1232	ND	0.0050	1	10/29/2019 20:00
Aroclor1242	ND	0.0050	1	10/29/2019 20:00
Aroclor1248	ND	0.0050	1	10/29/2019 20:00
Aroclor1254	ND	0.0050	1	10/29/2019 20:00
Aroclor1260	ND	0.0050	1	10/29/2019 20:00
PCBs, total	ND	0.0050	1	10/29/2019 20:00

Surrogates	REC (%)	Limits		
Decachlorobiphenyl	95	20-145		10/29/2019 20:00

Analyst(s): CN

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	10/25/19	**Analytical Method:**	SW8081A/8082
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B3-3	1910B43-009A	Soil	10/22/2019 08:30	GC40 10251933.d	187709

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	10/25/2019 16:38
a-BHC	ND	0.00010	1	10/25/2019 16:38
b-BHC	ND	0.00030	1	10/25/2019 16:38
d-BHC	ND	0.00020	1	10/25/2019 16:38
g-BHC	ND	0.00010	1	10/25/2019 16:38
Chlordane (Technical)	ND	0.0025	1	10/25/2019 16:38
a-Chlordane	ND	0.00010	1	10/25/2019 16:38
g-Chlordane	ND	0.00010	1	10/25/2019 16:38
p,p-DDD	ND	0.00010	1	10/25/2019 16:38
p,p-DDE	ND	0.00010	1	10/25/2019 16:38
p,p-DDT	**0.00017**	0.00010	1	10/25/2019 16:38
Dieldrin	ND	0.00010	1	10/25/2019 16:38
Endosulfan I	ND	0.00010	1	10/25/2019 16:38
Endosulfan II	ND	0.00010	1	10/25/2019 16:38
Endosulfan sulfate	ND	0.00010	1	10/25/2019 16:38
Endrin	ND	0.00010	1	10/25/2019 16:38
Endrin aldehyde	ND	0.00010	1	10/25/2019 16:38
Endrin ketone	ND	0.00010	1	10/25/2019 16:38
Heptachlor	ND	0.00010	1	10/25/2019 16:38
Heptachlor epoxide	ND	0.00010	1	10/25/2019 16:38
Hexachlorobenzene	ND	0.0010	1	10/25/2019 16:38
Hexachlorocyclopentadiene	ND	0.0020	1	10/25/2019 16:38
Methoxychlor	ND	0.00020	1	10/25/2019 16:38
Toxaphene	ND	0.0050	1	10/25/2019 16:38
Aroclor1016	ND	0.0050	1	10/25/2019 16:38
Aroclor1221	ND	0.0050	1	10/25/2019 16:38
Aroclor1232	ND	0.0050	1	10/25/2019 16:38
Aroclor1242	ND	0.0050	1	10/25/2019 16:38
Aroclor1248	ND	0.0050	1	10/25/2019 16:38
Aroclor1254	ND	0.0050	1	10/25/2019 16:38
Aroclor1260	ND	0.0050	1	10/25/2019 16:38
PCBs, total	ND	0.0050	1	10/25/2019 16:38

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	94	20-145	10/25/2019 16:38

Analyst(s): CN

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	10/25/19	**Analytical Method:**	SW8081A/8082
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B1-4	1910B43-012A	Soil	10/22/2019 10:45	GC40 10251934.d	187709

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	10/25/2019 16:52
a-BHC	ND	0.00010	1	10/25/2019 16:52
b-BHC	ND	0.00030	1	10/25/2019 16:52
d-BHC	ND	0.00020	1	10/25/2019 16:52
g-BHC	ND	0.00010	1	10/25/2019 16:52
Chlordane (Technical)	ND	0.0025	1	10/25/2019 16:52
a-Chlordane	ND	0.00010	1	10/25/2019 16:52
g-Chlordane	ND	0.00010	1	10/25/2019 16:52
p,p-DDD	ND	0.00010	1	10/25/2019 16:52
p,p-DDE	ND	0.00010	1	10/25/2019 16:52
p,p-DDT	ND	0.00010	1	10/25/2019 16:52
Dieldrin	ND	0.00010	1	10/25/2019 16:52
Endosulfan I	ND	0.00010	1	10/25/2019 16:52
Endosulfan II	ND	0.00010	1	10/25/2019 16:52
Endosulfan sulfate	ND	0.00010	1	10/25/2019 16:52
Endrin	ND	0.00010	1	10/25/2019 16:52
Endrin aldehyde	ND	0.00010	1	10/25/2019 16:52
Endrin ketone	ND	0.00010	1	10/25/2019 16:52
Heptachlor	ND	0.00010	1	10/25/2019 16:52
Heptachlor epoxide	ND	0.00010	1	10/25/2019 16:52
Hexachlorobenzene	ND	0.0010	1	10/25/2019 16:52
Hexachlorocyclopentadiene	ND	0.0020	1	10/25/2019 16:52
Methoxychlor	ND	0.00020	1	10/25/2019 16:52
Toxaphene	ND	0.0050	1	10/25/2019 16:52
Aroclor1016	ND	0.0050	1	10/25/2019 16:52
Aroclor1221	ND	0.0050	1	10/25/2019 16:52
Aroclor1232	ND	0.0050	1	10/25/2019 16:52
Aroclor1242	ND	0.0050	1	10/25/2019 16:52
Aroclor1248	ND	0.0050	1	10/25/2019 16:52
Aroclor1254	ND	0.0050	1	10/25/2019 16:52
Aroclor1260	ND	0.0050	1	10/25/2019 16:52
PCBs, total	ND	0.0050	1	10/25/2019 16:52

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	74	20-145	10/25/2019 16:52

Analyst(s): CN

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	10/25/19	**Analytical Method:**	SW8081A/8082
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B2-5	1910B43-013A	Soil	10/22/2019 10:45	GC40 10251935.d	187709

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00010	1	10/25/2019 17:06
a-BHC	ND		0.00010	1	10/25/2019 17:06
b-BHC	ND		0.00030	1	10/25/2019 17:06
d-BHC	ND		0.00020	1	10/25/2019 17:06
g-BHC	ND		0.00010	1	10/25/2019 17:06
Chlordane (Technical)	ND		0.0025	1	10/25/2019 17:06
a-Chlordane	**0.00012**	P	0.00010	1	10/25/2019 17:06
g-Chlordane	ND		0.00010	1	10/25/2019 17:06
p,p-DDD	ND		0.00010	1	10/25/2019 17:06
p,p-DDE	ND		0.00010	1	10/25/2019 17:06
p,p-DDT	**0.00011**	P	0.00010	1	10/25/2019 17:06
Dieldrin	ND		0.00010	1	10/25/2019 17:06
Endosulfan I	ND		0.00010	1	10/25/2019 17:06
Endosulfan II	ND		0.00010	1	10/25/2019 17:06
Endosulfan sulfate	ND		0.00010	1	10/25/2019 17:06
Endrin	ND		0.00010	1	10/25/2019 17:06
Endrin aldehyde	ND		0.00010	1	10/25/2019 17:06
Endrin ketone	ND		0.00010	1	10/25/2019 17:06
Heptachlor	ND		0.00010	1	10/25/2019 17:06
Heptachlor epoxide	ND		0.00010	1	10/25/2019 17:06
Hexachlorobenzene	ND		0.0010	1	10/25/2019 17:06
Hexachlorocyclopentadiene	ND		0.0020	1	10/25/2019 17:06
Methoxychlor	ND		0.00020	1	10/25/2019 17:06
Toxaphene	ND		0.0050	1	10/25/2019 17:06
Aroclor1016	ND		0.0050	1	10/25/2019 17:06
Aroclor1221	ND		0.0050	1	10/25/2019 17:06
Aroclor1232	ND		0.0050	1	10/25/2019 17:06
Aroclor1242	ND		0.0050	1	10/25/2019 17:06
Aroclor1248	ND		0.0050	1	10/25/2019 17:06
Aroclor1254	ND		0.0050	1	10/25/2019 17:06
Aroclor1260	ND		0.0050	1	10/25/2019 17:06
PCBs, total	ND		0.0050	1	10/25/2019 17:06

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	82	20-145	10/25/2019 17:06

Analyst(s): CN

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	1910B43-001A	Soil	10/22/2019 08:30	GC18 10241929.D	187630

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	10/25/2019 01:50
tert-Amyl methyl ether (TAME)	ND	0.0050	1	10/25/2019 01:50
Benzene	ND	0.0050	1	10/25/2019 01:50
Bromobenzene	ND	0.0050	1	10/25/2019 01:50
Bromochloromethane	ND	0.0050	1	10/25/2019 01:50
Bromodichloromethane	ND	0.0010	1	10/25/2019 01:50
Bromoform	ND	0.0050	1	10/25/2019 01:50
Bromomethane	ND	0.0050	1	10/25/2019 01:50
2-Butanone (MEK)	ND	0.020	1	10/25/2019 01:50
t-Butyl alcohol (TBA)	ND	0.050	1	10/25/2019 01:50
n-Butyl benzene	ND	0.0050	1	10/25/2019 01:50
sec-Butyl benzene	ND	0.0050	1	10/25/2019 01:50
tert-Butyl benzene	ND	0.0050	1	10/25/2019 01:50
Carbon Disulfide	ND	0.0050	1	10/25/2019 01:50
Carbon Tetrachloride	ND	0.0050	1	10/25/2019 01:50
Chlorobenzene	ND	0.0050	1	10/25/2019 01:50
Chloroethane	ND	0.0050	1	10/25/2019 01:50
Chloroform	ND	0.0050	1	10/25/2019 01:50
Chloromethane	ND	0.0050	1	10/25/2019 01:50
2-Chlorotoluene	ND	0.0050	1	10/25/2019 01:50
4-Chlorotoluene	ND	0.0050	1	10/25/2019 01:50
Dibromochloromethane	ND	0.0050	1	10/25/2019 01:50
1,2-Dibromo-3-chloropropane	ND	0.00025	1	10/25/2019 01:50
1,2-Dibromoethane (EDB)	ND	0.00010	1	10/25/2019 01:50
Dibromomethane	ND	0.0050	1	10/25/2019 01:50
1,2-Dichlorobenzene	ND	0.0050	1	10/25/2019 01:50
1,3-Dichlorobenzene	ND	0.0050	1	10/25/2019 01:50
1,4-Dichlorobenzene	ND	0.0050	1	10/25/2019 01:50
Dichlorodifluoromethane	ND	0.0050	1	10/25/2019 01:50
1,1-Dichloroethane	ND	0.0050	1	10/25/2019 01:50
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	10/25/2019 01:50
1,1-Dichloroethene	ND	0.00025	1	10/25/2019 01:50
cis-1,2-Dichloroethene	ND	0.0050	1	10/25/2019 01:50
trans-1,2-Dichloroethene	ND	0.0050	1	10/25/2019 01:50
1,2-Dichloropropane	ND	0.0050	1	10/25/2019 01:50
1,3-Dichloropropane	ND	0.0050	1	10/25/2019 01:50
2,2-Dichloropropane	ND	0.0050	1	10/25/2019 01:50

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	1910B43-001A	Soil	10/22/2019 08:30	GC18 10241929.D	187630

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	10/25/2019 01:50
cis-1,3-Dichloropropene	ND	0.0050	1	10/25/2019 01:50
trans-1,3-Dichloropropene	ND	0.0050	1	10/25/2019 01:50
Diisopropyl ether (DIPE)	ND	0.0050	1	10/25/2019 01:50
Ethylbenzene	ND	0.0050	1	10/25/2019 01:50
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	10/25/2019 01:50
Freon 113	ND	0.0050	1	10/25/2019 01:50
Hexachlorobutadiene	ND	0.0050	1	10/25/2019 01:50
Hexachloroethane	ND	0.0050	1	10/25/2019 01:50
2-Hexanone	ND	0.0050	1	10/25/2019 01:50
Isopropylbenzene	ND	0.0050	1	10/25/2019 01:50
4-Isopropyl toluene	ND	0.0050	1	10/25/2019 01:50
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	10/25/2019 01:50
Methylene chloride	ND	0.010	1	10/25/2019 01:50
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	10/25/2019 01:50
Naphthalene	ND	0.0050	1	10/25/2019 01:50
n-Propyl benzene	ND	0.0050	1	10/25/2019 01:50
Styrene	ND	0.0050	1	10/25/2019 01:50
1,1,1,2-Tetrachloroethane	ND	0.0050	1	10/25/2019 01:50
1,1,2,2-Tetrachloroethane	ND	0.00025	1	10/25/2019 01:50
Tetrachloroethene	ND	0.0010	1	10/25/2019 01:50
Toluene	ND	0.0050	1	10/25/2019 01:50
1,2,3-Trichlorobenzene	ND	0.0050	1	10/25/2019 01:50
1,2,4-Trichlorobenzene	ND	0.0050	1	10/25/2019 01:50
1,1,1-Trichloroethane	ND	0.0050	1	10/25/2019 01:50
1,1,2-Trichloroethane	ND	0.0050	1	10/25/2019 01:50
Trichloroethene	ND	0.0050	1	10/25/2019 01:50
Trichlorofluoromethane	ND	0.0050	1	10/25/2019 01:50
1,2,3-Trichloropropane	ND	0.00010	1	10/25/2019 01:50
1,2,4-Trimethylbenzene	ND	0.0050	1	10/25/2019 01:50
1,3,5-Trimethylbenzene	ND	0.0050	1	10/25/2019 01:50
Vinyl Chloride	ND	0.00025	1	10/25/2019 01:50
m,p-Xylene	ND	0.0050	1	10/25/2019 01:50
o-Xylene	ND	0.0050	1	10/25/2019 01:50
Xylenes, Total	ND	0.0050	1	10/25/2019 01:50

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	1910B43-001A	Soil	10/22/2019 08:30	GC18 10241929.D	187630

Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)	Qualifiers	Limits		
Dibromofluoromethane	99		82-136		10/25/2019 01:50
Toluene-d8	90	S	92-139		10/25/2019 01:50
4-BFB	84		82-135		10/25/2019 01:50
Benzene-d6	71		55-122		10/25/2019 01:50
Ethylbenzene-d10	75		58-141		10/25/2019 01:50
1,2-DCB-d4	64		51-107		10/25/2019 01:50

Analyst(s): AK

Analytical Comments: c2

(Cont.)

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"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	1910B43-005A	Soil	10/22/2019 08:30	GC18 10241923.D	187630

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	10/24/2019 21:51
tert-Amyl methyl ether (TAME)	ND	0.0050	1	10/24/2019 21:51
Benzene	ND	0.0050	1	10/24/2019 21:51
Bromobenzene	ND	0.0050	1	10/24/2019 21:51
Bromochloromethane	ND	0.0050	1	10/24/2019 21:51
Bromodichloromethane	ND	0.0010	1	10/24/2019 21:51
Bromoform	ND	0.0050	1	10/24/2019 21:51
Bromomethane	ND	0.0050	1	10/24/2019 21:51
2-Butanone (MEK)	ND	0.020	1	10/24/2019 21:51
t-Butyl alcohol (TBA)	ND	0.050	1	10/24/2019 21:51
n-Butyl benzene	ND	0.0050	1	10/24/2019 21:51
sec-Butyl benzene	ND	0.0050	1	10/24/2019 21:51
tert-Butyl benzene	ND	0.0050	1	10/24/2019 21:51
Carbon Disulfide	ND	0.0050	1	10/24/2019 21:51
Carbon Tetrachloride	ND	0.0050	1	10/24/2019 21:51
Chlorobenzene	ND	0.0050	1	10/24/2019 21:51
Chloroethane	ND	0.0050	1	10/24/2019 21:51
Chloroform	ND	0.0050	1	10/24/2019 21:51
Chloromethane	ND	0.0050	1	10/24/2019 21:51
2-Chlorotoluene	ND	0.0050	1	10/24/2019 21:51
4-Chlorotoluene	ND	0.0050	1	10/24/2019 21:51
Dibromochloromethane	ND	0.0050	1	10/24/2019 21:51
1,2-Dibromo-3-chloropropane	ND	0.00025	1	10/24/2019 21:51
1,2-Dibromoethane (EDB)	ND	0.00010	1	10/24/2019 21:51
Dibromomethane	ND	0.0050	1	10/24/2019 21:51
1,2-Dichlorobenzene	ND	0.0050	1	10/24/2019 21:51
1,3-Dichlorobenzene	ND	0.0050	1	10/24/2019 21:51
1,4-Dichlorobenzene	ND	0.0050	1	10/24/2019 21:51
Dichlorodifluoromethane	ND	0.0050	1	10/24/2019 21:51
1,1-Dichloroethane	ND	0.0050	1	10/24/2019 21:51
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	10/24/2019 21:51
1,1-Dichloroethene	ND	0.00025	1	10/24/2019 21:51
cis-1,2-Dichloroethene	ND	0.0050	1	10/24/2019 21:51
trans-1,2-Dichloroethene	ND	0.0050	1	10/24/2019 21:51
1,2-Dichloropropane	ND	0.0050	1	10/24/2019 21:51
1,3-Dichloropropane	ND	0.0050	1	10/24/2019 21:51
2,2-Dichloropropane	ND	0.0050	1	10/24/2019 21:51

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	1910B43-005A	Soil	10/22/2019 08:30	GC18 10241923.D	187630

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	10/24/2019 21:51
cis-1,3-Dichloropropene	ND	0.0050	1	10/24/2019 21:51
trans-1,3-Dichloropropene	ND	0.0050	1	10/24/2019 21:51
Diisopropyl ether (DIPE)	ND	0.0050	1	10/24/2019 21:51
Ethylbenzene	ND	0.0050	1	10/24/2019 21:51
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	10/24/2019 21:51
Freon 113	ND	0.0050	1	10/24/2019 21:51
Hexachlorobutadiene	ND	0.0050	1	10/24/2019 21:51
Hexachloroethane	ND	0.0050	1	10/24/2019 21:51
2-Hexanone	ND	0.0050	1	10/24/2019 21:51
Isopropylbenzene	ND	0.0050	1	10/24/2019 21:51
4-Isopropyl toluene	ND	0.0050	1	10/24/2019 21:51
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	10/24/2019 21:51
Methylene chloride	ND	0.010	1	10/24/2019 21:51
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	10/24/2019 21:51
Naphthalene	ND	0.0050	1	10/24/2019 21:51
n-Propyl benzene	ND	0.0050	1	10/24/2019 21:51
Styrene	ND	0.0050	1	10/24/2019 21:51
1,1,1,2-Tetrachloroethane	ND	0.0050	1	10/24/2019 21:51
1,1,2,2-Tetrachloroethane	ND	0.00025	1	10/24/2019 21:51
Tetrachloroethene	**0.0010**	0.0010	1	10/24/2019 21:51
Toluene	ND	0.0050	1	10/24/2019 21:51
1,2,3-Trichlorobenzene	ND	0.0050	1	10/24/2019 21:51
1,2,4-Trichlorobenzene	ND	0.0050	1	10/24/2019 21:51
1,1,1-Trichloroethane	ND	0.0050	1	10/24/2019 21:51
1,1,2-Trichloroethane	ND	0.0050	1	10/24/2019 21:51
Trichloroethene	ND	0.0050	1	10/24/2019 21:51
Trichlorofluoromethane	ND	0.0050	1	10/24/2019 21:51
1,2,3-Trichloropropane	ND	0.00010	1	10/24/2019 21:51
1,2,4-Trimethylbenzene	ND	0.0050	1	10/24/2019 21:51
1,3,5-Trimethylbenzene	ND	0.0050	1	10/24/2019 21:51
Vinyl Chloride	ND	0.00025	1	10/24/2019 21:51
m,p-Xylene	ND	0.0050	1	10/24/2019 21:51
o-Xylene	ND	0.0050	1	10/24/2019 21:51
Xylenes, Total	ND	0.0050	1	10/24/2019 21:51

(Cont.)

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Analytical Report

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Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	1910B43-005A	Soil	10/22/2019 08:30	GC18 10241923.D	187630

Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)	Qualifiers	Limits		
Dibromofluoromethane	98		82-136		10/24/2019 21:51
Toluene-d8	90	S	92-139		10/24/2019 21:51
4-BFB	82		82-135		10/24/2019 21:51
Benzene-d6	70		55-122		10/24/2019 21:51
Ethylbenzene-d10	75		58-141		10/24/2019 21:51
1,2-DCB-d4	63		51-107		10/24/2019 21:51

Analyst(s): AK

Analytical Comments: c2

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	1910B43-006A	Soil	10/22/2019 08:30	GC18 10241924.D	187630

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	10/24/2019 22:31
tert-Amyl methyl ether (TAME)	ND	0.0050	1	10/24/2019 22:31
Benzene	ND	0.0050	1	10/24/2019 22:31
Bromobenzene	ND	0.0050	1	10/24/2019 22:31
Bromochloromethane	ND	0.0050	1	10/24/2019 22:31
Bromodichloromethane	ND	0.0010	1	10/24/2019 22:31
Bromoform	ND	0.0050	1	10/24/2019 22:31
Bromomethane	ND	0.0050	1	10/24/2019 22:31
2-Butanone (MEK)	ND	0.020	1	10/24/2019 22:31
t-Butyl alcohol (TBA)	ND	0.050	1	10/24/2019 22:31
n-Butyl benzene	ND	0.0050	1	10/24/2019 22:31
sec-Butyl benzene	ND	0.0050	1	10/24/2019 22:31
tert-Butyl benzene	ND	0.0050	1	10/24/2019 22:31
Carbon Disulfide	ND	0.0050	1	10/24/2019 22:31
Carbon Tetrachloride	ND	0.0050	1	10/24/2019 22:31
Chlorobenzene	ND	0.0050	1	10/24/2019 22:31
Chloroethane	ND	0.0050	1	10/24/2019 22:31
Chloroform	ND	0.0050	1	10/24/2019 22:31
Chloromethane	ND	0.0050	1	10/24/2019 22:31
2-Chlorotoluene	ND	0.0050	1	10/24/2019 22:31
4-Chlorotoluene	ND	0.0050	1	10/24/2019 22:31
Dibromochloromethane	ND	0.0050	1	10/24/2019 22:31
1,2-Dibromo-3-chloropropane	ND	0.00025	1	10/24/2019 22:31
1,2-Dibromoethane (EDB)	ND	0.00010	1	10/24/2019 22:31
Dibromomethane	ND	0.0050	1	10/24/2019 22:31
1,2-Dichlorobenzene	ND	0.0050	1	10/24/2019 22:31
1,3-Dichlorobenzene	ND	0.0050	1	10/24/2019 22:31
1,4-Dichlorobenzene	ND	0.0050	1	10/24/2019 22:31
Dichlorodifluoromethane	ND	0.0050	1	10/24/2019 22:31
1,1-Dichloroethane	ND	0.0050	1	10/24/2019 22:31
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	10/24/2019 22:31
1,1-Dichloroethene	ND	0.00025	1	10/24/2019 22:31
cis-1,2-Dichloroethene	ND	0.0050	1	10/24/2019 22:31
trans-1,2-Dichloroethene	ND	0.0050	1	10/24/2019 22:31
1,2-Dichloropropane	ND	0.0050	1	10/24/2019 22:31
1,3-Dichloropropane	ND	0.0050	1	10/24/2019 22:31
2,2-Dichloropropane	ND	0.0050	1	10/24/2019 22:31

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	1910B43-006A	Soil	10/22/2019 08:30	GC18 10241924.D	187630

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	10/24/2019 22:31
cis-1,3-Dichloropropene	ND	0.0050	1	10/24/2019 22:31
trans-1,3-Dichloropropene	ND	0.0050	1	10/24/2019 22:31
Diisopropyl ether (DIPE)	ND	0.0050	1	10/24/2019 22:31
Ethylbenzene	ND	0.0050	1	10/24/2019 22:31
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	10/24/2019 22:31
Freon 113	ND	0.0050	1	10/24/2019 22:31
Hexachlorobutadiene	ND	0.0050	1	10/24/2019 22:31
Hexachloroethane	ND	0.0050	1	10/24/2019 22:31
2-Hexanone	ND	0.0050	1	10/24/2019 22:31
Isopropylbenzene	ND	0.0050	1	10/24/2019 22:31
4-Isopropyl toluene	ND	0.0050	1	10/24/2019 22:31
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	10/24/2019 22:31
Methylene chloride	ND	0.010	1	10/24/2019 22:31
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	10/24/2019 22:31
Naphthalene	ND	0.0050	1	10/24/2019 22:31
n-Propyl benzene	ND	0.0050	1	10/24/2019 22:31
Styrene	ND	0.0050	1	10/24/2019 22:31
1,1,1,2-Tetrachloroethane	ND	0.0050	1	10/24/2019 22:31
1,1,2,2-Tetrachloroethane	ND	0.00025	1	10/24/2019 22:31
Tetrachloroethene	ND	0.0010	1	10/24/2019 22:31
Toluene	ND	0.0050	1	10/24/2019 22:31
1,2,3-Trichlorobenzene	ND	0.0050	1	10/24/2019 22:31
1,2,4-Trichlorobenzene	ND	0.0050	1	10/24/2019 22:31
1,1,1-Trichloroethane	ND	0.0050	1	10/24/2019 22:31
1,1,2-Trichloroethane	ND	0.0050	1	10/24/2019 22:31
Trichloroethene	ND	0.0050	1	10/24/2019 22:31
Trichlorofluoromethane	ND	0.0050	1	10/24/2019 22:31
1,2,3-Trichloropropane	ND	0.00010	1	10/24/2019 22:31
1,2,4-Trimethylbenzene	ND	0.0050	1	10/24/2019 22:31
1,3,5-Trimethylbenzene	ND	0.0050	1	10/24/2019 22:31
Vinyl Chloride	ND	0.00025	1	10/24/2019 22:31
m,p-Xylene	ND	0.0050	1	10/24/2019 22:31
o-Xylene	ND	0.0050	1	10/24/2019 22:31
Xylenes, Total	ND	0.0050	1	10/24/2019 22:31

(Cont.)

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	1910B43-006A	Soil	10/22/2019 08:30	GC18 10241924.D	187630

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	98	82-136		10/24/2019 22:31
Toluene-d8	92	92-139		10/24/2019 22:31
4-BFB	85	82-135		10/24/2019 22:31
Benzene-d6	87	55-122		10/24/2019 22:31
Ethylbenzene-d10	94	58-141		10/24/2019 22:31
1,2-DCB-d4	76	51-107		10/24/2019 22:31

Analyst(s): AK

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B5-2	1910B43-007A	Soil	10/22/2019 08:30	GC18 10241925.D	187630

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	10/24/2019 23:11
tert-Amyl methyl ether (TAME)	ND	0.0050	1	10/24/2019 23:11
Benzene	ND	0.0050	1	10/24/2019 23:11
Bromobenzene	ND	0.0050	1	10/24/2019 23:11
Bromochloromethane	ND	0.0050	1	10/24/2019 23:11
Bromodichloromethane	ND	0.0010	1	10/24/2019 23:11
Bromoform	ND	0.0050	1	10/24/2019 23:11
Bromomethane	ND	0.0050	1	10/24/2019 23:11
2-Butanone (MEK)	ND	0.020	1	10/24/2019 23:11
t-Butyl alcohol (TBA)	ND	0.050	1	10/24/2019 23:11
n-Butyl benzene	ND	0.0050	1	10/24/2019 23:11
sec-Butyl benzene	ND	0.0050	1	10/24/2019 23:11
tert-Butyl benzene	ND	0.0050	1	10/24/2019 23:11
Carbon Disulfide	ND	0.0050	1	10/24/2019 23:11
Carbon Tetrachloride	ND	0.0050	1	10/24/2019 23:11
Chlorobenzene	ND	0.0050	1	10/24/2019 23:11
Chloroethane	ND	0.0050	1	10/24/2019 23:11
Chloroform	ND	0.0050	1	10/24/2019 23:11
Chloromethane	ND	0.0050	1	10/24/2019 23:11
2-Chlorotoluene	ND	0.0050	1	10/24/2019 23:11
4-Chlorotoluene	ND	0.0050	1	10/24/2019 23:11
Dibromochloromethane	ND	0.0050	1	10/24/2019 23:11
1,2-Dibromo-3-chloropropane	ND	0.00025	1	10/24/2019 23:11
1,2-Dibromoethane (EDB)	ND	0.00010	1	10/24/2019 23:11
Dibromomethane	ND	0.0050	1	10/24/2019 23:11
1,2-Dichlorobenzene	ND	0.0050	1	10/24/2019 23:11
1,3-Dichlorobenzene	ND	0.0050	1	10/24/2019 23:11
1,4-Dichlorobenzene	ND	0.0050	1	10/24/2019 23:11
Dichlorodifluoromethane	ND	0.0050	1	10/24/2019 23:11
1,1-Dichloroethane	ND	0.0050	1	10/24/2019 23:11
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	10/24/2019 23:11
1,1-Dichloroethene	ND	0.00025	1	10/24/2019 23:11
cis-1,2-Dichloroethene	ND	0.0050	1	10/24/2019 23:11
trans-1,2-Dichloroethene	ND	0.0050	1	10/24/2019 23:11
1,2-Dichloropropane	ND	0.0050	1	10/24/2019 23:11
1,3-Dichloropropane	ND	0.0050	1	10/24/2019 23:11
2,2-Dichloropropane	ND	0.0050	1	10/24/2019 23:11

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B5-2	1910B43-007A	Soil	10/22/2019 08:30	GC18 10241925.D	187630

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	10/24/2019 23:11
cis-1,3-Dichloropropene	ND	0.0050	1	10/24/2019 23:11
trans-1,3-Dichloropropene	ND	0.0050	1	10/24/2019 23:11
Diisopropyl ether (DIPE)	ND	0.0050	1	10/24/2019 23:11
Ethylbenzene	ND	0.0050	1	10/24/2019 23:11
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	10/24/2019 23:11
Freon 113	ND	0.0050	1	10/24/2019 23:11
Hexachlorobutadiene	ND	0.0050	1	10/24/2019 23:11
Hexachloroethane	ND	0.0050	1	10/24/2019 23:11
2-Hexanone	ND	0.0050	1	10/24/2019 23:11
Isopropylbenzene	ND	0.0050	1	10/24/2019 23:11
4-Isopropyl toluene	ND	0.0050	1	10/24/2019 23:11
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	10/24/2019 23:11
Methylene chloride	ND	0.010	1	10/24/2019 23:11
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	10/24/2019 23:11
Naphthalene	ND	0.0050	1	10/24/2019 23:11
n-Propyl benzene	ND	0.0050	1	10/24/2019 23:11
Styrene	ND	0.0050	1	10/24/2019 23:11
1,1,1,2-Tetrachloroethane	ND	0.0050	1	10/24/2019 23:11
1,1,2,2-Tetrachloroethane	ND	0.00025	1	10/24/2019 23:11
Tetrachloroethene	**0.0020**	0.0010	1	10/24/2019 23:11
Toluene	ND	0.0050	1	10/24/2019 23:11
1,2,3-Trichlorobenzene	ND	0.0050	1	10/24/2019 23:11
1,2,4-Trichlorobenzene	ND	0.0050	1	10/24/2019 23:11
1,1,1-Trichloroethane	ND	0.0050	1	10/24/2019 23:11
1,1,2-Trichloroethane	ND	0.0050	1	10/24/2019 23:11
Trichloroethene	ND	0.0050	1	10/24/2019 23:11
Trichlorofluoromethane	ND	0.0050	1	10/24/2019 23:11
1,2,3-Trichloropropane	ND	0.00010	1	10/24/2019 23:11
1,2,4-Trimethylbenzene	ND	0.0050	1	10/24/2019 23:11
1,3,5-Trimethylbenzene	ND	0.0050	1	10/24/2019 23:11
Vinyl Chloride	ND	0.00025	1	10/24/2019 23:11
m,p-Xylene	ND	0.0050	1	10/24/2019 23:11
o-Xylene	ND	0.0050	1	10/24/2019 23:11
Xylenes, Total	ND	0.0050	1	10/24/2019 23:11

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B5-2	1910B43-007A	Soil	10/22/2019 08:30	GC18 10241925.D	187630

Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)	Qualifiers	Limits		
Dibromofluoromethane	94		82-136		10/24/2019 23:11
Toluene-d8	90	S	92-139		10/24/2019 23:11
4-BFB	85		82-135		10/24/2019 23:11
Benzene-d6	72		55-122		10/24/2019 23:11
Ethylbenzene-d10	81		58-141		10/24/2019 23:11
1,2-DCB-d4	67		51-107		10/24/2019 23:11

Analyst(s): AK

Analytical Comments: c2

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B3-3	1910B43-009A	Soil	10/22/2019 08:30	GC18 10241926.D	187630

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	10/24/2019 23:51
tert-Amyl methyl ether (TAME)	ND	0.0050	1	10/24/2019 23:51
Benzene	ND	0.0050	1	10/24/2019 23:51
Bromobenzene	ND	0.0050	1	10/24/2019 23:51
Bromochloromethane	ND	0.0050	1	10/24/2019 23:51
Bromodichloromethane	ND	0.0010	1	10/24/2019 23:51
Bromoform	ND	0.0050	1	10/24/2019 23:51
Bromomethane	ND	0.0050	1	10/24/2019 23:51
2-Butanone (MEK)	ND	0.020	1	10/24/2019 23:51
t-Butyl alcohol (TBA)	ND	0.050	1	10/24/2019 23:51
n-Butyl benzene	ND	0.0050	1	10/24/2019 23:51
sec-Butyl benzene	ND	0.0050	1	10/24/2019 23:51
tert-Butyl benzene	ND	0.0050	1	10/24/2019 23:51
Carbon Disulfide	ND	0.0050	1	10/24/2019 23:51
Carbon Tetrachloride	ND	0.0050	1	10/24/2019 23:51
Chlorobenzene	ND	0.0050	1	10/24/2019 23:51
Chloroethane	ND	0.0050	1	10/24/2019 23:51
Chloroform	ND	0.0050	1	10/24/2019 23:51
Chloromethane	ND	0.0050	1	10/24/2019 23:51
2-Chlorotoluene	ND	0.0050	1	10/24/2019 23:51
4-Chlorotoluene	ND	0.0050	1	10/24/2019 23:51
Dibromochloromethane	ND	0.0050	1	10/24/2019 23:51
1,2-Dibromo-3-chloropropane	ND	0.00025	1	10/24/2019 23:51
1,2-Dibromoethane (EDB)	ND	0.00010	1	10/24/2019 23:51
Dibromomethane	ND	0.0050	1	10/24/2019 23:51
1,2-Dichlorobenzene	ND	0.0050	1	10/24/2019 23:51
1,3-Dichlorobenzene	ND	0.0050	1	10/24/2019 23:51
1,4-Dichlorobenzene	ND	0.0050	1	10/24/2019 23:51
Dichlorodifluoromethane	ND	0.0050	1	10/24/2019 23:51
1,1-Dichloroethane	ND	0.0050	1	10/24/2019 23:51
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	10/24/2019 23:51
1,1-Dichloroethene	ND	0.00025	1	10/24/2019 23:51
cis-1,2-Dichloroethene	ND	0.0050	1	10/24/2019 23:51
trans-1,2-Dichloroethene	ND	0.0050	1	10/24/2019 23:51
1,2-Dichloropropane	ND	0.0050	1	10/24/2019 23:51
1,3-Dichloropropane	ND	0.0050	1	10/24/2019 23:51
2,2-Dichloropropane	ND	0.0050	1	10/24/2019 23:51

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B3-3	1910B43-009A	Soil	10/22/2019 08:30	GC18 10241926.D	187630

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	10/24/2019 23:51
cis-1,3-Dichloropropene	ND	0.0050	1	10/24/2019 23:51
trans-1,3-Dichloropropene	ND	0.0050	1	10/24/2019 23:51
Diisopropyl ether (DIPE)	ND	0.0050	1	10/24/2019 23:51
Ethylbenzene	ND	0.0050	1	10/24/2019 23:51
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	10/24/2019 23:51
Freon 113	ND	0.0050	1	10/24/2019 23:51
Hexachlorobutadiene	ND	0.0050	1	10/24/2019 23:51
Hexachloroethane	ND	0.0050	1	10/24/2019 23:51
2-Hexanone	ND	0.0050	1	10/24/2019 23:51
Isopropylbenzene	ND	0.0050	1	10/24/2019 23:51
4-Isopropyl toluene	ND	0.0050	1	10/24/2019 23:51
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	10/24/2019 23:51
Methylene chloride	ND	0.010	1	10/24/2019 23:51
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	10/24/2019 23:51
Naphthalene	ND	0.0050	1	10/24/2019 23:51
n-Propyl benzene	ND	0.0050	1	10/24/2019 23:51
Styrene	ND	0.0050	1	10/24/2019 23:51
1,1,1,2-Tetrachloroethane	ND	0.0050	1	10/24/2019 23:51
1,1,2,2-Tetrachloroethane	ND	0.00025	1	10/24/2019 23:51
Tetrachloroethene	**0.0020**	0.0010	1	10/24/2019 23:51
Toluene	ND	0.0050	1	10/24/2019 23:51
1,2,3-Trichlorobenzene	ND	0.0050	1	10/24/2019 23:51
1,2,4-Trichlorobenzene	ND	0.0050	1	10/24/2019 23:51
1,1,1-Trichloroethane	ND	0.0050	1	10/24/2019 23:51
1,1,2-Trichloroethane	ND	0.0050	1	10/24/2019 23:51
Trichloroethene	ND	0.0050	1	10/24/2019 23:51
Trichlorofluoromethane	ND	0.0050	1	10/24/2019 23:51
1,2,3-Trichloropropane	ND	0.00010	1	10/24/2019 23:51
1,2,4-Trimethylbenzene	ND	0.0050	1	10/24/2019 23:51
1,3,5-Trimethylbenzene	ND	0.0050	1	10/24/2019 23:51
Vinyl Chloride	ND	0.00025	1	10/24/2019 23:51
m,p-Xylene	ND	0.0050	1	10/24/2019 23:51
o-Xylene	ND	0.0050	1	10/24/2019 23:51
Xylenes, Total	ND	0.0050	1	10/24/2019 23:51

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B3-3	1910B43-009A	Soil	10/22/2019 08:30	GC18 10241926.D	187630

Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)	Qualifiers	Limits		
Dibromofluoromethane	93		82-136		10/24/2019 23:51
Toluene-d8	91	S	92-139		10/24/2019 23:51
4-BFB	85		82-135		10/24/2019 23:51
Benzene-d6	75		55-122		10/24/2019 23:51
Ethylbenzene-d10	85		58-141		10/24/2019 23:51
1,2-DCB-d4	71		51-107		10/24/2019 23:51

Analyst(s): AK

Analytical Comments: c2

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B1-4	1910B43-012A	Soil	10/22/2019 10:45	GC18 10241927.D	187630

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	10/25/2019 00:31
tert-Amyl methyl ether (TAME)	ND	0.0050	1	10/25/2019 00:31
Benzene	ND	0.0050	1	10/25/2019 00:31
Bromobenzene	ND	0.0050	1	10/25/2019 00:31
Bromochloromethane	ND	0.0050	1	10/25/2019 00:31
Bromodichloromethane	ND	0.0010	1	10/25/2019 00:31
Bromoform	ND	0.0050	1	10/25/2019 00:31
Bromomethane	ND	0.0050	1	10/25/2019 00:31
2-Butanone (MEK)	ND	0.020	1	10/25/2019 00:31
t-Butyl alcohol (TBA)	ND	0.050	1	10/25/2019 00:31
n-Butyl benzene	ND	0.0050	1	10/25/2019 00:31
sec-Butyl benzene	ND	0.0050	1	10/25/2019 00:31
tert-Butyl benzene	ND	0.0050	1	10/25/2019 00:31
Carbon Disulfide	ND	0.0050	1	10/25/2019 00:31
Carbon Tetrachloride	ND	0.0050	1	10/25/2019 00:31
Chlorobenzene	ND	0.0050	1	10/25/2019 00:31
Chloroethane	ND	0.0050	1	10/25/2019 00:31
Chloroform	ND	0.0050	1	10/25/2019 00:31
Chloromethane	ND	0.0050	1	10/25/2019 00:31
2-Chlorotoluene	ND	0.0050	1	10/25/2019 00:31
4-Chlorotoluene	ND	0.0050	1	10/25/2019 00:31
Dibromochloromethane	ND	0.0050	1	10/25/2019 00:31
1,2-Dibromo-3-chloropropane	ND	0.00025	1	10/25/2019 00:31
1,2-Dibromoethane (EDB)	ND	0.00010	1	10/25/2019 00:31
Dibromomethane	ND	0.0050	1	10/25/2019 00:31
1,2-Dichlorobenzene	ND	0.0050	1	10/25/2019 00:31
1,3-Dichlorobenzene	ND	0.0050	1	10/25/2019 00:31
1,4-Dichlorobenzene	ND	0.0050	1	10/25/2019 00:31
Dichlorodifluoromethane	ND	0.0050	1	10/25/2019 00:31
1,1-Dichloroethane	ND	0.0050	1	10/25/2019 00:31
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	10/25/2019 00:31
1,1-Dichloroethene	ND	0.00025	1	10/25/2019 00:31
cis-1,2-Dichloroethene	ND	0.0050	1	10/25/2019 00:31
trans-1,2-Dichloroethene	ND	0.0050	1	10/25/2019 00:31
1,2-Dichloropropane	ND	0.0050	1	10/25/2019 00:31
1,3-Dichloropropane	ND	0.0050	1	10/25/2019 00:31
2,2-Dichloropropane	ND	0.0050	1	10/25/2019 00:31

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B1-4	1910B43-012A	Soil	10/22/2019 10:45	GC18 10241927.D	187630

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	10/25/2019 00:31
cis-1,3-Dichloropropene	ND	0.0050	1	10/25/2019 00:31
trans-1,3-Dichloropropene	ND	0.0050	1	10/25/2019 00:31
Diisopropyl ether (DIPE)	ND	0.0050	1	10/25/2019 00:31
Ethylbenzene	ND	0.0050	1	10/25/2019 00:31
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	10/25/2019 00:31
Freon 113	ND	0.0050	1	10/25/2019 00:31
Hexachlorobutadiene	ND	0.0050	1	10/25/2019 00:31
Hexachloroethane	ND	0.0050	1	10/25/2019 00:31
2-Hexanone	ND	0.0050	1	10/25/2019 00:31
Isopropylbenzene	ND	0.0050	1	10/25/2019 00:31
4-Isopropyl toluene	ND	0.0050	1	10/25/2019 00:31
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	10/25/2019 00:31
Methylene chloride	ND	0.010	1	10/25/2019 00:31
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	10/25/2019 00:31
Naphthalene	ND	0.0050	1	10/25/2019 00:31
n-Propyl benzene	ND	0.0050	1	10/25/2019 00:31
Styrene	ND	0.0050	1	10/25/2019 00:31
1,1,1,2-Tetrachloroethane	ND	0.0050	1	10/25/2019 00:31
1,1,2,2-Tetrachloroethane	ND	0.00025	1	10/25/2019 00:31
Tetrachloroethene	ND	0.0010	1	10/25/2019 00:31
Toluene	ND	0.0050	1	10/25/2019 00:31
1,2,3-Trichlorobenzene	ND	0.0050	1	10/25/2019 00:31
1,2,4-Trichlorobenzene	ND	0.0050	1	10/25/2019 00:31
1,1,1-Trichloroethane	ND	0.0050	1	10/25/2019 00:31
1,1,2-Trichloroethane	ND	0.0050	1	10/25/2019 00:31
Trichloroethene	ND	0.0050	1	10/25/2019 00:31
Trichlorofluoromethane	ND	0.0050	1	10/25/2019 00:31
1,2,3-Trichloropropane	ND	0.00010	1	10/25/2019 00:31
1,2,4-Trimethylbenzene	ND	0.0050	1	10/25/2019 00:31
1,3,5-Trimethylbenzene	ND	0.0050	1	10/25/2019 00:31
Vinyl Chloride	ND	0.00025	1	10/25/2019 00:31
m,p-Xylene	ND	0.0050	1	10/25/2019 00:31
o-Xylene	ND	0.0050	1	10/25/2019 00:31
Xylenes, Total	ND	0.0050	1	10/25/2019 00:31

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McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B1-4	**1910B43-012A**	**Soil**	**10/22/2019 10:45**	**GC18 10241927.D**	**187630**

Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)	Qualifiers	Limits		
Dibromofluoromethane	92		82-136		10/25/2019 00:31
Toluene-d8	90	S	92-139		10/25/2019 00:31
4-BFB	86		82-135		10/25/2019 00:31
Benzene-d6	79		55-122		10/25/2019 00:31
Ethylbenzene-d10	89		58-141		10/25/2019 00:31
1,2-DCB-d4	74		51-107		10/25/2019 00:31

Analyst(s): AK

Analytical Comments: c2

(Cont.)

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B2-5	1910B43-013A	Soil	10/22/2019 10:45	GC18 10241928.D	187630

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	10/25/2019 01:10
tert-Amyl methyl ether (TAME)	ND	0.0050	1	10/25/2019 01:10
Benzene	ND	0.0050	1	10/25/2019 01:10
Bromobenzene	ND	0.0050	1	10/25/2019 01:10
Bromochloromethane	ND	0.0050	1	10/25/2019 01:10
Bromodichloromethane	ND	0.0010	1	10/25/2019 01:10
Bromoform	ND	0.0050	1	10/25/2019 01:10
Bromomethane	ND	0.0050	1	10/25/2019 01:10
2-Butanone (MEK)	ND	0.020	1	10/25/2019 01:10
t-Butyl alcohol (TBA)	ND	0.050	1	10/25/2019 01:10
n-Butyl benzene	ND	0.0050	1	10/25/2019 01:10
sec-Butyl benzene	ND	0.0050	1	10/25/2019 01:10
tert-Butyl benzene	ND	0.0050	1	10/25/2019 01:10
Carbon Disulfide	ND	0.0050	1	10/25/2019 01:10
Carbon Tetrachloride	ND	0.0050	1	10/25/2019 01:10
Chlorobenzene	ND	0.0050	1	10/25/2019 01:10
Chloroethane	ND	0.0050	1	10/25/2019 01:10
Chloroform	ND	0.0050	1	10/25/2019 01:10
Chloromethane	ND	0.0050	1	10/25/2019 01:10
2-Chlorotoluene	ND	0.0050	1	10/25/2019 01:10
4-Chlorotoluene	ND	0.0050	1	10/25/2019 01:10
Dibromochloromethane	ND	0.0050	1	10/25/2019 01:10
1,2-Dibromo-3-chloropropane	ND	0.00025	1	10/25/2019 01:10
1,2-Dibromoethane (EDB)	ND	0.00010	1	10/25/2019 01:10
Dibromomethane	ND	0.0050	1	10/25/2019 01:10
1,2-Dichlorobenzene	ND	0.0050	1	10/25/2019 01:10
1,3-Dichlorobenzene	ND	0.0050	1	10/25/2019 01:10
1,4-Dichlorobenzene	ND	0.0050	1	10/25/2019 01:10
Dichlorodifluoromethane	ND	0.0050	1	10/25/2019 01:10
1,1-Dichloroethane	ND	0.0050	1	10/25/2019 01:10
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	10/25/2019 01:10
1,1-Dichloroethene	ND	0.00025	1	10/25/2019 01:10
cis-1,2-Dichloroethene	ND	0.0050	1	10/25/2019 01:10
trans-1,2-Dichloroethene	ND	0.0050	1	10/25/2019 01:10
1,2-Dichloropropane	ND	0.0050	1	10/25/2019 01:10
1,3-Dichloropropane	ND	0.0050	1	10/25/2019 01:10
2,2-Dichloropropane	ND	0.0050	1	10/25/2019 01:10

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B2-5	1910B43-013A	Soil	10/22/2019 10:45	GC18 10241928.D	187630

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	10/25/2019 01:10
cis-1,3-Dichloropropene	ND	0.0050	1	10/25/2019 01:10
trans-1,3-Dichloropropene	ND	0.0050	1	10/25/2019 01:10
Diisopropyl ether (DIPE)	ND	0.0050	1	10/25/2019 01:10
Ethylbenzene	ND	0.0050	1	10/25/2019 01:10
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	10/25/2019 01:10
Freon 113	ND	0.0050	1	10/25/2019 01:10
Hexachlorobutadiene	ND	0.0050	1	10/25/2019 01:10
Hexachloroethane	ND	0.0050	1	10/25/2019 01:10
2-Hexanone	ND	0.0050	1	10/25/2019 01:10
Isopropylbenzene	ND	0.0050	1	10/25/2019 01:10
4-Isopropyl toluene	ND	0.0050	1	10/25/2019 01:10
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	10/25/2019 01:10
Methylene chloride	ND	0.010	1	10/25/2019 01:10
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	10/25/2019 01:10
Naphthalene	ND	0.0050	1	10/25/2019 01:10
n-Propyl benzene	ND	0.0050	1	10/25/2019 01:10
Styrene	ND	0.0050	1	10/25/2019 01:10
1,1,1,2-Tetrachloroethane	ND	0.0050	1	10/25/2019 01:10
1,1,2,2-Tetrachloroethane	ND	0.00025	1	10/25/2019 01:10
Tetrachloroethene	ND	0.0010	1	10/25/2019 01:10
Toluene	ND	0.0050	1	10/25/2019 01:10
1,2,3-Trichlorobenzene	ND	0.0050	1	10/25/2019 01:10
1,2,4-Trichlorobenzene	ND	0.0050	1	10/25/2019 01:10
1,1,1-Trichloroethane	ND	0.0050	1	10/25/2019 01:10
1,1,2-Trichloroethane	ND	0.0050	1	10/25/2019 01:10
Trichloroethene	ND	0.0050	1	10/25/2019 01:10
Trichlorofluoromethane	ND	0.0050	1	10/25/2019 01:10
1,2,3-Trichloropropane	ND	0.00010	1	10/25/2019 01:10
1,2,4-Trimethylbenzene	ND	0.0050	1	10/25/2019 01:10
1,3,5-Trimethylbenzene	ND	0.0050	1	10/25/2019 01:10
Vinyl Chloride	ND	0.00025	1	10/25/2019 01:10
m,p-Xylene	ND	0.0050	1	10/25/2019 01:10
o-Xylene	ND	0.0050	1	10/25/2019 01:10
Xylenes, Total	ND	0.0050	1	10/25/2019 01:10

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5030B
Date Prepared:	10/23/19	**Analytical Method:**	SW8260B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B2-5	1910B43-013A	Soil	10/22/2019 10:45	GC18 10241928.D	187630

Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)	Qualifiers	Limits		
Dibromofluoromethane	93		82-136		10/25/2019 01:10
Toluene-d8	91	S	92-139		10/25/2019 01:10
4-BFB	84		82-135		10/25/2019 01:10
Benzene-d6	77		55-122		10/25/2019 01:10
Ethylbenzene-d10	88		58-141		10/25/2019 01:10
1,2-DCB-d4	72		51-107		10/25/2019 01:10

Analyst(s): AK

Analytical Comments: c2

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	1910B43-001A	Soil	10/22/2019 08:30	GC17 10251931.D	187707

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	10/25/2019 21:57
Acenaphthylene	**0.0023**	0.0013	1	10/25/2019 21:57
Acetochlor	ND	0.25	1	10/25/2019 21:57
Anthracene	**0.0021**	0.0013	1	10/25/2019 21:57
Benzidine	ND	1.2	1	10/25/2019 21:57
Benzo (a) anthracene	**0.010**	0.0050	1	10/25/2019 21:57
Benzo (a) pyrene	**0.0076**	0.0025	1	10/25/2019 21:57
Benzo (b) fluoranthene	**0.0090**	0.0063	1	10/25/2019 21:57
Benzo (g,h,i) perylene	**0.0079**	0.0025	1	10/25/2019 21:57
Benzo (k) fluoranthene	**0.0041**	0.0013	1	10/25/2019 21:57
Benzyl Alcohol	ND	1.2	1	10/25/2019 21:57
1,1-Biphenyl	ND	0.013	1	10/25/2019 21:57
Bis (2-chloroethoxy) Methane	ND	0.25	1	10/25/2019 21:57
Bis (2-chloroethyl) Ether	ND	0.0025	1	10/25/2019 21:57
Bis (2-chloroisopropyl) Ether	ND	0.0025	1	10/25/2019 21:57
Bis (2-ethylhexyl) Adipate	ND	0.50	1	10/25/2019 21:57
Bis (2-ethylhexyl) Phthalate	**0.049**	0.0050	1	10/25/2019 21:57
4-Bromophenyl Phenyl Ether	ND	0.25	1	10/25/2019 21:57
Butylbenzyl Phthalate	ND	0.025	1	10/25/2019 21:57
4-Chloroaniline	ND	0.0025	1	10/25/2019 21:57
4-Chloro-3-methylphenol	ND	0.25	1	10/25/2019 21:57
2-Chloronaphthalene	ND	0.25	1	10/25/2019 21:57
2-Chlorophenol	ND	0.0050	1	10/25/2019 21:57
4-Chlorophenyl Phenyl Ether	ND	0.25	1	10/25/2019 21:57
Chrysene	**0.0074**	0.0025	1	10/25/2019 21:57
Dibenzo (a,h) anthracene	ND	0.0025	1	10/25/2019 21:57
Dibenzofuran	ND	0.25	1	10/25/2019 21:57
Di-n-butyl Phthalate	**0.0093**	0.0025	1	10/25/2019 21:57
1,2-Dichlorobenzene	ND	0.25	1	10/25/2019 21:57
1,3-Dichlorobenzene	ND	0.25	1	10/25/2019 21:57
1,4-Dichlorobenzene	ND	0.25	1	10/25/2019 21:57
3,3-Dichlorobenzidine	ND	0.0025	1	10/25/2019 21:57
2,4-Dichlorophenol	ND	0.013	1	10/25/2019 21:57
Diethyl Phthalate	ND	0.0050	1	10/25/2019 21:57
2,4-Dimethylphenol	ND	0.25	1	10/25/2019 21:57
Dimethyl Phthalate	ND	0.0025	1	10/25/2019 21:57
4,6-Dinitro-2-methylphenol	ND	1.2	1	10/25/2019 21:57

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	1910B43-001A	Soil	10/22/2019 08:30	GC17 10251931.D	187707

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.13	1	10/25/2019 21:57
2,4-Dinitrotoluene	ND	0.0063	1	10/25/2019 21:57
2,6-Dinitrotoluene	ND	0.0025	1	10/25/2019 21:57
Di-n-octyl Phthalate	ND	0.0050	1	10/25/2019 21:57
1,2-Diphenylhydrazine	ND	0.25	1	10/25/2019 21:57
Fluoranthene	**0.012**	0.0013	1	10/25/2019 21:57
Fluorene	ND	0.0025	1	10/25/2019 21:57
Hexachlorobenzene	ND	0.0013	1	10/25/2019 21:57
Hexachlorobutadiene	ND	0.0025	1	10/25/2019 21:57
Hexachlorocyclopentadiene	ND	2.0	1	10/25/2019 21:57
Hexachloroethane	ND	0.0025	1	10/25/2019 21:57
Indeno (1,2,3-cd) pyrene	**0.0052**	0.0025	1	10/25/2019 21:57
Isophorone	ND	0.25	1	10/25/2019 21:57
2-Methylnaphthalene	**0.041**	0.0025	1	10/25/2019 21:57
2-Methylphenol (o-Cresol)	ND	0.50	1	10/25/2019 21:57
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	10/25/2019 21:57
Naphthalene	**0.024**	0.0013	1	10/25/2019 21:57
2-Nitroaniline	ND	1.2	1	10/25/2019 21:57
3-Nitroaniline	ND	1.2	1	10/25/2019 21:57
4-Nitroaniline	ND	1.2	1	10/25/2019 21:57
Nitrobenzene	ND	0.25	1	10/25/2019 21:57
2-Nitrophenol	ND	1.2	1	10/25/2019 21:57
4-Nitrophenol	ND	1.2	1	10/25/2019 21:57
N-Nitrosodiphenylamine	ND	0.25	1	10/25/2019 21:57
N-Nitrosodi-n-propylamine	ND	0.25	1	10/25/2019 21:57
Pentachlorophenol	ND	0.031	1	10/25/2019 21:57
Phenanthrene	**0.012**	0.0050	1	10/25/2019 21:57
Phenol	ND	0.0050	1	10/25/2019 21:57
Pyrene	**0.013**	0.0025	1	10/25/2019 21:57
Pyridine	ND	0.25	1	10/25/2019 21:57
1,2,4-Trichlorobenzene	ND	0.25	1	10/25/2019 21:57
2,4,5-Trichlorophenol	ND	0.0025	1	10/25/2019 21:57
2,4,6-Trichlorophenol	ND	0.013	1	10/25/2019 21:57

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	1910B43-001A	Soil	10/22/2019 08:30	GC17 10251931.D	187707

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	73	51-142		10/25/2019 21:57
Phenol-d5	74	49-144		10/25/2019 21:57
Nitrobenzene-d5	60	47-148		10/25/2019 21:57
2-Fluorobiphenyl	62	46-140		10/25/2019 21:57
2,4,6-Tribromophenol	72	45-152		10/25/2019 21:57
4-Terphenyl-d14	65	33-170		10/25/2019 21:57

Analyst(s): REB

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	**1910B43-005A**	**Soil**	**10/22/2019 08:30**	**GC17 10251932.D**	**187707**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	**0.0018**	0.0013	1	10/25/2019 22:24
Acenaphthylene	**0.022**	0.0013	1	10/25/2019 22:24
Acetochlor	ND	0.25	1	10/25/2019 22:24
Anthracene	**0.0088**	0.0013	1	10/25/2019 22:24
Benzidine	ND	1.2	1	10/25/2019 22:24
Benzo (a) anthracene	**0.074**	0.0050	1	10/25/2019 22:24
Benzo (a) pyrene	**0.090**	0.0025	1	10/25/2019 22:24
Benzo (b) fluoranthene	**0.10**	0.0063	1	10/25/2019 22:24
Benzo (g,h,i) perylene	**0.058**	0.0025	1	10/25/2019 22:24
Benzo (k) fluoranthene	**0.031**	0.0013	1	10/25/2019 22:24
Benzyl Alcohol	ND	1.2	1	10/25/2019 22:24
1,1-Biphenyl	ND	0.013	1	10/25/2019 22:24
Bis (2-chloroethoxy) Methane	ND	0.25	1	10/25/2019 22:24
Bis (2-chloroethyl) Ether	ND	0.0025	1	10/25/2019 22:24
Bis (2-chloroisopropyl) Ether	ND	0.0025	1	10/25/2019 22:24
Bis (2-ethylhexyl) Adipate	ND	0.50	1	10/25/2019 22:24
Bis (2-ethylhexyl) Phthalate	**0.26**	0.0050	1	10/25/2019 22:24
4-Bromophenyl Phenyl Ether	ND	0.25	1	10/25/2019 22:24
Butylbenzyl Phthalate	**0.025**	0.025	1	10/25/2019 22:24
4-Chloroaniline	ND	0.0025	1	10/25/2019 22:24
4-Chloro-3-methylphenol	ND	0.25	1	10/25/2019 22:24
2-Chloronaphthalene	ND	0.25	1	10/25/2019 22:24
2-Chlorophenol	ND	0.0050	1	10/25/2019 22:24
4-Chlorophenyl Phenyl Ether	ND	0.25	1	10/25/2019 22:24
Chrysene	**0.078**	0.0025	1	10/25/2019 22:24
Dibenzo (a,h) anthracene	**0.011**	0.0025	1	10/25/2019 22:24
Dibenzofuran	ND	0.25	1	10/25/2019 22:24
Di-n-butyl Phthalate	**0.011**	0.0025	1	10/25/2019 22:24
1,2-Dichlorobenzene	ND	0.25	1	10/25/2019 22:24
1,3-Dichlorobenzene	ND	0.25	1	10/25/2019 22:24
1,4-Dichlorobenzene	ND	0.25	1	10/25/2019 22:24
3,3-Dichlorobenzidine	ND	0.0025	1	10/25/2019 22:24
2,4-Dichlorophenol	ND	0.013	1	10/25/2019 22:24
Diethyl Phthalate	ND	0.0050	1	10/25/2019 22:24
2,4-Dimethylphenol	ND	0.25	1	10/25/2019 22:24
Dimethyl Phthalate	ND	0.0025	1	10/25/2019 22:24
4,6-Dinitro-2-methylphenol	ND	1.2	1	10/25/2019 22:24

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	1910B43-005A	Soil	10/22/2019 08:30	GC17 10251932.D	187707

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.13	1	10/25/2019 22:24
2,4-Dinitrotoluene	ND	0.0063	1	10/25/2019 22:24
2,6-Dinitrotoluene	ND	0.0025	1	10/25/2019 22:24
Di-n-octyl Phthalate	ND	0.0050	1	10/25/2019 22:24
1,2-Diphenylhydrazine	ND	0.25	1	10/25/2019 22:24
Fluoranthene	**0.13**	0.0013	1	10/25/2019 22:24
Fluorene	ND	0.0025	1	10/25/2019 22:24
Hexachlorobenzene	ND	0.0013	1	10/25/2019 22:24
Hexachlorobutadiene	ND	0.0025	1	10/25/2019 22:24
Hexachlorocyclopentadiene	ND	2.0	1	10/25/2019 22:24
Hexachloroethane	ND	0.0025	1	10/25/2019 22:24
Indeno (1,2,3-cd) pyrene	**0.047**	0.0025	1	10/25/2019 22:24
Isophorone	ND	0.25	1	10/25/2019 22:24
2-Methylnaphthalene	**0.0033**	0.0025	1	10/25/2019 22:24
2-Methylphenol (o-Cresol)	ND	0.50	1	10/25/2019 22:24
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	10/25/2019 22:24
Naphthalene	**0.0045**	0.0013	1	10/25/2019 22:24
2-Nitroaniline	ND	1.2	1	10/25/2019 22:24
3-Nitroaniline	ND	1.2	1	10/25/2019 22:24
4-Nitroaniline	ND	1.2	1	10/25/2019 22:24
Nitrobenzene	ND	0.25	1	10/25/2019 22:24
2-Nitrophenol	ND	1.2	1	10/25/2019 22:24
4-Nitrophenol	ND	1.2	1	10/25/2019 22:24
N-Nitrosodiphenylamine	ND	0.25	1	10/25/2019 22:24
N-Nitrosodi-n-propylamine	ND	0.25	1	10/25/2019 22:24
Pentachlorophenol	ND	0.031	1	10/25/2019 22:24
Phenanthrene	**0.053**	0.0050	1	10/25/2019 22:24
Phenol	**0.28**	0.0050	1	10/25/2019 22:24
Pyrene	**0.13**	0.0025	1	10/25/2019 22:24
Pyridine	ND	0.25	1	10/25/2019 22:24
1,2,4-Trichlorobenzene	ND	0.25	1	10/25/2019 22:24
2,4,5-Trichlorophenol	ND	0.0025	1	10/25/2019 22:24
2,4,6-Trichlorophenol	ND	0.013	1	10/25/2019 22:24

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	**1910B43-005A**	**Soil**	**10/22/2019 08:30**	**GC17 10251932.D**	**187707**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	78	51-142		10/25/2019 22:24
Phenol-d5	83	49-144		10/25/2019 22:24
Nitrobenzene-d5	62	47-148		10/25/2019 22:24
2-Fluorobiphenyl	60	46-140		10/25/2019 22:24
2,4,6-Tribromophenol	74	45-152		10/25/2019 22:24
4-Terphenyl-d14	65	33-170		10/25/2019 22:24

Analyst(s): REB

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	**1910B43-006A**	**Soil**	**10/22/2019 08:30**	**GC17 10251933.D**	**187707**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0026	2	10/25/2019 22:51
Acenaphthylene	**0.014**	0.0026	2	10/25/2019 22:51
Acetochlor	ND	0.50	2	10/25/2019 22:51
Anthracene	**0.022**	0.0026	2	10/25/2019 22:51
Benzidine	ND	2.5	2	10/25/2019 22:51
Benzo (a) anthracene	**0.25**	0.010	2	10/25/2019 22:51
Benzo (a) pyrene	**0.24**	0.0050	2	10/25/2019 22:51
Benzo (b) fluoranthene	**0.37**	0.013	2	10/25/2019 22:51
Benzo (g,h,i) perylene	**0.099**	0.0050	2	10/25/2019 22:51
Benzo (k) fluoranthene	**0.15**	0.0026	2	10/25/2019 22:51
Benzyl Alcohol	ND	2.5	2	10/25/2019 22:51
1,1-Biphenyl	ND	0.026	2	10/25/2019 22:51
Bis (2-chloroethoxy) Methane	ND	0.50	2	10/25/2019 22:51
Bis (2-chloroethyl) Ether	ND	0.0050	2	10/25/2019 22:51
Bis (2-chloroisopropyl) Ether	ND	0.0050	2	10/25/2019 22:51
Bis (2-ethylhexyl) Adipate	ND	1.0	2	10/25/2019 22:51
Bis (2-ethylhexyl) Phthalate	**0.53**	0.010	2	10/25/2019 22:51
4-Bromophenyl Phenyl Ether	ND	0.50	2	10/25/2019 22:51
Butylbenzyl Phthalate	ND	0.050	2	10/25/2019 22:51
4-Chloroaniline	ND	0.0050	2	10/25/2019 22:51
4-Chloro-3-methylphenol	ND	0.50	2	10/25/2019 22:51
2-Chloronaphthalene	ND	0.50	2	10/25/2019 22:51
2-Chlorophenol	ND	0.010	2	10/25/2019 22:51
4-Chlorophenyl Phenyl Ether	ND	0.50	2	10/25/2019 22:51
Chrysene	**0.26**	0.0050	2	10/25/2019 22:51
Dibenzo (a,h) anthracene	**0.028**	0.0050	2	10/25/2019 22:51
Dibenzofuran	ND	0.50	2	10/25/2019 22:51
Di-n-butyl Phthalate	**0.047**	0.0050	2	10/25/2019 22:51
1,2-Dichlorobenzene	ND	0.50	2	10/25/2019 22:51
1,3-Dichlorobenzene	ND	0.50	2	10/25/2019 22:51
1,4-Dichlorobenzene	ND	0.50	2	10/25/2019 22:51
3,3-Dichlorobenzidine	ND	0.0050	2	10/25/2019 22:51
2,4-Dichlorophenol	ND	0.026	2	10/25/2019 22:51
Diethyl Phthalate	ND	0.010	2	10/25/2019 22:51
2,4-Dimethylphenol	ND	0.50	2	10/25/2019 22:51
Dimethyl Phthalate	ND	0.0050	2	10/25/2019 22:51
4,6-Dinitro-2-methylphenol	ND	2.5	2	10/25/2019 22:51

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	**1910B43-006A**	**Soil**	**10/22/2019 08:30**	**GC17 10251933.D**	**187707**

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.26	2	10/25/2019 22:51
2,4-Dinitrotoluene	ND	0.013	2	10/25/2019 22:51
2,6-Dinitrotoluene	ND	0.0050	2	10/25/2019 22:51
Di-n-octyl Phthalate	ND	0.010	2	10/25/2019 22:51
1,2-Diphenylhydrazine	ND	0.50	2	10/25/2019 22:51
Fluoranthene	**0.12**	0.0026	2	10/25/2019 22:51
Fluorene	ND	0.0050	2	10/25/2019 22:51
Hexachlorobenzene	ND	0.0026	2	10/25/2019 22:51
Hexachlorobutadiene	ND	0.0050	2	10/25/2019 22:51
Hexachlorocyclopentadiene	ND	4.0	2	10/25/2019 22:51
Hexachloroethane	ND	0.0050	2	10/25/2019 22:51
Indeno (1,2,3-cd) pyrene	**0.086**	0.0050	2	10/25/2019 22:51
Isophorone	ND	0.50	2	10/25/2019 22:51
2-Methylnaphthalene	ND	0.0050	2	10/25/2019 22:51
2-Methylphenol (o-Cresol)	ND	1.0	2	10/25/2019 22:51
3 & 4-Methylphenol (m,p-Cresol)	ND	0.50	2	10/25/2019 22:51
Naphthalene	**0.0027**	0.0026	2	10/25/2019 22:51
2-Nitroaniline	ND	2.5	2	10/25/2019 22:51
3-Nitroaniline	ND	2.5	2	10/25/2019 22:51
4-Nitroaniline	ND	2.5	2	10/25/2019 22:51
Nitrobenzene	ND	0.50	2	10/25/2019 22:51
2-Nitrophenol	ND	2.5	2	10/25/2019 22:51
4-Nitrophenol	ND	2.5	2	10/25/2019 22:51
N-Nitrosodiphenylamine	ND	0.50	2	10/25/2019 22:51
N-Nitrosodi-n-propylamine	ND	0.50	2	10/25/2019 22:51
Pentachlorophenol	ND	0.063	2	10/25/2019 22:51
Phenanthrene	**0.030**	0.010	2	10/25/2019 22:51
Phenol	ND	0.010	2	10/25/2019 22:51
Pyrene	**0.16**	0.0050	2	10/25/2019 22:51
Pyridine	ND	0.50	2	10/25/2019 22:51
1,2,4-Trichlorobenzene	ND	0.50	2	10/25/2019 22:51
2,4,5-Trichlorophenol	ND	0.0050	2	10/25/2019 22:51
2,4,6-Trichlorophenol	ND	0.026	2	10/25/2019 22:51

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	1910B43-006A	Soil	10/22/2019 08:30	GC17 10251933.D	187707

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	68	51-142		10/25/2019 22:51
Phenol-d5	71	49-144		10/25/2019 22:51
Nitrobenzene-d5	55	47-148		10/25/2019 22:51
2-Fluorobiphenyl	55	46-140		10/25/2019 22:51
2,4,6-Tribromophenol	68	45-152		10/25/2019 22:51
4-Terphenyl-d14	61	33-170		10/25/2019 22:51

Analyst(s): REB

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B5-2	1910B43-007A	Soil	10/22/2019 08:30	GC17 10251934.D	187707

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	10/25/2019 23:18
Acenaphthylene	ND	0.0013	1	10/25/2019 23:18
Acetochlor	ND	0.25	1	10/25/2019 23:18
Anthracene	ND	0.0013	1	10/25/2019 23:18
Benzidine	ND	1.2	1	10/25/2019 23:18
Benzo (a) anthracene	ND	0.0050	1	10/25/2019 23:18
Benzo (a) pyrene	ND	0.0025	1	10/25/2019 23:18
Benzo (b) fluoranthene	ND	0.0063	1	10/25/2019 23:18
Benzo (g,h,i) perylene	ND	0.0025	1	10/25/2019 23:18
Benzo (k) fluoranthene	ND	0.0013	1	10/25/2019 23:18
Benzyl Alcohol	ND	1.2	1	10/25/2019 23:18
1,1-Biphenyl	ND	0.013	1	10/25/2019 23:18
Bis (2-chloroethoxy) Methane	ND	0.25	1	10/25/2019 23:18
Bis (2-chloroethyl) Ether	ND	0.0025	1	10/25/2019 23:18
Bis (2-chloroisopropyl) Ether	ND	0.0025	1	10/25/2019 23:18
Bis (2-ethylhexyl) Adipate	ND	0.50	1	10/25/2019 23:18
Bis (2-ethylhexyl) Phthalate	ND	0.0050	1	10/25/2019 23:18
4-Bromophenyl Phenyl Ether	ND	0.25	1	10/25/2019 23:18
Butylbenzyl Phthalate	ND	0.025	1	10/25/2019 23:18
4-Chloroaniline	ND	0.0025	1	10/25/2019 23:18
4-Chloro-3-methylphenol	ND	0.25	1	10/25/2019 23:18
2-Chloronaphthalene	ND	0.25	1	10/25/2019 23:18
2-Chlorophenol	ND	0.0050	1	10/25/2019 23:18
4-Chlorophenyl Phenyl Ether	ND	0.25	1	10/25/2019 23:18
Chrysene	ND	0.0025	1	10/25/2019 23:18
Dibenzo (a,h) anthracene	ND	0.0025	1	10/25/2019 23:18
Dibenzofuran	ND	0.25	1	10/25/2019 23:18
Di-n-butyl Phthalate	ND	0.0025	1	10/25/2019 23:18
1,2-Dichlorobenzene	ND	0.25	1	10/25/2019 23:18
1,3-Dichlorobenzene	ND	0.25	1	10/25/2019 23:18
1,4-Dichlorobenzene	ND	0.25	1	10/25/2019 23:18
3,3-Dichlorobenzidine	ND	0.0025	1	10/25/2019 23:18
2,4-Dichlorophenol	ND	0.013	1	10/25/2019 23:18
Diethyl Phthalate	ND	0.0050	1	10/25/2019 23:18
2,4-Dimethylphenol	ND	0.25	1	10/25/2019 23:18
Dimethyl Phthalate	ND	0.0025	1	10/25/2019 23:18
4,6-Dinitro-2-methylphenol	ND	1.2	1	10/25/2019 23:18

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B5-2	**1910B43-007A**	**Soil**	**10/22/2019 08:30**	**GC17 10251934.D**	**187707**

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.13	1	10/25/2019 23:18
2,4-Dinitrotoluene	ND	0.0063	1	10/25/2019 23:18
2,6-Dinitrotoluene	ND	0.0025	1	10/25/2019 23:18
Di-n-octyl Phthalate	ND	0.0050	1	10/25/2019 23:18
1,2-Diphenylhydrazine	ND	0.25	1	10/25/2019 23:18
Fluoranthene	ND	0.0013	1	10/25/2019 23:18
Fluorene	ND	0.0025	1	10/25/2019 23:18
Hexachlorobenzene	ND	0.0013	1	10/25/2019 23:18
Hexachlorobutadiene	ND	0.0025	1	10/25/2019 23:18
Hexachlorocyclopentadiene	ND	2.0	1	10/25/2019 23:18
Hexachloroethane	ND	0.0025	1	10/25/2019 23:18
Indeno (1,2,3-cd) pyrene	ND	0.0025	1	10/25/2019 23:18
Isophorone	ND	0.25	1	10/25/2019 23:18
2-Methylnaphthalene	ND	0.0025	1	10/25/2019 23:18
2-Methylphenol (o-Cresol)	ND	0.50	1	10/25/2019 23:18
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	10/25/2019 23:18
Naphthalene	ND	0.0013	1	10/25/2019 23:18
2-Nitroaniline	ND	1.2	1	10/25/2019 23:18
3-Nitroaniline	ND	1.2	1	10/25/2019 23:18
4-Nitroaniline	ND	1.2	1	10/25/2019 23:18
Nitrobenzene	ND	0.25	1	10/25/2019 23:18
2-Nitrophenol	ND	1.2	1	10/25/2019 23:18
4-Nitrophenol	ND	1.2	1	10/25/2019 23:18
N-Nitrosodiphenylamine	ND	0.25	1	10/25/2019 23:18
N-Nitrosodi-n-propylamine	ND	0.25	1	10/25/2019 23:18
Pentachlorophenol	ND	0.031	1	10/25/2019 23:18
Phenanthrene	ND	0.0050	1	10/25/2019 23:18
Phenol	**0.13**	0.0050	1	10/25/2019 23:18
Pyrene	ND	0.0025	1	10/25/2019 23:18
Pyridine	ND	0.25	1	10/25/2019 23:18
1,2,4-Trichlorobenzene	ND	0.25	1	10/25/2019 23:18
2,4,5-Trichlorophenol	ND	0.0025	1	10/25/2019 23:18
2,4,6-Trichlorophenol	ND	0.013	1	10/25/2019 23:18

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B5-2	1910B43-007A	Soil	10/22/2019 08:30	GC17 10251934.D	187707

Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)	Qualifiers	Limits		
2-Fluorophenol	89		51-142		10/25/2019 23:18
Phenol-d5	87		49-144		10/25/2019 23:18
Nitrobenzene-d5	65		47-148		10/25/2019 23:18
2-Fluorobiphenyl	63		46-140		10/25/2019 23:18
2,4,6-Tribromophenol	41	S	45-152		10/25/2019 23:18
4-Terphenyl-d14	65		33-170		10/25/2019 23:18

Analyst(s): REB

Analytical Comments: c2

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B3-3	1910B43-009A	Soil	10/22/2019 08:30	GC17 10251935.D	187707

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	10/25/2019 23:45
Acenaphthylene	ND	0.0013	1	10/25/2019 23:45
Acetochlor	ND	0.25	1	10/25/2019 23:45
Anthracene	ND	0.0013	1	10/25/2019 23:45
Benzidine	ND	1.2	1	10/25/2019 23:45
Benzo (a) anthracene	ND	0.0050	1	10/25/2019 23:45
Benzo (a) pyrene	ND	0.0025	1	10/25/2019 23:45
Benzo (b) fluoranthene	ND	0.0063	1	10/25/2019 23:45
Benzo (g,h,i) perylene	ND	0.0025	1	10/25/2019 23:45
Benzo (k) fluoranthene	ND	0.0013	1	10/25/2019 23:45
Benzyl Alcohol	ND	1.2	1	10/25/2019 23:45
1,1-Biphenyl	ND	0.013	1	10/25/2019 23:45
Bis (2-chloroethoxy) Methane	ND	0.25	1	10/25/2019 23:45
Bis (2-chloroethyl) Ether	ND	0.0025	1	10/25/2019 23:45
Bis (2-chloroisopropyl) Ether	ND	0.0025	1	10/25/2019 23:45
Bis (2-ethylhexyl) Adipate	ND	0.50	1	10/25/2019 23:45
Bis (2-ethylhexyl) Phthalate	ND	0.0050	1	10/25/2019 23:45
4-Bromophenyl Phenyl Ether	ND	0.25	1	10/25/2019 23:45
Butylbenzyl Phthalate	ND	0.025	1	10/25/2019 23:45
4-Chloroaniline	ND	0.0025	1	10/25/2019 23:45
4-Chloro-3-methylphenol	ND	0.25	1	10/25/2019 23:45
2-Chloronaphthalene	ND	0.25	1	10/25/2019 23:45
2-Chlorophenol	ND	0.0050	1	10/25/2019 23:45
4-Chlorophenyl Phenyl Ether	ND	0.25	1	10/25/2019 23:45
Chrysene	ND	0.0025	1	10/25/2019 23:45
Dibenzo (a,h) anthracene	ND	0.0025	1	10/25/2019 23:45
Dibenzofuran	ND	0.25	1	10/25/2019 23:45
Di-n-butyl Phthalate	ND	0.0025	1	10/25/2019 23:45
1,2-Dichlorobenzene	ND	0.25	1	10/25/2019 23:45
1,3-Dichlorobenzene	ND	0.25	1	10/25/2019 23:45
1,4-Dichlorobenzene	ND	0.25	1	10/25/2019 23:45
3,3-Dichlorobenzidine	ND	0.0025	1	10/25/2019 23:45
2,4-Dichlorophenol	ND	0.013	1	10/25/2019 23:45
Diethyl Phthalate	ND	0.0050	1	10/25/2019 23:45
2,4-Dimethylphenol	ND	0.25	1	10/25/2019 23:45
Dimethyl Phthalate	ND	0.0025	1	10/25/2019 23:45
4,6-Dinitro-2-methylphenol	ND	1.2	1	10/25/2019 23:45

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B3-3	1910B43-009A	Soil	10/22/2019 08:30	GC17 10251935.D	187707

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.13	1	10/25/2019 23:45
2,4-Dinitrotoluene	ND	0.0063	1	10/25/2019 23:45
2,6-Dinitrotoluene	ND	0.0025	1	10/25/2019 23:45
Di-n-octyl Phthalate	ND	0.0050	1	10/25/2019 23:45
1,2-Diphenylhydrazine	ND	0.25	1	10/25/2019 23:45
Fluoranthene	ND	0.0013	1	10/25/2019 23:45
Fluorene	ND	0.0025	1	10/25/2019 23:45
Hexachlorobenzene	ND	0.0013	1	10/25/2019 23:45
Hexachlorobutadiene	ND	0.0025	1	10/25/2019 23:45
Hexachlorocyclopentadiene	ND	2.0	1	10/25/2019 23:45
Hexachloroethane	ND	0.0025	1	10/25/2019 23:45
Indeno (1,2,3-cd) pyrene	ND	0.0025	1	10/25/2019 23:45
Isophorone	ND	0.25	1	10/25/2019 23:45
2-Methylnaphthalene	ND	0.0025	1	10/25/2019 23:45
2-Methylphenol (o-Cresol)	ND	0.50	1	10/25/2019 23:45
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	10/25/2019 23:45
Naphthalene	ND	0.0013	1	10/25/2019 23:45
2-Nitroaniline	ND	1.2	1	10/25/2019 23:45
3-Nitroaniline	ND	1.2	1	10/25/2019 23:45
4-Nitroaniline	ND	1.2	1	10/25/2019 23:45
Nitrobenzene	ND	0.25	1	10/25/2019 23:45
2-Nitrophenol	ND	1.2	1	10/25/2019 23:45
4-Nitrophenol	ND	1.2	1	10/25/2019 23:45
N-Nitrosodiphenylamine	ND	0.25	1	10/25/2019 23:45
N-Nitrosodi-n-propylamine	ND	0.25	1	10/25/2019 23:45
Pentachlorophenol	ND	0.031	1	10/25/2019 23:45
Phenanthrene	ND	0.0050	1	10/25/2019 23:45
Phenol	**0.027**	0.0050	1	10/25/2019 23:45
Pyrene	ND	0.0025	1	10/25/2019 23:45
Pyridine	ND	0.25	1	10/25/2019 23:45
1,2,4-Trichlorobenzene	ND	0.25	1	10/25/2019 23:45
2,4,5-Trichlorophenol	ND	0.0025	1	10/25/2019 23:45
2,4,6-Trichlorophenol	ND	0.013	1	10/25/2019 23:45

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B3-3	1910B43-009A	Soil	10/22/2019 08:30	GC17 10251935.D	187707

Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)	Qualifiers	Limits		
2-Fluorophenol	87		51-142		10/25/2019 23:45
Phenol-d5	86		49-144		10/25/2019 23:45
Nitrobenzene-d5	60		47-148		10/25/2019 23:45
2-Fluorobiphenyl	62		46-140		10/25/2019 23:45
2,4,6-Tribromophenol	32	S	45-152		10/25/2019 23:45
4-Terphenyl-d14	59		33-170		10/25/2019 23:45

Analyst(s): REB

Analytical Comments: c2

(Cont.)

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B1-4	1910B43-012A	Soil	10/22/2019 10:45	GC17 10251936.D	187707

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	10/26/2019 00:13
Acenaphthylene	**0.0027**	0.0013	1	10/26/2019 00:13
Acetochlor	ND	0.25	1	10/26/2019 00:13
Anthracene	ND	0.0013	1	10/26/2019 00:13
Benzidine	ND	1.2	1	10/26/2019 00:13
Benzo (a) anthracene	**0.0079**	0.0050	1	10/26/2019 00:13
Benzo (a) pyrene	**0.0077**	0.0025	1	10/26/2019 00:13
Benzo (b) fluoranthene	**0.0080**	0.0063	1	10/26/2019 00:13
Benzo (g,h,i) perylene	**0.0082**	0.0025	1	10/26/2019 00:13
Benzo (k) fluoranthene	**0.0030**	0.0013	1	10/26/2019 00:13
Benzyl Alcohol	ND	1.2	1	10/26/2019 00:13
1,1-Biphenyl	ND	0.013	1	10/26/2019 00:13
Bis (2-chloroethoxy) Methane	ND	0.25	1	10/26/2019 00:13
Bis (2-chloroethyl) Ether	ND	0.0025	1	10/26/2019 00:13
Bis (2-chloroisopropyl) Ether	ND	0.0025	1	10/26/2019 00:13
Bis (2-ethylhexyl) Adipate	ND	0.50	1	10/26/2019 00:13
Bis (2-ethylhexyl) Phthalate	**0.010**	0.0050	1	10/26/2019 00:13
4-Bromophenyl Phenyl Ether	ND	0.25	1	10/26/2019 00:13
Butylbenzyl Phthalate	ND	0.025	1	10/26/2019 00:13
4-Chloroaniline	ND	0.0025	1	10/26/2019 00:13
4-Chloro-3-methylphenol	ND	0.25	1	10/26/2019 00:13
2-Chloronaphthalene	ND	0.25	1	10/26/2019 00:13
2-Chlorophenol	ND	0.0050	1	10/26/2019 00:13
4-Chlorophenyl Phenyl Ether	ND	0.25	1	10/26/2019 00:13
Chrysene	**0.0055**	0.0025	1	10/26/2019 00:13
Dibenzo (a,h) anthracene	ND	0.0025	1	10/26/2019 00:13
Dibenzofuran	ND	0.25	1	10/26/2019 00:13
Di-n-butyl Phthalate	ND	0.0025	1	10/26/2019 00:13
1,2-Dichlorobenzene	ND	0.25	1	10/26/2019 00:13
1,3-Dichlorobenzene	ND	0.25	1	10/26/2019 00:13
1,4-Dichlorobenzene	ND	0.25	1	10/26/2019 00:13
3,3-Dichlorobenzidine	ND	0.0025	1	10/26/2019 00:13
2,4-Dichlorophenol	ND	0.013	1	10/26/2019 00:13
Diethyl Phthalate	ND	0.0050	1	10/26/2019 00:13
2,4-Dimethylphenol	ND	0.25	1	10/26/2019 00:13
Dimethyl Phthalate	ND	0.0025	1	10/26/2019 00:13
4,6-Dinitro-2-methylphenol	ND	1.2	1	10/26/2019 00:13

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B1-4	1910B43-012A	Soil	10/22/2019 10:45	GC17 10251936.D	187707

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.13	1	10/26/2019 00:13
2,4-Dinitrotoluene	ND	0.0063	1	10/26/2019 00:13
2,6-Dinitrotoluene	ND	0.0025	1	10/26/2019 00:13
Di-n-octyl Phthalate	ND	0.0050	1	10/26/2019 00:13
1,2-Diphenylhydrazine	ND	0.25	1	10/26/2019 00:13
Fluoranthene	**0.0083**	0.0013	1	10/26/2019 00:13
Fluorene	ND	0.0025	1	10/26/2019 00:13
Hexachlorobenzene	ND	0.0013	1	10/26/2019 00:13
Hexachlorobutadiene	ND	0.0025	1	10/26/2019 00:13
Hexachlorocyclopentadiene	ND	2.0	1	10/26/2019 00:13
Hexachloroethane	ND	0.0025	1	10/26/2019 00:13
Indeno (1,2,3-cd) pyrene	**0.0053**	0.0025	1	10/26/2019 00:13
Isophorone	ND	0.25	1	10/26/2019 00:13
2-Methylnaphthalene	ND	0.0025	1	10/26/2019 00:13
2-Methylphenol (o-Cresol)	ND	0.50	1	10/26/2019 00:13
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	10/26/2019 00:13
Naphthalene	**0.0068**	0.0013	1	10/26/2019 00:13
2-Nitroaniline	ND	1.2	1	10/26/2019 00:13
3-Nitroaniline	ND	1.2	1	10/26/2019 00:13
4-Nitroaniline	ND	1.2	1	10/26/2019 00:13
Nitrobenzene	ND	0.25	1	10/26/2019 00:13
2-Nitrophenol	ND	1.2	1	10/26/2019 00:13
4-Nitrophenol	ND	1.2	1	10/26/2019 00:13
N-Nitrosodiphenylamine	ND	0.25	1	10/26/2019 00:13
N-Nitrosodi-n-propylamine	ND	0.25	1	10/26/2019 00:13
Pentachlorophenol	ND	0.031	1	10/26/2019 00:13
Phenanthrene	ND	0.0050	1	10/26/2019 00:13
Phenol	ND	0.0050	1	10/26/2019 00:13
Pyrene	**0.0093**	0.0025	1	10/26/2019 00:13
Pyridine	ND	0.25	1	10/26/2019 00:13
1,2,4-Trichlorobenzene	ND	0.25	1	10/26/2019 00:13
2,4,5-Trichlorophenol	ND	0.0025	1	10/26/2019 00:13
2,4,6-Trichlorophenol	ND	0.013	1	10/26/2019 00:13

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B1-4	**1910B43-012A**	**Soil**	**10/22/2019 10:45**	**GC17 10251936.D**	**187707**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	76	51-142		10/26/2019 00:13
Phenol-d5	82	49-144		10/26/2019 00:13
Nitrobenzene-d5	60	47-148		10/26/2019 00:13
2-Fluorobiphenyl	62	46-140		10/26/2019 00:13
2,4,6-Tribromophenol	72	45-152		10/26/2019 00:13
4-Terphenyl-d14	59	33-170		10/26/2019 00:13

Analyst(s): REB

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B2-5	1910B43-013A	Soil	10/22/2019 10:45	GC17 10251937.D	187707

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.0013	1	10/26/2019 00:40
Acenaphthylene	ND	0.0013	1	10/26/2019 00:40
Acetochlor	ND	0.25	1	10/26/2019 00:40
Anthracene	ND	0.0013	1	10/26/2019 00:40
Benzidine	ND	1.2	1	10/26/2019 00:40
Benzo (a) anthracene	ND	0.0050	1	10/26/2019 00:40
Benzo (a) pyrene	ND	0.0025	1	10/26/2019 00:40
Benzo (b) fluoranthene	ND	0.0063	1	10/26/2019 00:40
Benzo (g,h,i) perylene	ND	0.0025	1	10/26/2019 00:40
Benzo (k) fluoranthene	ND	0.0013	1	10/26/2019 00:40
Benzyl Alcohol	ND	1.2	1	10/26/2019 00:40
1,1-Biphenyl	ND	0.013	1	10/26/2019 00:40
Bis (2-chloroethoxy) Methane	ND	0.25	1	10/26/2019 00:40
Bis (2-chloroethyl) Ether	ND	0.0025	1	10/26/2019 00:40
Bis (2-chloroisopropyl) Ether	ND	0.0025	1	10/26/2019 00:40
Bis (2-ethylhexyl) Adipate	ND	0.50	1	10/26/2019 00:40
Bis (2-ethylhexyl) Phthalate	ND	0.0050	1	10/26/2019 00:40
4-Bromophenyl Phenyl Ether	ND	0.25	1	10/26/2019 00:40
Butylbenzyl Phthalate	ND	0.025	1	10/26/2019 00:40
4-Chloroaniline	ND	0.0025	1	10/26/2019 00:40
4-Chloro-3-methylphenol	ND	0.25	1	10/26/2019 00:40
2-Chloronaphthalene	ND	0.25	1	10/26/2019 00:40
2-Chlorophenol	ND	0.0050	1	10/26/2019 00:40
4-Chlorophenyl Phenyl Ether	ND	0.25	1	10/26/2019 00:40
Chrysene	ND	0.0025	1	10/26/2019 00:40
Dibenzo (a,h) anthracene	ND	0.0025	1	10/26/2019 00:40
Dibenzofuran	ND	0.25	1	10/26/2019 00:40
Di-n-butyl Phthalate	ND	0.0025	1	10/26/2019 00:40
1,2-Dichlorobenzene	ND	0.25	1	10/26/2019 00:40
1,3-Dichlorobenzene	ND	0.25	1	10/26/2019 00:40
1,4-Dichlorobenzene	ND	0.25	1	10/26/2019 00:40
3,3-Dichlorobenzidine	ND	0.0025	1	10/26/2019 00:40
2,4-Dichlorophenol	ND	0.013	1	10/26/2019 00:40
Diethyl Phthalate	ND	0.0050	1	10/26/2019 00:40
2,4-Dimethylphenol	ND	0.25	1	10/26/2019 00:40
Dimethyl Phthalate	ND	0.0025	1	10/26/2019 00:40
4,6-Dinitro-2-methylphenol	ND	1.2	1	10/26/2019 00:40

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B2-5	1910B43-013A	Soil	10/22/2019 10:45	GC17 10251937.D	187707

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.13	1	10/26/2019 00:40
2,4-Dinitrotoluene	ND	0.0063	1	10/26/2019 00:40
2,6-Dinitrotoluene	ND	0.0025	1	10/26/2019 00:40
Di-n-octyl Phthalate	ND	0.0050	1	10/26/2019 00:40
1,2-Diphenylhydrazine	ND	0.25	1	10/26/2019 00:40
Fluoranthene	ND	0.0013	1	10/26/2019 00:40
Fluorene	ND	0.0025	1	10/26/2019 00:40
Hexachlorobenzene	ND	0.0013	1	10/26/2019 00:40
Hexachlorobutadiene	ND	0.0025	1	10/26/2019 00:40
Hexachlorocyclopentadiene	ND	2.0	1	10/26/2019 00:40
Hexachloroethane	ND	0.0025	1	10/26/2019 00:40
Indeno (1,2,3-cd) pyrene	ND	0.0025	1	10/26/2019 00:40
Isophorone	ND	0.25	1	10/26/2019 00:40
2-Methylnaphthalene	ND	0.0025	1	10/26/2019 00:40
2-Methylphenol (o-Cresol)	ND	0.50	1	10/26/2019 00:40
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	10/26/2019 00:40
Naphthalene	ND	0.0013	1	10/26/2019 00:40
2-Nitroaniline	ND	1.2	1	10/26/2019 00:40
3-Nitroaniline	ND	1.2	1	10/26/2019 00:40
4-Nitroaniline	ND	1.2	1	10/26/2019 00:40
Nitrobenzene	ND	0.25	1	10/26/2019 00:40
2-Nitrophenol	ND	1.2	1	10/26/2019 00:40
4-Nitrophenol	ND	1.2	1	10/26/2019 00:40
N-Nitrosodiphenylamine	ND	0.25	1	10/26/2019 00:40
N-Nitrosodi-n-propylamine	ND	0.25	1	10/26/2019 00:40
Pentachlorophenol	ND	0.031	1	10/26/2019 00:40
Phenanthrene	ND	0.0050	1	10/26/2019 00:40
Phenol	**0.027**	0.0050	1	10/26/2019 00:40
Pyrene	ND	0.0025	1	10/26/2019 00:40
Pyridine	ND	0.25	1	10/26/2019 00:40
1,2,4-Trichlorobenzene	ND	0.25	1	10/26/2019 00:40
2,4,5-Trichlorophenol	ND	0.0025	1	10/26/2019 00:40
2,4,6-Trichlorophenol	ND	0.013	1	10/26/2019 00:40

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B/3640A
Date Prepared:	10/25/19	**Analytical Method:**	SW8270C
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B2-5	1910B43-013A	Soil	10/22/2019 10:45	GC17 10251937.D	187707

Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)	Qualifiers	Limits		
2-Fluorophenol	86		51-142		10/26/2019 00:40
Phenol-d5	86		49-144		10/26/2019 00:40
Nitrobenzene-d5	64		47-148		10/26/2019 00:40
2-Fluorobiphenyl	65		46-140		10/26/2019 00:40
2,4,6-Tribromophenol	30	S	45-152		10/26/2019 00:40
4-Terphenyl-d14	66		33-170		10/26/2019 00:40

Analyst(s): REB

Analytical Comments: c2

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3050B
Date Prepared:	10/23/19	**Analytical Method:**	SW6020
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	1910B43-001A	Soil	10/22/2019 08:30	ICP-MS2 057SMPL.D	187620

Analytes	Result	RL	DF	Date Analyzed
Antimony	**0.60**	0.50	1	10/26/2019 03:57
Arsenic	**3.0**	0.50	1	10/26/2019 03:57
Barium	**140**	5.0	1	10/26/2019 03:57
Beryllium	ND	0.50	1	10/26/2019 03:57
Cadmium	**0.42**	0.25	1	10/26/2019 03:57
Chromium	**39**	0.50	1	10/26/2019 03:57
Cobalt	**4.7**	0.50	1	10/26/2019 03:57
Copper	**18**	0.50	1	10/26/2019 03:57
Lead	**250**	0.50	1	10/26/2019 03:57
Mercury	**0.18**	0.050	1	10/26/2019 03:57
Molybdenum	ND	0.50	1	10/26/2019 03:57
Nickel	**26**	0.50	1	10/26/2019 03:57
Selenium	ND	0.50	1	10/26/2019 03:57
Silver	ND	0.50	1	10/26/2019 03:57
Thallium	ND	0.50	1	10/26/2019 03:57
Vanadium	**27**	0.50	1	10/26/2019 03:57
Zinc	**160**	5.0	1	10/26/2019 03:57

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	103	70-130	10/26/2019 03:57

Analyst(s): ND

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3050B
Date Prepared:	10/23/19	**Analytical Method:**	SW6020
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	**1910B43-005A**	**Soil**	**10/22/2019 08:30**	**ICP-MS2 058SMPL.D**	**187620**

Analytes	Result	RL	DF	Date Analyzed
Antimony	**0.94**	0.50	1	10/26/2019 04:03
Arsenic	**5.4**	0.50	1	10/26/2019 04:03
Barium	**200**	5.0	1	10/26/2019 04:03
Beryllium	ND	0.50	1	10/26/2019 04:03
Cadmium	**0.46**	0.25	1	10/26/2019 04:03
Chromium	**42**	0.50	1	10/26/2019 04:03
Cobalt	**7.5**	0.50	1	10/26/2019 04:03
Copper	**26**	0.50	1	10/26/2019 04:03
Lead	**190**	0.50	1	10/26/2019 04:03
Mercury	**0.24**	0.050	1	10/26/2019 04:03
Molybdenum	**0.52**	0.50	1	10/26/2019 04:03
Nickel	**35**	0.50	1	10/26/2019 04:03
Selenium	ND	0.50	1	10/26/2019 04:03
Silver	ND	0.50	1	10/26/2019 04:03
Thallium	ND	0.50	1	10/26/2019 04:03
Vanadium	**38**	0.50	1	10/26/2019 04:03
Zinc	**150**	5.0	1	10/26/2019 04:03

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	103	70-130	10/26/2019 04:03

Analyst(s): ND

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3050B
Date Prepared:	10/23/19	**Analytical Method:**	SW6020
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	**1910B43-006A**	**Soil**	**10/22/2019 08:30**	**ICP-MS3 061SMPL.D**	**187620**

Analytes	Result	RL	DF	Date Analyzed
Antimony	**3.0**	0.50	1	10/29/2019 00:51
Arsenic	**15**	0.50	1	10/29/2019 00:51
Barium	**560**	5.0	1	10/29/2019 00:51
Beryllium	**0.73**	0.50	1	10/29/2019 00:51
Cadmium	**1.4**	0.25	1	10/29/2019 00:51
Chromium	**79**	0.50	1	10/29/2019 00:51
Cobalt	**35**	0.50	1	10/29/2019 00:51
Copper	**69**	0.50	1	10/29/2019 00:51
Lead	**330**	0.50	1	10/29/2019 00:51
Mercury	**0.42**	0.050	1	10/29/2019 00:51
Molybdenum	**1.9**	0.50	1	10/29/2019 00:51
Nickel	**80**	0.50	1	10/29/2019 00:51
Selenium	ND	0.50	1	10/29/2019 00:51
Silver	ND	0.50	1	10/29/2019 00:51
Thallium	ND	0.50	1	10/29/2019 00:51
Vanadium	**81**	0.50	1	10/29/2019 00:51
Zinc	**450**	5.0	1	10/29/2019 00:51

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	127	70-130	10/29/2019 00:51

Analyst(s): ND

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3050B
Date Prepared:	10/23/19	**Analytical Method:**	SW6020
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B5-2	**1910B43-007A**	**Soil**	**10/22/2019 08:30**	**ICP-MS2 128SMPL.D**	**187620**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	10/30/2019 06:32
Arsenic	**8.4**	0.50	1	10/30/2019 06:32
Barium	**260**	5.0	1	10/30/2019 06:32
Beryllium	**0.71**	0.50	1	10/30/2019 06:32
Cadmium	ND	0.25	1	10/30/2019 06:32
Chromium	**65**	0.50	1	10/30/2019 06:32
Cobalt	**12**	0.50	1	10/30/2019 06:32
Copper	**29**	0.50	1	10/30/2019 06:32
Lead	**16**	0.50	1	10/30/2019 06:32
Mercury	**0.072**	0.050	1	10/30/2019 06:32
Molybdenum	**0.93**	0.50	1	10/30/2019 06:32
Nickel	**59**	0.50	1	10/30/2019 06:32
Selenium	ND	0.50	1	10/30/2019 06:32
Silver	ND	0.50	1	10/30/2019 06:32
Thallium	ND	0.50	1	10/30/2019 06:32
Vanadium	**66**	0.50	1	10/30/2019 06:32
Zinc	**68**	5.0	1	10/30/2019 06:32

Surrogates	REC (%)	Limits		
Terbium	105	70-130		10/30/2019 06:32

Analyst(s): ND

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3050B
Date Prepared:	10/23/19	**Analytical Method:**	SW6020
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B3-3	**1910B43-009A**	**Soil**	**10/22/2019 08:30**	**ICP-MS3 059SMPL.D**	**187620**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	10/29/2019 00:39
Arsenic	**7.6**	0.50	1	10/29/2019 00:39
Barium	**270**	5.0	1	10/29/2019 00:39
Beryllium	**0.76**	0.50	1	10/29/2019 00:39
Cadmium	ND	0.25	1	10/29/2019 00:39
Chromium	**61**	0.50	1	10/29/2019 00:39
Cobalt	**14**	0.50	1	10/29/2019 00:39
Copper	**25**	0.50	1	10/29/2019 00:39
Lead	**35**	0.50	1	10/29/2019 00:39
Mercury	ND	0.050	1	10/29/2019 00:39
Molybdenum	**0.89**	0.50	1	10/29/2019 00:39
Nickel	**61**	0.50	1	10/29/2019 00:39
Selenium	ND	0.50	1	10/29/2019 00:39
Silver	ND	0.50	1	10/29/2019 00:39
Thallium	ND	0.50	1	10/29/2019 00:39
Vanadium	**61**	0.50	1	10/29/2019 00:39
Zinc	**82**	5.0	1	10/29/2019 00:39

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	112	70-130	10/29/2019 00:39

Analyst(s): ND

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3050B
Date Prepared:	10/23/19	**Analytical Method:**	SW6020
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B1-4	**1910B43-012A**	**Soil**	**10/22/2019 10:45**	**ICP-MS3 060SMPL.D**	**187620**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	10/29/2019 00:45
Arsenic	**2.5**	0.50	1	10/29/2019 00:45
Barium	**110**	5.0	1	10/29/2019 00:45
Beryllium	ND	0.50	1	10/29/2019 00:45
Cadmium	ND	0.25	1	10/29/2019 00:45
Chromium	**19**	0.50	1	10/29/2019 00:45
Cobalt	**13**	0.50	1	10/29/2019 00:45
Copper	**62**	0.50	1	10/29/2019 00:45
Lead	**41**	0.50	1	10/29/2019 00:45
Mercury	**0.077**	0.050	1	10/29/2019 00:45
Molybdenum	**0.58**	0.50	1	10/29/2019 00:45
Nickel	**14**	0.50	1	10/29/2019 00:45
Selenium	ND	0.50	1	10/29/2019 00:45
Silver	ND	0.50	1	10/29/2019 00:45
Thallium	ND	0.50	1	10/29/2019 00:45
Vanadium	**120**	0.50	1	10/29/2019 00:45
Zinc	**75**	5.0	1	10/29/2019 00:45

Surrogates	REC (%)	Limits		
Terbium	122	70-130		10/29/2019 00:45

Analyst(s): ND

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3050B
Date Prepared:	10/23/19	**Analytical Method:**	SW6020
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B2-5	**1910B43-013A**	**Soil**	**10/22/2019 10:45**	**ICP-MS2 127SMPL.D**	**187620**

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	10/30/2019 06:26
Arsenic	**6.2**	0.50	1	10/30/2019 06:26
Barium	**130**	5.0	1	10/30/2019 06:26
Beryllium	**0.53**	0.50	1	10/30/2019 06:26
Cadmium	ND	0.25	1	10/30/2019 06:26
Chromium	**59**	0.50	1	10/30/2019 06:26
Cobalt	**5.0**	0.50	1	10/30/2019 06:26
Copper	**16**	0.50	1	10/30/2019 06:26
Lead	**6.7**	0.50	1	10/30/2019 06:26
Mercury	ND	0.050	1	10/30/2019 06:26
Molybdenum	**0.61**	0.50	1	10/30/2019 06:26
Nickel	**42**	0.50	1	10/30/2019 06:26
Selenium	ND	0.50	1	10/30/2019 06:26
Silver	ND	0.50	1	10/30/2019 06:26
Thallium	ND	0.50	1	10/30/2019 06:26
Vanadium	**50**	0.50	1	10/30/2019 06:26
Zinc	**31**	5.0	1	10/30/2019 06:26

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	104	70-130	10/30/2019 06:26

Analyst(s): ND

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5035
Date Prepared:	10/23/19	**Analytical Method:**	SW8021B/8015Bm
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	1910B43-001A	Soil	10/22/2019 08:30	GC19 10241917.D	187592

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	10/24/2019 19:54
MTBE	---	0.050	1	10/24/2019 19:54
Benzene	---	0.0050	1	10/24/2019 19:54
Toluene	---	0.0050	1	10/24/2019 19:54
Ethylbenzene	---	0.0050	1	10/24/2019 19:54
m,p-Xylene	---	0.010	1	10/24/2019 19:54
o-Xylene	---	0.0050	1	10/24/2019 19:54
Xylenes	---	0.0050	1	10/24/2019 19:54

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	76	62-126	10/24/2019 19:54

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	1910B43-005A	Soil	10/22/2019 08:30	GC19 10241927.D	187592

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	10/25/2019 01:00
MTBE	---	0.050	1	10/25/2019 01:00
Benzene	---	0.0050	1	10/25/2019 01:00
Toluene	---	0.0050	1	10/25/2019 01:00
Ethylbenzene	---	0.0050	1	10/25/2019 01:00
m,p-Xylene	---	0.010	1	10/25/2019 01:00
o-Xylene	---	0.0050	1	10/25/2019 01:00
Xylenes	---	0.0050	1	10/25/2019 01:00

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	81	62-126	10/25/2019 01:00

Analyst(s): IA

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5035
Date Prepared:	10/23/19	**Analytical Method:**	SW8021B/8015Bm
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	**1910B43-006A**	**Soil**	**10/22/2019 08:30**	**GC19 10241928.D**	**187592**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	10/25/2019 01:31
MTBE	---	0.050	1	10/25/2019 01:31
Benzene	---	0.0050	1	10/25/2019 01:31
Toluene	---	0.0050	1	10/25/2019 01:31
Ethylbenzene	---	0.0050	1	10/25/2019 01:31
m,p-Xylene	---	0.010	1	10/25/2019 01:31
o-Xylene	---	0.0050	1	10/25/2019 01:31
Xylenes	---	0.0050	1	10/25/2019 01:31

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	91	62-126	10/25/2019 01:31

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B5-2	**1910B43-007A**	**Soil**	**10/22/2019 08:30**	**GC19 10241918.D**	**187629**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	10/24/2019 20:25
MTBE	---	0.050	1	10/24/2019 20:25
Benzene	---	0.0050	1	10/24/2019 20:25
Toluene	---	0.0050	1	10/24/2019 20:25
Ethylbenzene	---	0.0050	1	10/24/2019 20:25
m,p-Xylene	---	0.010	1	10/24/2019 20:25
o-Xylene	---	0.0050	1	10/24/2019 20:25
Xylenes	---	0.0050	1	10/24/2019 20:25

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	86	62-126	10/24/2019 20:25

Analyst(s): IA

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5035
Date Prepared:	10/23/19	**Analytical Method:**	SW8021B/8015Bm
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B3-3	1910B43-009A	Soil	10/22/2019 08:30	GC19 10241929.D	187629

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	10/25/2019 02:01
MTBE	---	0.050	1	10/25/2019 02:01
Benzene	---	0.0050	1	10/25/2019 02:01
Toluene	---	0.0050	1	10/25/2019 02:01
Ethylbenzene	---	0.0050	1	10/25/2019 02:01
m,p-Xylene	---	0.010	1	10/25/2019 02:01
o-Xylene	---	0.0050	1	10/25/2019 02:01
Xylenes	---	0.0050	1	10/25/2019 02:01

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	86	62-126	10/25/2019 02:01

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B1-4	1910B43-012A	Soil	10/22/2019 10:45	GC19 10241931.D	187629

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	10/25/2019 03:02
MTBE	---	0.050	1	10/25/2019 03:02
Benzene	---	0.0050	1	10/25/2019 03:02
Toluene	---	0.0050	1	10/25/2019 03:02
Ethylbenzene	---	0.0050	1	10/25/2019 03:02
m,p-Xylene	---	0.010	1	10/25/2019 03:02
o-Xylene	---	0.0050	1	10/25/2019 03:02
Xylenes	---	0.0050	1	10/25/2019 03:02

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	95	62-126	10/25/2019 03:02

Analyst(s): IA

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW5035
Date Prepared:	10/23/19	**Analytical Method:**	SW8021B/8015Bm
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B2-5	**1910B43-013A**	**Soil**	**10/22/2019 10:45**	**GC19 10241932.D**	**187629**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	10/25/2019 03:32
MTBE	---	0.050	1	10/25/2019 03:32
Benzene	---	0.0050	1	10/25/2019 03:32
Toluene	---	0.0050	1	10/25/2019 03:32
Ethylbenzene	---	0.0050	1	10/25/2019 03:32
m,p-Xylene	---	0.010	1	10/25/2019 03:32
o-Xylene	---	0.0050	1	10/25/2019 03:32
Xylenes	---	0.0050	1	10/25/2019 03:32

Surrogates	REC (%)	Limits		
2-Fluorotoluene	85	62-126		10/25/2019 03:32

Analyst(s): IA

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B
Date Prepared:	10/23/19	**Analytical Method:**	SW8015B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	**1910B43-001A**	**Soil**	**10/22/2019 08:30**	**GC9a 10251958.D**	**187591**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/26/2019 10:25
TPH-Motor Oil (C18-C36)	**10**	5.0	1	10/26/2019 10:25

Surrogates	REC (%)	Limits	Date Analyzed
C9	87	74-123	10/26/2019 10:25

Analyst(s): JIS — Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	**1910B43-005A**	**Soil**	**10/22/2019 08:30**	**GC9a 10251962.D**	**187591**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1.2**	1.0	1	10/26/2019 11:43
TPH-Motor Oil (C18-C36)	**14**	5.0	1	10/26/2019 11:43

Surrogates	REC (%)	Limits	Date Analyzed
C9	87	74-123	10/26/2019 11:43

Analyst(s): JIS — Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	**1910B43-006A**	**Soil**	**10/22/2019 08:30**	**GC9a 10251966.D**	**187591**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**18**	1.0	1	10/26/2019 13:00
TPH-Motor Oil (C18-C36)	**250**	5.0	1	10/26/2019 13:00

Surrogates	REC (%)	Limits	Date Analyzed
C9	89	74-123	10/26/2019 13:00

Analyst(s): JIS — Analytical Comments: e7,e2

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B
Date Prepared:	10/23/19	**Analytical Method:**	SW8015B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B5-2	**1910B43-007A**	**Soil**	**10/22/2019 08:30**	**GC9a 10251980.D**	**187591**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/26/2019 17:32
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/26/2019 17:32

Surrogates	REC (%)	Limits	Date Analyzed
C9	97	74-123	10/26/2019 17:32

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B3-3	**1910B43-009A**	**Soil**	**10/22/2019 08:30**	**GC9a 10251984.D**	**187628**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/26/2019 18:50
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/26/2019 18:50

Surrogates	REC (%)	Limits	Date Analyzed
C9	88	74-123	10/26/2019 18:50

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B1-4	**1910B43-012A**	**Soil**	**10/22/2019 10:45**	**GC9a 10251992.D**	**187628**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/26/2019 21:24
TPH-Motor Oil (C18-C36)	**6.2**	5.0	1	10/26/2019 21:24

Surrogates	REC (%)	Limits	Date Analyzed
C9	96	74-123	10/26/2019 21:24

Analyst(s): JIS

Analytical Comments: e7

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW3550B
Date Prepared:	10/23/19	**Analytical Method:**	SW8015B
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B2-5	1910B43-013A	Soil	10/22/2019 10:45	GC9b 10251913.D	187628

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/25/2019 20:12
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/25/2019 20:12

Surrogates	REC (%)	Limits	Date Analyzed
C9	91	74-123	10/25/2019 20:12

Analyst(s): JIS

Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/25/19	**BatchID:**	187709
Date Analyzed:	10/25/19	**Extraction Method:**	SW3550B/3640Am/3630Cm
Instrument:	GC40	**Analytical Method:**	SW8081A/8082
Matrix:	Soil	**Unit:**	mg/kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187709

QC Summary Report for SW8081A/8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.000036	0.00010	-	-	-
a-BHC	ND	0.000025	0.00010	-	-	-
b-BHC	ND	0.00025	0.00030	-	-	-
d-BHC	ND	0.00013	0.00020	-	-	-
g-BHC	ND	0.000066	0.00010	-	-	-
Chlordane (Technical)	ND	0.00043	0.0025	-	-	-
a-Chlordane	ND	0.000095	0.00010	-	-	-
g-Chlordane	ND	0.000047	0.00010	-	-	-
p,p-DDD	ND	0.000043	0.00010	-	-	-
p,p-DDE	ND	0.000094	0.00010	-	-	-
p,p-DDT	ND	0.000092	0.00010	-	-	-
Dieldrin	ND	0.000061	0.00010	-	-	-
Endosulfan I	ND	0.000048	0.00010	-	-	-
Endosulfan II	ND	0.000076	0.00010	-	-	-
Endosulfan sulfate	ND	0.000078	0.00010	-	-	-
Endrin	ND	0.000035	0.00010	-	-	-
Endrin aldehyde	ND	0.000067	0.00010	-	-	-
Endrin ketone	ND	0.000084	0.00010	-	-	-
Heptachlor	ND	0.000040	0.00010	-	-	-
Heptachlor epoxide	ND	0.000054	0.00010	-	-	-
Hexachlorobenzene	ND	0.00011	0.0010	-	-	-
Hexachlorocyclopentadiene	ND	0.00034	0.0020	-	-	-
Methoxychlor	ND	0.00013	0.00020	-	-	-
Toxaphene	ND	0.0034	0.0050	-	-	-
Aroclor1016	ND	0.0020	0.0050	-	-	-
Aroclor1221	ND	0.0022	0.0050	-	-	-
Aroclor1232	ND	0.0022	0.0050	-	-	-
Aroclor1242	ND	0.0022	0.0050	-	-	-
Aroclor1248	ND	0.0022	0.0050	-	-	-
Aroclor1254	ND	0.0022	0.0050	-	-	-
Aroclor1260	ND	0.0022	0.0050	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.0035			0.005	69	28-170

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/25/19	**BatchID:**	187709
Date Analyzed:	10/25/19	**Extraction Method:**	SW3550B/3640Am/3630Cm
Instrument:	GC40	**Analytical Method:**	SW8081A/8082
Matrix:	Soil	**Unit:**	mg/kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187709

QC Summary Report for SW8081A/8082

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.0034	0.0036	0.0050	67	72	31-155	6.15	20
a-BHC	0.0032	0.0034	0.0050	63	67	32-160	6.35	20
b-BHC	0.0034	0.0036	0.0050	69	73	44-149	5.79	20
d-BHC	0.0039	0.0041	0.0050	77	82	37-157	5.84	20
g-BHC	0.0033	0.0035	0.0050	67	71	43-154	6.02	20
a-Chlordane	0.0042	0.0044	0.0050	83	89	39-150	6.50	20
g-Chlordane	0.0033	0.0036	0.0050	67	71	39-151	6.30	20
p,p-DDD	0.0030	0.0032	0.0050	60	63	30-158	5.97	20
p,p-DDE	0.0032	0.0034	0.0050	64	68	47-149	6.10	20
p,p-DDT	0.0037	0.0040	0.0050	74	79	56-166	6.46	20
Dieldrin	0.0036	0.0038	0.0050	73	77	50-163	5.67	20
Endosulfan I	0.0034	0.0036	0.0050	68	72	45-159	5.84	20
Endosulfan II	0.0036	0.0038	0.0050	72	77	41-155	5.77	20
Endosulfan sulfate	0.0038	0.0040	0.0050	75	80	45-156	6.29	20
Endrin	0.0038	0.0040	0.0050	75	81	54-154	7.02	20
Endrin aldehyde	0.0040	0.0043	0.0050	81	86	27-159	6.04	20
Endrin ketone	0.0038	0.0040	0.0050	75	80	40-147	6.12	20
Heptachlor	0.0033	0.0035	0.0050	65	70	52-165	6.53	20
Heptachlor epoxide	0.0032	0.0034	0.0050	65	69	46-145	6.15	20
Hexachlorobenzene	0.0028	0.0030	0.0050	57	60	22-156	6.40	20
Hexachlorocyclopentadiene	0.0054	0.0058	0.0050	108	116	43-173	7.25	20
Methoxychlor	0.0037	0.0040	0.0050	74	80	49-150	8.24	20
Surrogate Recovery								
Decachlorobiphenyl	0.0038	0.0039	0.0050	77	79	28-170	2.28	20

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187630
Date Analyzed:	10/24/19 - 10/25/19	**Extraction Method:**	SW5030B
Instrument:	GC18, GC38	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187630 1910B43-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	0.067	0.10	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.00078	0.0050	-	-	-
Benzene	ND	0.00098	0.0050	-	-	-
Bromobenzene	ND	0.0012	0.0050	-	-	-
Bromochloromethane	ND	0.0011	0.0050	-	-	-
Bromodichloromethane	ND	0.00028	0.0010	-	-	-
Bromoform	ND	0.0017	0.0050	-	-	-
Bromomethane	ND	0.0018	0.0050	-	-	-
2-Butanone (MEK)	0.016,J	0.011	0.020	-	-	-
t-Butyl alcohol (TBA)	ND	0.032	0.050	-	-	-
n-Butyl benzene	ND	0.0021	0.0050	-	-	-
sec-Butyl benzene	ND	0.0017	0.0050	-	-	-
tert-Butyl benzene	ND	0.0013	0.0050	-	-	-
Carbon Disulfide	ND	0.0030	0.0050	-	-	-
Carbon Tetrachloride	ND	0.00090	0.0050	-	-	-
Chlorobenzene	ND	0.00086	0.0050	-	-	-
Chloroethane	ND	0.0020	0.0050	-	-	-
Chloroform	ND	0.00011	0.0050	-	-	-
Chloromethane	ND	0.0026	0.0050	-	-	-
2-Chlorotoluene	ND	0.0016	0.0050	-	-	-
4-Chlorotoluene	ND	0.0012	0.0050	-	-	-
Dibromochloromethane	ND	0.00019	0.0050	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.00016	0.00025	-	-	-
1,2-Dibromoethane (EDB)	ND	0.000034	0.00010	-	-	-
Dibromomethane	ND	0.00081	0.0050	-	-	-
1,2-Dichlorobenzene	ND	0.0011	0.0050	-	-	-
1,3-Dichlorobenzene	ND	0.0010	0.0050	-	-	-
1,4-Dichlorobenzene	ND	0.00085	0.0050	-	-	-
Dichlorodifluoromethane	ND	0.0013	0.0050	-	-	-
1,1-Dichloroethane	ND	0.00088	0.0050	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.000043	0.00025	-	-	-
1,1-Dichloroethene	ND	0.000028	0.00025	-	-	-
cis-1,2-Dichloroethene	ND	0.00084	0.0050	-	-	-
trans-1,2-Dichloroethene	ND	0.0011	0.0050	-	-	-
1,2-Dichloropropane	ND	0.00080	0.0050	-	-	-
1,3-Dichloropropane	ND	0.00070	0.0050	-	-	-
2,2-Dichloropropane	ND	0.0019	0.0050	-	-	-
1,1-Dichloropropene	ND	0.00083	0.0050	-	-	-

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Quality Control Report

Client: Essel Environmental Consulting
Date Prepared: 10/23/19
Date Analyzed: 10/24/19 - 10/25/19
Instrument: GC18, GC38
Matrix: Soil
Project: 19272; RCD; 3823 MLK Jr Way Oakland

WorkOrder: 1910B43
BatchID: 187630
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-187630
1910B43-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
cis-1,3-Dichloropropene	ND	0.0017	0.0050	-	-	-
trans-1,3-Dichloropropene	ND	0.0020	0.0050	-	-	-
Diisopropyl ether (DIPE)	ND	0.0011	0.0050	-	-	-
Ethylbenzene	ND	0.00095	0.0050	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0011	0.0050	-	-	-
Freon 113	ND	0.0011	0.0050	-	-	-
Hexachlorobutadiene	ND	0.0023	0.0050	-	-	-
Hexachloroethane	ND	0.0014	0.0050	-	-	-
2-Hexanone	ND	0.0031	0.0050	-	-	-
Isopropylbenzene	ND	0.0017	0.0050	-	-	-
4-Isopropyl toluene	ND	0.0015	0.0050	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0017	0.0050	-	-	-
Methylene chloride	ND	0.0080	0.010	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.0029	0.0050	-	-	-
Naphthalene	ND	0.0036	0.0050	-	-	-
n-Propyl benzene	ND	0.0016	0.0050	-	-	-
Styrene	ND	0.0027	0.0050	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.00089	0.0050	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.000087	0.00025	-	-	-
Tetrachloroethene	ND	0.00020	0.0010	-	-	-
Toluene	ND	0.0016	0.0050	-	-	-
1,2,3-Trichlorobenzene	ND	0.0037	0.0050	-	-	-
1,2,4-Trichlorobenzene	ND	0.0018	0.0050	-	-	-
1,1,1-Trichloroethane	ND	0.00084	0.0050	-	-	-
1,1,2-Trichloroethane	ND	0.00067	0.0050	-	-	-
Trichloroethene	ND	0.0016	0.0050	-	-	-
Trichlorofluoromethane	ND	0.0014	0.0050	-	-	-
1,2,3-Trichloropropane	ND	0.000042	0.00010	-	-	-
1,2,4-Trimethylbenzene	ND	0.0015	0.0050	-	-	-
1,3,5-Trimethylbenzene	ND	0.0016	0.0050	-	-	-
Vinyl Chloride	ND	0.000053	0.00025	-	-	-
m,p-Xylene	ND	0.0023	0.0050	-	-	-
o-Xylene	ND	0.00074	0.0050	-	-	-

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187630
Date Analyzed:	10/24/19 - 10/25/19	**Extraction Method:**	SW5030B
Instrument:	GC18, GC38	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187630 1910B43-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	0.13			0.125	106	87-127
Toluene-d8	0.13			0.125	105	93-141
4-BFB	0.012			0.0125	95	84-137
Benzene-d6	0.094			0.1	94	67-131
Ethylbenzene-d10	0.10			0.1	101	78-153
1,2-DCB-d4	0.083			0.1	83	63-109

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187630
Date Analyzed:	10/24/19 - 10/25/19	**Extraction Method:**	SW5030B
Instrument:	GC18, GC38	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187630 1910B43-001AMS/MSD

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	0.30	0.32	0.20	152	160,F2	48-156	4.54	30
tert-Amyl methyl ether (TAME)	0.018	0.019	0.020	88	93	56-115	6.37	30
Benzene	0.018	0.020	0.020	92	99	63-131	7.25	30
Bromobenzene	0.021	0.021	0.020	103	103	66-127	0	30
Bromochloromethane	0.022	0.024	0.020	112	121	64-124	7.66	30
Bromodichloromethane	0.016	0.017	0.020	81	87	64-120	7.09	30
Bromoform	0.014	0.014	0.020	72	71	48-92	1.33	30
Bromomethane	0.016	0.017	0.020	78	85	25-163	8.66	30
2-Butanone (MEK)	0.083	0.089	0.080	104	111	51-133	6.63	30
t-Butyl alcohol (TBA)	0.089	0.095	0.080	112	118	52-129	5.86	30
n-Butyl benzene	0.025	0.025	0.020	126	126	83-200	0	30
sec-Butyl benzene	0.024	0.025	0.020	122	123	81-199	0.698	30
tert-Butyl benzene	0.023	0.024	0.020	116	120	79-178	3.83	30
Carbon Disulfide	0.019	0.020	0.020	94	100	64-136	5.36	30
Carbon Tetrachloride	0.018	0.020	0.020	92	99	66-140	7.03	30
Chlorobenzene	0.020	0.020	0.020	101	100	73-116	0.743	30
Chloroethane	0.013	0.014	0.020	66	69	35-147	3.69	30
Chloroform	0.019	0.020	0.020	95	102	65-130	7.36	30
Chloromethane	0.011	0.012	0.020	57	60	30-137	4.39	30
2-Chlorotoluene	0.022	0.022	0.020	109	110	75-152	0.918	30
4-Chlorotoluene	0.021	0.021	0.020	107	107	71-148	0	30
Dibromochloromethane	0.017	0.016	0.020	83	82	61-106	1.11	30
1,2-Dibromo-3-chloropropane	0.0081	0.0081	0.010	81	81	36-120	0	30
1,2-Dibromoethane (EDB)	0.0097	0.0096	0.010	97	96	67-118	1.46	30
Dibromomethane	0.019	0.020	0.020	95	100	61-116	5.18	30
1,2-Dichlorobenzene	0.018	0.017	0.020	90	87	59-106	2.87	30
1,3-Dichlorobenzene	0.021	0.021	0.020	105	105	75-129	0	30
1,4-Dichlorobenzene	0.020	0.020	0.020	98	101	66-127	2.32	30
Dichlorodifluoromethane	0.0045	0.0046	0.020	23	23	13-74	0	30
1,1-Dichloroethane	0.018	0.020	0.020	92	99	65-134	7.24	30
1,2-Dichloroethane (1,2-DCA)	0.018	0.019	0.020	91	95	57-131	3.99	30
1,1-Dichloroethene	0.018	0.019	0.020	89	95	62-127	6.19	30
cis-1,2-Dichloroethene	0.019	0.021	0.020	97	103	66-130	5.92	30
trans-1,2-Dichloroethene	0.019	0.020	0.020	94	102	60-131	7.76	30
1,2-Dichloropropane	0.018	0.019	0.020	89	96	63-127	7.21	30
1,3-Dichloropropane	0.022	0.021	0.020	108	106	68-124	1.92	30
2,2-Dichloropropane	0.018	0.019	0.020	90	95	63-150	5.29	30
1,1-Dichloropropene	0.018	0.020	0.020	91	98	67-134	7.69	30

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187630
Date Analyzed:	10/24/19 - 10/25/19	**Extraction Method:**	SW5030B
Instrument:	GC18, GC38	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187630 1910B43-001AMS/MSD

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	0.019	0.019	0.020	97	96	65-138	1.16	30
trans-1,3-Dichloropropene	0.021	0.020	0.020	103	100	66-124	2.40	30
Diisopropyl ether (DIPE)	0.017	0.018	0.020	84	91	58-129	7.67	30
Ethylbenzene	0.020	0.020	0.020	102	102	73-145	0	30
Ethyl tert-butyl ether (ETBE)	0.018	0.019	0.020	89	96	62-125	7.58	30
Freon 113	0.017	0.018	0.020	85	89	55-116	4.97	30
Hexachlorobutadiene	0.025	0.025	0.020	124	127	75-178	1.67	30
Hexachloroethane	0.019	0.020	0.020	96	98	75-152	1.60	30
2-Hexanone	0.015	0.012	0.020	76	60	41-113	23.7	30
Isopropylbenzene	0.024	0.024	0.020	118	118	67-172	0	30
4-Isopropyl toluene	0.025	0.025	0.020	123	123	88-171	0	30
Methyl-t-butyl ether (MTBE)	0.019	0.020	0.020	95	101	58-122	5.58	30
Methylene chloride	0.019	0.021	0.020	96	105	57-140	8.93	30
4-Methyl-2-pentanone (MIBK)	0.016	0.015	0.020	78	76	42-117	3.54	30
Naphthalene	0.012	0.011	0.020	59	55	29-65	6.90	30
n-Propyl benzene	0.023	0.024	0.020	117	118	85-174	0.531	30
Styrene	0.018	0.018	0.020	90	89	63-126	1.71	30
1,1,1,2-Tetrachloroethane	0.020	0.019	0.020	98	97	68-131	0.661	30
1,1,2,2-Tetrachloroethane	0.018	0.018	0.020	91	91	45-121	0	30
Tetrachloroethene	0.023	0.023	0.020	115	114	65-150	0.889	30
Toluene	0.020	0.020	0.020	102	101	72-135	1.04	30
1,2,3-Trichlorobenzene	0.014	0.014	0.020	68	68	35-80	0	30
1,2,4-Trichlorobenzene	0.017	0.017	0.020	83	85	45-103	2.32	30
1,1,1-Trichloroethane	0.018	0.019	0.020	91	97	67-137	6.99	30
1,1,2-Trichloroethane	0.021	0.020	0.020	104	102	67-117	1.68	30
Trichloroethene	0.020	0.021	0.020	99	107	62-135	7.78	30
Trichlorofluoromethane	0.017	0.018	0.020	87	92	56-124	5.57	30
1,2,3-Trichloropropane	0.010	0.010	0.010	103	102	58-133	0.963	30
1,2,4-Trimethylbenzene	0.022	0.022	0.020	110	111	78-161	0.965	30
1,3,5-Trimethylbenzene	0.022	0.023	0.020	111	114	85-170	2.09	30
Vinyl Chloride	0.0068	0.0072	0.010	68	72	32-142	5.41	30
m,p-Xylene	0.043	0.040	0.040	108	99	70-138	8.27	30
o-Xylene	0.019	0.019	0.020	96	96	69-135	0	30

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187630
Date Analyzed:	10/24/19 - 10/25/19	**Extraction Method:**	SW5030B
Instrument:	GC18, GC38	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187630 1910B43-001AMS/MSD

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	0.12	0.13	0.12	98	107	87-127	8.19	30
Toluene-d8	0.13	0.13	0.12	105	105	93-141	0	30
4-BFB	0.012	0.012	0.012	97	99	84-137	1.60	30
Benzene-d6	0.090	0.095	0.10	90	95	67-131	5.94	30
Ethylbenzene-d10	0.10	0.10	0.10	105	103	78-153	1.82	30
1,2-DCB-d4	0.084	0.084	0.10	84	84	63-109	0	30

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acetone	1	0.23	0.23	0.20	ND	113	114	36-141	0.118	30
tert-Amyl methyl ether (TAME)	1	0.014	0.014	0.020	ND	69	72	46-105	4.44	30
Benzene	1	0.016	0.016	0.020	ND	78	82	46-124	5.14	30
Bromobenzene	1	0.015	0.016	0.020	ND	77	78	50-119	1.55	30
Bromochloromethane	1	0.015	0.016	0.020	ND	75	78	42-122	3.71	30
Bromodichloromethane	1	0.015	0.016	0.020	ND	77	80	48-112	3.53	30
Bromoform	1	0.012	0.012	0.020	ND	60	61	36-90	1.41	30
Bromomethane	1	0.016	0.018	0.020	ND	79	92	10-149	15.2	30
2-Butanone (MEK)	1	0.066	0.061	0.080	ND	83	77	43-114	7.55	30
t-Butyl alcohol (TBA)	1	0.11	0.11	0.040	ND	267,F1	140,F1	33-123	4.84	30
n-Butyl benzene	1	0.019	0.020	0.020	ND	95	99	40-185	4.20	30
sec-Butyl benzene	1	0.020	0.021	0.020	ND	100	103	40-183	2.94	30
tert-Butyl benzene	1	0.019	0.020	0.020	ND	94	98	44-168	3.81	30
Carbon Disulfide	1	0.014	0.016	0.020	ND	70	78	23-139	10.5	30
Carbon Tetrachloride	1	0.015	0.016	0.020	ND	77	81	43-133	5.54	30
Chlorobenzene	1	0.015	0.016	0.020	ND	76	78	51-115	3.12	30
Chloroethane	1	0.017	0.018	0.020	ND	87	91	16-138	5.43	30
Chloroform	1	0.015	0.016	0.020	ND	75	79	54-117	4.88	30
Chloromethane	1	0.014	0.015	0.020	ND	69	75	14-128	8.01	30
2-Chlorotoluene	1	0.017	0.018	0.020	ND	86	89	54-141	3.23	30
4-Chlorotoluene	1	0.016	0.016	0.020	ND	80	83	52-134	2.68	30
Dibromochloromethane	1	0.014	0.014	0.020	ND	68	70	46-102	3.22	30
1,2-Dibromo-3-chloropropane	1	0.0066	0.0067	0.020	ND	33	67	16-120	1.91	30
1,2-Dibromoethane (EDB)	1	0.0074	0.0076	0.010	ND	74	76	48-113	2.84	30
Dibromomethane	1	0.015	0.015	0.020	ND	76	77	44-110	0.520	30
1,2-Dichlorobenzene	1	0.014	0.015	0.010	ND	144,F1	74	43-106	2.51	30

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187630
Date Analyzed:	10/24/19 - 10/25/19	**Extraction Method:**	SW5030B
Instrument:	GC18, GC38	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187630 1910B43-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
1,3-Dichlorobenzene	1	0.016	0.017	0.020	ND	82	87	49-128	5.46	30
1,4-Dichlorobenzene	1	0.016	0.016	0.020	ND	81	82	48-120	1.75	30
Dichlorodifluoromethane	1	0.0052	0.0059	0.020	ND	26	29	8-63	11.2	30
1,1-Dichloroethane	1	0.015	0.016	0.020	ND	76	80	50-122	5.79	30
1,2-Dichloroethane (1,2-DCA)	1	0.018	0.019	0.020	ND	90	94	46-116	4.41	30
1,1-Dichloroethene	1	0.013	0.014	0.020	ND	66	72	37-124	8.08	30
cis-1,2-Dichloroethene	1	0.015	0.015	0.020	ND	74	77	47-123	3.48	30
trans-1,2-Dichloroethene	1	0.013	0.015	0.020	ND	67	74	31-131	9.08	30
1,2-Dichloropropane	1	0.015	0.016	0.020	ND	77	80	50-116	4.13	30
1,3-Dichloropropane	1	0.014	0.015	0.020	ND	71	74	52-115	3.89	30
2,2-Dichloropropane	1	0.015	0.016	0.020	ND	73	79	43-137	8.09	30
1,1-Dichloropropene	1	0.014	0.015	0.020	ND	72	77	43-126	6.06	30
cis-1,3-Dichloropropene	1	0.015	0.016	0.020	ND	76	80	35-134	4.78	30
trans-1,3-Dichloropropene	1	0.015	0.016	0.020	ND	77	80	35-124	4.14	30
Diisopropyl ether (DIPE)	1	0.014	0.015	0.020	ND	71	75	49-116	4.97	30
Ethylbenzene	1	0.017	0.018	0.020	ND	85	88	49-137	3.85	30
Ethyl tert-butyl ether (ETBE)	1	0.016	0.017	0.020	ND	81	85	50-113	4.87	30
Freon 113	1	0.012	0.012	0.020	ND	58	62	28-114	7.55	30
Hexachlorobutadiene	1	0.018	0.019	0.020	ND	90	94	22-180	4.48	30
Hexachloroethane	1	0.018	0.019	0.020	ND	90	94	28-158	4.15	30
2-Hexanone	1	0.012	0.012	0.020	ND	60	59	31-102	2.15	30
Isopropylbenzene	1	0.019	0.020	0.020	ND	97	102	50-153	5.73	30
4-Isopropyl toluene	1	0.020	0.020	0.020	ND	98	100	41-171	1.33	30
Methyl-t-butyl ether (MTBE)	1	0.014	0.016	0.020	ND	72	78	48-110	7.64	30
Methylene chloride	1	0.014	0.015	0.020	ND	71	77	42-127	9.20	30
4-Methyl-2-pentanone (MIBK)	1	0.011	0.012	0.020	ND	54	59	24-114	8.81	30
Naphthalene	1	0.0087	0.0090	0.020	ND	43	45	19-69	4.19	30
n-Propyl benzene	1	0.019	0.020	0.020	ND	96	101	46-168	4.27	30
Styrene	1	0.015	0.015	0.020	ND	74	76	42-122	3.58	30
1,1,1,2-Tetrachloroethane	1	0.016	0.017	0.020	ND	80	83	52-121	4.01	30
1,1,2,2-Tetrachloroethane	1	0.014	0.015	0.020	ND	71	74	27-116	3.05	30
Tetrachloroethene	1	0.015	0.016	0.020	ND	74	77	37-149	3.99	30
Toluene	1	0.016	0.017	0.020	ND	79	83	52-124	5.06	30
1,2,3-Trichlorobenzene	1	0.010	0.011	0.020	ND	50	53	20-86	5.17	30
1,2,4-Trichlorobenzene	1	0.013	0.013	0.020	ND	63	66	24-107	4.80	30
1,1,1-Trichloroethane	1	0.016	0.017	0.020	ND	79	84	48-128	6.73	30
1,1,2-Trichloroethane	1	0.014	0.015	0.020	ND	71	73	51-110	2.07	30
Trichloroethene	1	0.015	0.015	0.020	ND	74	76	42-128	2.68	30

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187630
Date Analyzed:	10/24/19 - 10/25/19	**Extraction Method:**	SW5030B
Instrument:	GC18, GC38	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187630 1910B43-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Trichlorofluoromethane	1	0.013	0.014	0.020	ND	64	69	31-121	7.49	30
1,2,3-Trichloropropane	1	0.0075	0.0077	0.010	ND	75	77	50-115	2.69	30
1,2,4-Trimethylbenzene	1	0.018	0.019	0.020	ND	90	95	48-151	5.12	30
1,3,5-Trimethylbenzene	1	0.019	0.019	0.020	ND	95	97	51-159	2.30	30
Vinyl Chloride	1	0.0077	0.0084	0.010	ND	77	84	11-136	8.82	30
m,p-Xylene	1	0.033	0.034	0.040	ND	82	85	30-150	3.86	30
o-Xylene	1	0.017	0.017	0.020	ND	83	86	48-128	3.46	30
Surrogate Recovery										
Dibromofluoromethane	1	0.12	0.12	0.12		97	98	82-136	0.558	30
Toluene-d8	1	0.11	0.11	0.12		90,F3	91,F3	92-139	1.14	30
4-BFB	1	0.011	0.011	0.012		85	88	82-135	3.20	30
Benzene-d6	1	0.073	0.074	0.10		73	74	55-122	1.84	30
Ethylbenzene-d10	1	0.079	0.080	0.10		79	80	58-141	1.40	30
1,2-DCB-d4	1	0.068	0.068	0.10		68	68	51-107	0	30

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/25/19	**BatchID:**	187707
Date Analyzed:	10/25/19	**Extraction Method:**	SW3550B/3640A
Instrument:	GC17	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187707

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Benzoic Acid	ND	0.96	1.2	-	-	-
Acenaphthene	ND	0.0012	0.0013	-	-	-
Acenaphthylene	ND	0.0012	0.0013	-	-	-
Acetochlor	ND	0.16	0.25	-	-	-
Anthracene	ND	0.00096	0.0013	-	-	-
Benzidine	ND	0.72	1.2	-	-	-
Benzo (a) anthracene	ND	0.0044	0.0050	-	-	-
Benzo (a) pyrene	ND	0.0011	0.0025	-	-	-
Benzo (b) fluoranthene	ND	0.0011	0.0063	-	-	-
Benzo (g,h,i) perylene	ND	0.0010	0.0025	-	-	-
Benzo (k) fluoranthene	ND	0.0010	0.0013	-	-	-
Benzyl Alcohol	ND	1.2	1.2	-	-	-
1,1-Biphenyl	ND	0.0026	0.013	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.16	0.25	-	-	-
Bis (2-chloroethyl) Ether	ND	0.0019	0.0025	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.0018	0.0025	-	-	-
Bis (2-ethylhexyl) Adipate	ND	0.23	0.50	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.0045	0.0050	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.16	0.25	-	-	-
Butylbenzyl Phthalate	ND	0.023	0.025	-	-	-
4-Chloroaniline	ND	0.0016	0.0025	-	-	-
4-Chloro-3-methylphenol	ND	0.16	0.25	-	-	-
2-Chloronaphthalene	ND	0.20	0.25	-	-	-
2-Chlorophenol	ND	0.0026	0.0050	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.18	0.25	-	-	-
Chrysene	ND	0.00098	0.0025	-	-	-
Dibenzo (a,h) anthracene	ND	0.0011	0.0025	-	-	-
Dibenzofuran	ND	0.18	0.25	-	-	-
Di-n-butyl Phthalate	ND	0.0018	0.0025	-	-	-
1,2-Dichlorobenzene	ND	0.13	0.25	-	-	-
1,3-Dichlorobenzene	ND	0.15	0.25	-	-	-
1,4-Dichlorobenzene	ND	0.15	0.25	-	-	-
3,3-Dichlorobenzidine	ND	0.00096	0.0025	-	-	-
2,4-Dichlorophenol	ND	0.0017	0.013	-	-	-
Diethyl Phthalate	ND	0.0023	0.0050	-	-	-
2,4-Dimethylphenol	ND	0.19	0.25	-	-	-
Dimethyl Phthalate	ND	0.0024	0.0025	-	-	-
4,6-Dinitro-2-methylphenol	ND	0.77	1.2	-	-	-

(Cont.)

Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/25/19	**BatchID:**	187707
Date Analyzed:	10/25/19	**Extraction Method:**	SW3550B/3640A
Instrument:	GC17	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187707

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
2,4-Dinitrophenol	ND	0.058	0.13	-	-	-
2,4-Dinitrotoluene	ND	0.0011	0.0063	-	-	-
2,6-Dinitrotoluene	ND	0.0019	0.0025	-	-	-
Di-n-octyl Phthalate	ND	0.0032	0.0050	-	-	-
1,2-Diphenylhydrazine	ND	0.20	0.25	-	-	-
Fluoranthene	ND	0.0011	0.0013	-	-	-
Fluorene	ND	0.0019	0.0025	-	-	-
Hexachlorobenzene	ND	0.0013	0.0013	-	-	-
Hexachlorobutadiene	ND	0.0017	0.0025	-	-	-
Hexachlorocyclopentadiene	ND	0.13	2.0	-	-	-
Hexachloroethane	ND	0.0012	0.0025	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	-	-	-
Isophorone	ND	0.14	0.25	-	-	-
2-Methylnaphthalene	ND	0.0018	0.0025	-	-	-
2-Methylphenol (o-Cresol)	ND	0.21	0.50	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	0.17	0.25	-	-	-
Naphthalene	ND	0.0013	0.0013	-	-	-
2-Nitroaniline	ND	1.1	1.2	-	-	-
3-Nitroaniline	ND	0.82	1.2	-	-	-
4-Nitroaniline	ND	0.98	1.2	-	-	-
Nitrobenzene	ND	0.15	0.25	-	-	-
2-Nitrophenol	ND	1.1	1.2	-	-	-
4-Nitrophenol	ND	1.2	1.2	-	-	-
N-Nitrosodimethylamine	ND	0.73	1.2	-	-	-
N-Nitrosodiphenylamine	ND	0.18	0.25	-	-	-
N-Nitrosodi-n-propylamine	ND	0.23	0.25	-	-	-
Pentachlorophenol	ND	0.011	0.031	-	-	-
Phenanthrene	ND	0.0011	0.0050	-	-	-
Phenol	ND	0.0016	0.0050	-	-	-
Pyrene	ND	0.0012	0.0025	-	-	-
Pyridine	ND	0.16	0.25	-	-	-
1,2,4-Trichlorobenzene	ND	0.15	0.25	-	-	-
2,4,5-Trichlorophenol	ND	0.0019	0.0025	-	-	-
2,4,6-Trichlorophenol	ND	0.0012	0.013	-	-	-

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/25/19	**BatchID:**	187707
Date Analyzed:	10/25/19	**Extraction Method:**	SW3550B/3640A
Instrument:	GC17	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187707

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
2-Fluorophenol	1.2			1.25	100	70-131
Phenol-d5	1.3			1.25	101	70-126
Nitrobenzene-d5	0.98			1.25	78	67-143
2-Fluorobiphenyl	0.97			1.25	77	65-131
2,4,6-Tribromophenol	0.94			1.25	75	59-142
4-Terphenyl-d14	0.89			1.25	71	49-151

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Date Prepared:	10/25/19	**BatchID:**	187707
Date Analyzed:	10/25/19	**Extraction Method:**	SW3550B/3640A
Instrument:	GC17	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187707

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.11	0.099	0.12	89	79	61-143	11.9	30
Acenaphthylene	0.12	0.10	0.12	94	83	68-146	12.4	30
Anthracene	0.11	0.10	0.12	88	80	67-139	9.66	30
Benzidine	3.9	3.4	12.5	31	27	14-60	12.8	30
Benzo (a) anthracene	0.12	0.11	0.12	95	87	66-140	9.56	30
Benzo (a) pyrene	0.13	0.12	0.12	104	93	73-157	10.7	30
Benzo (b) fluoranthene	0.55	0.47	0.62	88	76	73-145	14.5	30
Benzo (g,h,i) perylene	0.10	0.095	0.12	83	76	60-151	8.84	30
Benzo (k) fluoranthene	0.13	0.11	0.12	102	89	70-148	13.4	30
Benzyl Alcohol	15	15	12.5	123	117	38-140	4.87	30
Bis (2-chloroethoxy) Methane	2.3	2.0	2.5	91	82	70-127	10.6	30
Bis (2-chloroethyl) Ether	0.12	0.11	0.12	95	85	62-129	12.2	30
Bis (2-chloroisopropyl) Ether	0.11	0.10	0.12	91	83	61-151	9.50	30
Bis (2-ethylhexyl) Adipate	2.6	2.4	2.5	103	98	53-135	5.58	30
Bis (2-ethylhexyl) Phthalate	0.13	0.12	0.12	104	97	56-171	6.73	30
4-Bromophenyl Phenyl Ether	2.2	2.1	2.5	90	83	69-132	7.88	30
Butylbenzyl Phthalate	0.14	0.13	0.12	112	105	68-162	6.21	30
4-Chloroaniline	0.095	0.081	0.12	76	65	56-124	16.0	30
4-Chloro-3-methylphenol	2.8	2.4	2.5	112	98	80-144	14.2	30
2-Chloronaphthalene	2.3	2.0	2.5	91	81	66-132	11.6	30
2-Chlorophenol	0.11	0.10	0.12	90	83	63-132	8.21	30
4-Chlorophenyl Phenyl Ether	2.4	2.1	2.5	97	85	68-124	12.6	30
Chrysene	0.12	0.11	0.12	96	87	66-146	10.2	30
Dibenzo (a,h) anthracene	0.11	0.11	0.12	90	85	65-159	6.14	30
Dibenzofuran	2.4	2.1	2.5	97	85	66-119	13.0	30
Di-n-butyl Phthalate	0.13	0.11	0.12	100	91	77-136	9.26	30
1,2-Dichlorobenzene	2.7	2.5	2.5	107	98	62-120	8.90	30
1,3-Dichlorobenzene	1.9	1.8	2.5	78	71	62-120	9.19	30
1,4-Dichlorobenzene	1.9	1.8	2.5	78	72	64-123	8.09	30
3,3-Dichlorobenzidine	0.089	0.080	0.12	71	64	48-122	10.2	30
2,4-Dichlorophenol	2.7	2.4	2.5	110	98	69-145	11.8	30
Diethyl Phthalate	0.14	0.11	0.12	109	91	63-148	17.8	30
2,4-Dimethylphenol	2.8	2.4	2.5	111	97	58-160	12.9	30
Dimethyl Phthalate	0.14	0.12	0.12	108	96	65-149	11.5	30
4,6-Dinitro-2-methylphenol	12	11	12.5	96	87	51-132	9.20	30
2,4-Dinitrophenol	2.7	2.3	2.5	106	93	26-156	13.0	30
2,4-Dinitrotoluene	0.15	0.13	0.12	117	102	57-170	14.1	30
2,6-Dinitrotoluene	0.14	0.12	0.12	114	99	57-166	14.2	30

(Cont.)

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/25/19	**BatchID:**	187707
Date Analyzed:	10/25/19	**Extraction Method:**	SW3550B/3640A
Instrument:	GC17	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187707

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Di-n-octyl Phthalate	0.16	0.15	0.12	131	122	67-178	7.43	30
1,2-Diphenylhydrazine	2.2	2.0	2.5	87	79	57-141	9.34	30
Fluoranthene	0.13	0.12	0.12	103	92	74-149	11.5	30
Fluorene	0.13	0.12	0.12	104	92	76-153	12.2	30
Hexachlorobenzene	0.10	0.096	0.12	83	77	56-136	7.79	30
Hexachlorobutadiene	0.11	0.098	0.12	89	78	66-127	12.5	30
Hexachlorocyclopentadiene	9.1	8.3	12.5	73	66	43-118	9.72	30
Hexachloroethane	0.10	0.094	0.12	82	75	61-123	8.47	30
Indeno (1,2,3-cd) pyrene	0.11	0.10	0.12	89	82	62-156	8.84	30
Isophorone	2.3	2.1	2.5	92	82	67-122	11.7	30
2-Methylnaphthalene	0.13	0.12	0.12	107	95	74-148	11.8	30
2-Methylphenol (o-Cresol)	2.4	2.2	2.5	97	87	63-130	11.0	30
3 & 4-Methylphenol (m,p-Cresol)	2.9	2.7	2.5	115	110	67-122	4.87	30
Naphthalene	0.11	0.10	0.12	91	81	59-135	12.0	30
2-Nitroaniline	13	11	12.5	106	92	63-140	14.3	30
3-Nitroaniline	10	8.0	12.5	81	64	53-120	23.2	30
4-Nitroaniline	13	11	12.5	106	88	55-133	18.3	30
Nitrobenzene	2.5	2.2	2.5	98	87	68-127	12.4	30
2-Nitrophenol	13	12	12.5	102	92	74-144	9.87	30
4-Nitrophenol	15	12	12.5	120	99	61-138	19.2	30
N-Nitrosodiphenylamine	2.3	2.1	2.5	90	83	65-121	7.86	30
N-Nitrosodi-n-propylamine	2.0	1.9	2.5	81	75	61-111	7.84	30
Pentachlorophenol	0.68	0.59	0.62	108	95	56-158	12.7	30
Phenanthrene	0.11	0.10	0.12	87	80	64-135	8.10	30
Phenol	0.40	0.37	0.50	79	74	62-130	7.33	30
Pyrene	0.13	0.12	0.12	101	96	73-145	5.64	30
Pyridine	1.8	1.6	2.5	71	63	20-94	12.1	30
1,2,4-Trichlorobenzene	2.3	2.1	2.5	93	82	74-133	12.2	30
2,4,5-Trichlorophenol	0.13	0.11	0.12	102	90	69-159	12.3	30
2,4,6-Trichlorophenol	0.14	0.12	0.12	112	100	65-154	11.8	30

(Cont.)

Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/25/19	**BatchID:**	187707
Date Analyzed:	10/25/19	**Extraction Method:**	SW3550B/3640A
Instrument:	GC17	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187707

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
2-Fluorophenol	1.1	1.1	1.25	88	87	70-131	1.02	30
Phenol-d5	1.1	1.0	1.25	86	84	70-126	3.11	30
Nitrobenzene-d5	1.1	0.99	1.25	85	79	67-143	6.76	30
2-Fluorobiphenyl	1.0	0.95	1.25	80	76	65-131	4.57	30
2,4,6-Tribromophenol	0.99	0.96	1.25	79	77	59-142	2.88	30
4-Terphenyl-d14	0.96	0.96	1.25	77	77	49-151	0	30

Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187620
Date Analyzed:	10/24/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187620

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.094	0.50	-	-	-
Arsenic	ND	0.14	0.50	-	-	-
Barium	ND	0.97	5.0	-	-	-
Beryllium	ND	0.072	0.50	-	-	-
Cadmium	ND	0.058	0.25	-	-	-
Chromium	ND	0.092	0.50	-	-	-
Cobalt	ND	0.056	0.50	-	-	-
Copper	ND	0.069	0.50	-	-	-
Lead	ND	0.094	0.50	-	-	-
Mercury	ND	0.0050	0.050	-	-	-
Molybdenum	ND	0.23	0.50	-	-	-
Nickel	ND	0.072	0.50	-	-	-
Selenium	ND	0.13	0.50	-	-	-
Silver	ND	0.055	0.50	-	-	-
Thallium	ND	0.10	0.50	-	-	-
Vanadium	ND	0.064	0.50	-	-	-
Zinc	ND	1.4	5.0	-	-	-
Surrogate Recovery						
Terbium	620			500	124	70-130

(Cont.)

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187620
Date Analyzed:	10/24/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187620

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	51	50	50	101	100	75-125	1.21	20
Arsenic	52	52	50	103	104	75-125	0.790	20
Barium	540	540	500	108	108	75-125	0	20
Beryllium	56	56	50	112	112	75-125	0	20
Cadmium	51	52	50	102	103	75-125	0.895	20
Chromium	52	51	50	103	103	75-125	0	20
Cobalt	54	54	50	109	109	75-125	0	20
Copper	52	52	50	104	104	75-125	0	20
Lead	52	51	50	103	101	75-125	1.62	20
Mercury	1.2	1.2	1.25	94	95	75-125	1.10	20
Molybdenum	52	52	50	104	104	75-125	0	20
Nickel	52	53	50	104	105	75-125	0.592	20
Selenium	52	52	50	104	104	75-125	0	20
Silver	50	50	50	101	101	75-125	0	20
Thallium	53	53	50	106	106	75-125	0	20
Vanadium	52	52	50	105	104	75-125	1.10	20
Zinc	520	520	500	104	104	75-125	0	20
Surrogate Recovery								
Terbium	560	550	500	111	111	70-130	0	20

Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187592
Date Analyzed:	10/23/19 - 10/24/19	**Extraction Method:**	SW5035
Instrument:	GC19	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187592

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	0.11,J	0.090	1.0	-	-	-
MTBE	ND	0.0023	0.050	-	-	-
Benzene	ND	0.0010	0.0050	-	-	-
Toluene	ND	0.0012	0.0050	-	-	-
Ethylbenzene	ND	0.0020	0.0050	-	-	-
m,p-Xylene	ND	0.0013	0.010	-	-	-
o-Xylene	ND	0.0013	0.0050	-	-	-
Surrogate Recovery						
2-Fluorotoluene	0.097			0.1	97	75-134

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.64	0.64	0.60	106	107	82-118	1.17	20
MTBE	0.075	0.075	0.10	75	75	61-119	0	20
Benzene	0.082	0.085	0.10	82	85	77-128	3.80	20
Toluene	0.092	0.095	0.10	92	95	74-132	3.61	20
Ethylbenzene	0.093	0.097	0.10	93	97	84-127	3.79	20
m,p-Xylene	0.18	0.19	0.20	92	96	80-120	4.30	20
o-Xylene	0.092	0.097	0.10	92	97	80-120	4.53	20
Surrogate Recovery								
2-Fluorotoluene	0.089	0.091	0.10	89	91	75-134	2.90	20

(Cont.)

Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187629
Date Analyzed:	10/24/19 - 10/25/19	**Extraction Method:**	SW5035
Instrument:	GC19, GC7	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187629 1910B43-007AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	0.099,J	0.090	1.0	-	-	-
MTBE	ND	0.0023	0.050	-	-	-
Benzene	ND	0.0010	0.0050	-	-	-
Toluene	ND	0.0012	0.0050	-	-	-
Ethylbenzene	ND	0.0020	0.0050	-	-	-
m,p-Xylene	ND	0.0013	0.010	-	-	-
o-Xylene	ND	0.0013	0.0050	-	-	-
Surrogate Recovery						
2-Fluorotoluene	0.093			0.1	93	75-134

(Cont.)

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187629
Date Analyzed:	10/24/19 - 10/25/19	**Extraction Method:**	SW5035
Instrument:	GC19, GC7	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187629 1910B43-007AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.68	0.70	0.60	113	116	82-118	2.60	20
MTBE	0.077	0.088	0.10	77	88	61-119	12.7	20
Benzene	0.10	0.092	0.10	101	92	77-128	9.58	20
Toluene	0.10	0.094	0.10	103	94	74-132	9.17	20
Ethylbenzene	0.10	0.093	0.10	102	93	84-127	8.88	20
m,p-Xylene	0.20	0.19	0.20	101	93	80-120	8.17	20
o-Xylene	0.10	0.093	0.10	100	93	80-120	6.91	20
Surrogate Recovery								
2-Fluorotoluene	0.096	0.088	0.10	97	88	75-134	9.32	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	1	0.56	0.54	0.60	ND	94	90	58-129	4.31	20
MTBE	1	0.069	0.064	0.10	ND	69	64	47-118	7.80	20
Benzene	1	0.084	0.085	0.10	ND	84	85	55-129	0.603	20
Toluene	1	0.092	0.092	0.10	ND	90	90	56-130	0	20
Ethylbenzene	1	0.089	0.089	0.10	ND	89	89	63-129	0	20
m,p-Xylene	1	0.19	0.20	0.20	ND	97	98	80-120	0.806	20
o-Xylene	1	0.091	0.092	0.10	ND	91	92	80-120	1.36	20
Surrogate Recovery										
2-Fluorotoluene	1	0.079	0.080	0.10		79	80	62-126	0.992	20

Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187591
Date Analyzed:	10/24/19	**Extraction Method:**	SW3550B
Instrument:	GC11A, GC6A	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-187591

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	0.83	1.0	-	-	-
TPH-Motor Oil (C18-C36)	ND	3.8	5.0	-	-	-
Surrogate Recovery						
C9	25			25	98	72-122

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	44	45	40	110	113	75-128	2.40	30
Surrogate Recovery								
C9	22	24	25	89	97	72-122	9.28	30

(Cont.)

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/23/19	**BatchID:**	187628
Date Analyzed:	10/25/19 - 10/26/19	**Extraction Method:**	SW3550B
Instrument:	GC6A, GC9a	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB-187628 1910B43-009AMS/MSD

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	0.83	1.0	-	-	-
TPH-Motor Oil (C18-C36)	ND	3.8	5.0	-	-	-
Surrogate Recovery						
C9	23			25	93	72-122

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1	42	38	40	ND	105	94	71-134	11.0	30
Surrogate Recovery										
C9	1	24	22	25		96	86	78-126	11.0	30

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1910B43 **ClientCode: ESL**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☒ EQuIS ☐ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☒ Detection Summary ☒ Dry-Weight

Report to:
Minh Ngo
Essel Environmental Consulting
1035 22nd Avenue, Suite 9
Oakland, CA 94606
(510) 650-7730 FAX: 510-380-6610

Email: mngo@esseltek.com
cc/3rd Party:
PO:
Project: 19272; RCD; 3823 MLK Jr Way Oakland

Bill to:
Nik Lahiri
Essel Environmental Consulting
1035 22nd Avenue, Suite 9
Oakland, CA 94606
nlahiri@esseltek.com; accountspayable

Requested TAT: **5 days;**

Date Received: **10/23/2019**
Date Logged: **10/23/2019**

					Requested Tests (See legend below)											
Lab ID	**Client ID**	**Matrix**	**Collection Date**	**Hold**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
1910B43-001	B4-0.5	Soil	10/22/2019 08:30	☐	A	A	A	A	A	A		A				
1910B43-002	B4-5	Soil	10/22/2019 08:30	☑						A	A					
1910B43-003	B7-0.5	Soil	10/22/2019 08:30	☑						A	A					
1910B43-004	B7-4	Soil	10/22/2019 08:30	☑						A	A					
1910B43-005	B6-1	Soil	10/22/2019 08:30	☐	A	A	A	A	A	A		A				
1910B43-006	SS1	Soil	10/22/2019 08:30	☐	A	A	A	A	A	A		A				
1910B43-007	B5-2	Soil	10/22/2019 08:30	☐	A	A	A	A	A	A		A				
1910B43-008	B5-4	Soil	10/22/2019 08:30	☑						A	A					
1910B43-009	B3-3	Soil	10/22/2019 08:30	☐	A	A	A	A	A	A		A				
1910B43-010	B3-5	Soil	10/22/2019 10:30	☑						A	A					
1910B43-011	B1-0.5	Soil	10/22/2019 10:45	☑						A	A					
1910B43-012	B1-4	Soil	10/22/2019 10:45	☐	A	A	A	A	A	A		A				
1910B43-013	B2-5	Soil	10/22/2019 10:45	☐	A	A	A	A	A	A		A				
1910B43-014	SV3-0.5	Soil	10/22/2019 10:45	☑						A	A					
1910B43-015	SV3-4	Soil	10/22/2019 12:00	☑						A	A					

Test Legend:

1	8081pcB_ESL_LL_S	2	8260B_Scan-SIM_S	3	8270_SCSM_GPC_S	4	CAM17MS_TTLC_S
5	G-MBTEX_S	6	PRDisposal Fee	7	PRHOLD	8	TPH(DMO)_S
9		10		11		12	

Project Manager: Angela Rydelius **Prepared by: Nancy Palacios**

The following SampIDs: 001A, 005A, 006A, 007A, 009A, 012A, 013A contain testgroup Multi Range_S.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: ESSEL ENVIRONMENTAL CONSULTING **Project:** 19272; RCD; 3823 MLK Jr Way Oakland **Work Order:** 1910B43
Client Contact: Minh Ngo **QC Level:** LEVEL 2
Contact's Email: mngo@esseltek.com **Comments:** **Date Logged:** 10/23/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☒ EQuIS ☐ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1910B43-001A	B4-0.5	Soil	Multi-Range TPH	1	Acetate Liner	☐	10/22/2019 8:30	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (Low Level SVOCs) with GPC Cleanup			☐		5 days		☐	
			SW8260B (VOCs, Scan- SIM)			☐		5 days		☐	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			☐		5 days		☐	
1910B43-005A	B6-1	Soil	Multi-Range TPH	1	Acetate Liner	☐	10/22/2019 8:30	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (Low Level SVOCs) with GPC Cleanup			☐		5 days		☐	
			SW8260B (VOCs, Scan- SIM)			☐		5 days		☐	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			☐		5 days		☐	
1910B43-006A	SS1	Soil	Multi-Range TPH	1	Acetate Liner	☐	10/22/2019 8:30	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (Low Level SVOCs) with GPC Cleanup			☐		5 days		☐	
			SW8260B (VOCs, Scan- SIM)			☐		5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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WORK ORDER SUMMARY

Client Name: ESSEL ENVIRONMENTAL CONSULTING **Project:** 19272; RCD; 3823 MLK Jr Way Oakland **Work Order:** 1910B43
Client Contact: Minh Ngo **QC Level:** LEVEL 2
Contact's Email: mngo@esseltek.com **Comments:** **Date Logged:** 10/23/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☒ EQuIS ☐ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1910B43-006A	SS1	Soil	SW8081A/8082 (OC Pesticides+PCBs) ESLs	1	Acetate Liner	☐	10/22/2019 8:30	5 days		☐	
1910B43-007A	B5-2	Soil	Multi-Range TPH	1	Acetate Liner	☐	10/22/2019 8:30	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (Low Level SVOCs) with GPC Cleanup			☐		5 days		☐	
			SW8260B (VOCs, Scan- SIM)			☐		5 days		☐	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			☐		5 days		☐	
1910B43-009A	B3-3	Soil	Multi-Range TPH	1	Acetate Liner	☐	10/22/2019 8:30	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (Low Level SVOCs) with GPC Cleanup			☐		5 days		☐	
			SW8260B (VOCs, Scan- SIM)			☐		5 days		☐	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			☐		5 days		☐	
1910B43-012A	B1-4	Soil	Multi-Range TPH	1	Acetate Liner	☐	10/22/2019 10:45	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (Low Level SVOCs) with GPC Cleanup			☐		5 days		☐	

NOTES: **- STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).**

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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WORK ORDER SUMMARY

Client Name: ESSEL ENVIRONMENTAL CONSULTING **Project:** 19272; RCD; 3823 MLK Jr Way Oakland **Work Order:** 1910B43

Client Contact: Minh Ngo **QC Level:** LEVEL 2

Contact's Email: mngo@esseltek.com **Comments:** **Date Logged:** 10/23/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☒ EQuIS ☐ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1910B43-012A	B1-4	Soil	SW8260B (VOCs, Scan- SIM)	1	Acetate Liner	☐	10/22/2019 10:45	5 days		☐	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			☐		5 days		☐	
1910B43-013A	B2-5	Soil	Multi-Range TPH	1	Acetate Liner	☐	10/22/2019 10:45	5 days		☐	
			SW6020 (CAM 17)			☐		5 days		☐	
			SW8270C (Low Level SVOCs) with GPC Cleanup			☐		5 days		☐	
			SW8260B (VOCs, Scan- SIM)			☐		5 days		☐	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			☐		5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

General COC

MAI Work Order # 1910B43

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CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush		2 Day Rush		3 Day Rush		STD	●	Quote #	
J-Flag / MDL		ESL	●	Cleanup Approved		Dry Weight		Bottle Order #	
Delivery Format:	PDF	●	GeoTracker EDF		EDD		Write On (DW)		Detect Summary

Report To: Minh Ngo Bill To:
Company: Essel Environmental
Address: 1035 22nd Avenue, Suite 9, Oakland, CA 94606
Email: mngo@esseltek.com Tele: (510) 650-7730
Project Name: RCD Project #: 19272
Project Location: 3823 MLK Jr. Way, Oakland PO #
Sampler Signature: Minh Ngo

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	Multi Range as Gas, Diesel, and Motor Oil (8021/8015)	BTEX & TPH as Gas (8021/ 8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)*	Baylands Requirements	Lab to filter sample for dissolved metals analysis	HOLD		
B4-0.5	10/22	8:30	1	S	1	X							X	X	X	X	X	X				~~X~~		
B4-5	↓	↓	↓	↓	↓	~~X~~							~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~				X		
B7-0.5						~~X~~							~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~				X		
B7-4																						X		
B6-1						X							X	X	X	X	X	X						
SS1						X							X	X	X	X	X	X				~~X~~		
B5-2						X							X	X	X	X	X	X						
B5-4																						X		
B3-3						X							X	X	X	X	X	X						
B3-5	↓	10:30	↓	↓	↓																	X		

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
	10/23/19	1045	LAP	10/23/19	1045
LAP	10/23/19	1540	Nancy Palacios	10-23-19	1540

Comments / Instructions
run STLC and TCLP if sample ~~passes~~ exceeds threshold(s)

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp ______ °C Initials ______

General COC

MAI Work Order # 1910B43

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Telephone: (877) 252-9262 / Fax: (925) 252-9269

www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush		2 Day Rush		3 Day Rush		STD	●	Quote #	
J-Flag / MDL		ESL	●	Cleanup Approved		Dry Weight		Bottle Order #	
Delivery Format:	PDF ●	GeoTracker EDF		EDD		Write On (DW)		Detect Summary	

Report To: Minh Ngo Bill To:

Company: Essel Environmental

Address: 1035 22nd Avenue, Suite 9, Oakland, CA 94606

Email: mngo@esseltek.com Tele: (510) 650-7730

Project Name: RCD Project #: 19272

Project Location: 3823 MLK Jr. Way, Oakland PO #

Sampler Signature: Minh Ngo

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	Multi Range as Gas, Diesel, and Motor Oil (8021/8015)	BTEX & TPH as Gas (8021/ 8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silca Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608/ 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)*	Baylands Requirements	Lab to filter sample for dissolved metals analysis	HOLD		
B1-0.5	10/22	10:45	1	S	1																	X		
B1-4	↓	↓	↓	↓	↓	X							X	X	X	X	X	X						
B2-5	↓	↓	↓	↓	↓	X							X	X	X	X	X	X						
SV3-0.5	↓	↓	↓	↓	↓																	X		
SV3-4	↓	12:00	↓	↓	↓																	X		

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Comments / Instructions

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
	10/23/19	1045	UAP	10/23/19	1045
UAP	10/23/19	1540	Nanny Palacios	10-23-19	1540

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp ______ °C Initials ______

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Sample Receipt Checklist

Client Name:	**Essel Environmental Consulting**	Date and Time Received	**10/23/2019 15:40**
Project:	**19272; RCD; 3823 MLK Jr Way Oakland**	Date Logged:	**10/23/2019**
		Received by:	Nancy Palacios
WorkOrder №:	**1910B43** Matrix: Soil	Logged by:	Nancy Palacios
Carrier:	Lorenzo Perez (MAI Courier)		

Chain of Custody (COC) Information

	Yes	No	NA
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Sample IDs noted by Client on COC?	☑	☐	
Date and Time of collection noted by Client on COC?	☑	☐	
Sampler's name noted on COC?	☑	☐	
COC agrees with Quote?	☐	☐	☑

Sample Receipt Information

	Yes	No	NA
Custody seals intact on shipping container/cooler?	☐	☐	☑
Shipping container/cooler in good condition?	☑	☐	
Samples in proper containers/bottles?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	

Sample Preservation and Hold Time (HT) Information

	Yes	No	NA
All samples received within holding time?	☑	☐	☐
Samples Received on Ice?	☑	☐	
	(Ice Type: WET ICE)		
Sample/Temp Blank temperature	Temp: 0.4°C		☐
Water - VOA vials have zero headspace / no bubbles?	☐	☐	☑
Sample labels checked for correct preservation?	☑	☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	☐	☐	☑

UCMR Samples:

	Yes	No	NA
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	☐	☐	☑
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	☐	☐	☑

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1910B43 A

Report Created for: Essel Environmental Consulting

1035 22nd Avenue, Suite 9
Oakland, CA 94606

Project Contact: Minh Ngo
Project P.O.:
Project: 19272; RCD; 3823 MLK Jr Way Oakland

Project Received: 10/23/2019

Analytical Report reviewed & approved for release on 11/06/2019 by:

Yen Cao

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

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CA ELAP 1644 ♦ NELAP 4033 ORELAP

Glossary of Terms & Qualifier Definitions

Client: Essel Environmental Consulting
Project: 19272; RCD; 3823 MLK Jr Way Oakland
WorkOrder: 1910B43 A

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 μm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	CA Title 22
Date Prepared:	10/30/19	**Analytical Method:**	SW6020
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/L

Metals (STLC)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B5-2	1910B43-007A	Soil	10/22/2019 08:30	ICP-MS2 028SMPL.D	188026

Analytes	Result	RL	DF	Date Analyzed
Chromium	**0.12**	0.10	1	11/05/2019 14:18

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B3-3	1910B43-009A	Soil	10/22/2019 08:30	ICP-MS4 234SMPL.d	188026

Analytes	Result	RL	DF	Date Analyzed
Chromium	**0.12**	0.10	1	11/01/2019 23:01

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B2-5	1910B43-013A	Soil	10/22/2019 10:45	ICP-MS4 240SMPL.d	188026

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.10	1	11/01/2019 23:24

Analyst(s): JC

Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	CA Title 22
Date Prepared:	11/2/19	**Analytical Method:**	SW6020
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/L

Metals (STLC)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	**1910B43-006A**	**Soil**	**10/22/2019 08:30**	**ICP-MS4 239SMPL.d**	**188194**

Analytes	Result	RL	DF	Date Analyzed
Chromium	**0.56**	0.10	1	11/04/2019 18:53
Lead	**9.4**	0.10	1	11/04/2019 18:53

Analyst(s): DB

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	CA Title 22
Date Prepared:	10/30/19	**Analytical Method:**	SW6020
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/L

Metals (STLC)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	1910B43-001A	Soil	10/22/2019 08:30	ICP-MS4 225SMPL.d	188026

Analytes	Result	RL	DF	Date Analyzed
Lead	**7.9**	0.10	1	11/04/2019 17:58

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	1910B43-005A	Soil	10/22/2019 08:30	ICP-MS4 233SMPL.d	188026

Analytes	Result	RL	DF	Date Analyzed
Lead	**1.3**	0.10	1	11/01/2019 22:57

Analyst(s): JC

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Analytical Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Received:	10/23/19 15:40	**Extraction Method:**	SW1311/SW3010
Date Prepared:	10/30/19-11/5/19	**Analytical Method:**	SW6020
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Unit:**	mg/L

Metals (TCLP)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B4-0.5	**1910B43-001A**	**Soil**	**10/22/2019 08:30**	**ICP-MS3 074SMPL.D**	**188027**

Analytes	Result	RL	DF	Date Analyzed
Lead	**0.19**	0.10	1	11/01/2019 03:11

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B6-1	**1910B43-005A**	**Soil**	**10/22/2019 08:30**	**ICP-MS3 079SMPL.D**	**188027**

Analytes	Result	RL	DF	Date Analyzed
Lead	ND	0.10	1	11/01/2019 03:42

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1	**1910B43-006A**	**Soil**	**10/22/2019 08:30**	**ICP-MS2 048SMPL.D**	**188363**

Analytes	Result	RL	DF	Date Analyzed
Lead	ND	0.10	1	11/06/2019 13:52

Analyst(s): MIG

Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/30/19	**BatchID:**	188026
Date Analyzed:	11/1/19 - 11/4/19	**Extraction Method:**	CA Title 22
Instrument:	ICP-MS4	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/L
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-188026

QC Summary Report for Metals (STLC)

Analyte	MB Result	MDL	RL			
Chromium	ND	0.10	0.10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Chromium	10	9.7	10	102	97	75-125	5.15	20

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	11/2/19	**BatchID:**	188194
Date Analyzed:	11/4/19	**Extraction Method:**	CA Title 22
Instrument:	ICP-MS4	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/L
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-188194

QC Summary Report for Metals (STLC)

Analyte	MB Result	MDL	RL			
Chromium	ND	0.10	0.10	-	-	-
Lead	ND	0.10	0.10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Chromium	9.9	9.7	10	99	97	75-125	2.01	20
Lead	9.4	9.2	10	94	92	75-125	2.17	20

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Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/30/19	**BatchID:**	188026
Date Analyzed:	11/1/19 - 11/4/19	**Extraction Method:**	CA Title 22
Instrument:	ICP-MS4	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/L
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-188026

QC Summary Report for Metals (STLC)

Analyte	MB Result	MDL	RL			
Lead	ND	0.10	0.10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	10	9.3	10	100	93	75-125	6.78	20

Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	10/30/19	**BatchID:**	188027
Date Analyzed:	10/31/19	**Extraction Method:**	SW1311/SW3010
Instrument:	ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/L
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-188027

QC Summary Report for Metals (TCLP)

Analyte	MB Result	MDL	RL			
Lead	ND	0.10	0.10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	11	11	10	110	109	75-125	1.05	20

(Cont.)

Quality Control Report

Client:	Essel Environmental Consulting	**WorkOrder:**	1910B43
Date Prepared:	11/5/19	**BatchID:**	188363
Date Analyzed:	11/6/19	**Extraction Method:**	SW1311/SW3010
Instrument:	ICP-MS2	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/L
Project:	19272; RCD; 3823 MLK Jr Way Oakland	**Sample ID:**	MB/LCS/LCSD-188363

QC Summary Report for Metals (TCLP)

Analyte	MB Result	MDL	RL			
Lead	ND	0.10	0.10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	9.9	9.7	10	99	97	75-125	2.02	20

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1910B43 **A** **ClientCode: ESL**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☒ EQuIS ☐ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☒ Detection Summary ☒ Dry-Weight

Report to:
Minh Ngo
Essel Environmental Consulting
1035 22nd Avenue, Suite 9
Oakland, CA 94606
(510) 650-7730 FAX: 510-380-6610

Email: mngo@esseltek.com
cc/3rd Party:
PO:
Project: 19272; RCD; 3823 MLK Jr Way Oakland

Bill to:
Nik Lahiri
Essel Environmental Consulting
1035 22nd Avenue, Suite 9
Oakland, CA 94606
nlahiri@esseltek.com; accountspayable

Requested TAT: **5 days;**

Date Received: **10/23/2019**
Date Logged: **10/23/2019**
Date Add-On: **10/30/2019**

Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
					Requested Tests (See legend below)											
1910B43-001	B4-0.5	Soil	10/22/2019 08:30	☐			A	A								
1910B43-005	B6-1	Soil	10/22/2019 08:30	☐			A	A								
1910B43-006	SS1	Soil	10/22/2019 08:30	☐		A		A								
1910B43-007	B5-2	Soil	10/22/2019 08:30	☐	A											
1910B43-009	B3-3	Soil	10/22/2019 08:30	☐	A											
1910B43-013	B2-5	Soil	10/22/2019 10:45	☐	A											

Test Legend:

1	CRMS_STLC_S	2	PBCRMS_STLC_S	3	PBMS_STLC_S	4	PBMS_TCLP_S
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Nancy Palacios

Add-On Prepared By: Kena Ponce

Comments: STLC/TCLP Pb Cr 10/30/19 STAT

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: ESSEL ENVIRONMENTAL CONSULTING **Project:** 19272; RCD; 3823 MLK Jr Way Oakland **Work Order:** 1910B43
Client Contact: Minh Ngo **QC Level:** LEVEL 2
Contact's Email mngo@esseltek.com **Comments:** STLC/TCLP Pb Cr 10/30/19 STAT **Date Logged:** 10/23/2019
Date Add-On: 10/30/2019

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1910B43-001A	B4-0.5	Soil	SW6020 (Lead) (TCLP)	1	Acetate Liner	10/22/2019 8:30	5 days*		☐	
			SW6020 (Lead) (STLC)				5 days*		☐	
1910B43-005A	B6-1	Soil	SW6020 (Lead) (TCLP)	1	Acetate Liner	10/22/2019 8:30	5 days*		☐	
			SW6020 (Lead) (STLC)				5 days*		☐	
1910B43-006A	SS1	Soil	SW6020 (Lead) (TCLP)	1	Acetate Liner	10/22/2019 8:30	5 days*		☐	
			SW6020 (Chromium & Lead) (STLC)				5 days*		☐	
1910B43-007A	B5-2	Soil	SW6020 (Chromium) (STLC)	1	Acetate Liner	10/22/2019 8:30	5 days*		☐	
1910B43-009A	B3-3	Soil	SW6020 (Chromium) (STLC)	1	Acetate Liner	10/22/2019 8:30	5 days*		☐	
1910B43-013A	B2-5	Soil	SW6020 (Chromium) (STLC)	1	Acetate Liner	10/22/2019 10:45	5 days*		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

MAI Work Order # 1910B43

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McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701
Telephone: (877) 252-9262 / Fax: (925) 252-9269
www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush		2 Day Rush		3 Day Rush		STD	●	Quote #	
J-Flag / MDL		ESL	●	Cleanup Approved		Dry Weight		Bottle Order #	
Delivery Format:	PDF	●	GeoTracker EDF		EDD		Write On (DW)		Detect Summary	

Report To: Minh Ngo Bill To:
Company: Essel Environmental
Address: 1035 22nd Avenue, Suite 9, Oakland, CA 94606
Email: mngo@esseltek.com Tele: (510) 650-7730
Project Name: RCD Project #: 19272
Project Location: 3823 MLK Jr. Way, Oakland PO #
Sampler Signature: Minh Ngo

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	Multi Range as Gas, Diesel, and Motor Oil (8021/8015)	BTEX & TPH as Gas (8021/8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	~~Metals (200.8 / 6020)*~~ STLC Cr 10/30/19 STAT	Baylands Requirements	Lab to filter sample for dissolved metals analysis	HOLD	STLC Pb 10/30/19 STAT	TCLP Pb 10/30/19 STAT
B4-0.5	10/22	8:30	1	S	1	X							X	X	X	X	X	X				~~X~~	X	X
B4-5						~~X~~							~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~				X		
B7-0.5						~~X~~							~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~				X		
B7-4																						X		
B6-1						X							X	X	X	X	X	X					X	X
SS1						X							X	X	X	X	X	X	X			~~X~~	X	X
B5-2						X							X	X	X	X	X	X	X					
B5-4																						X		
B3-3						X							X	X	X	X	X	X	X					
B3-5		10:30																				X		

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
	10/23/19	1045	UAP	10/23/19	1045
UAP	10/23/19	1540	Nancy Palacios	10-23-19	1540

Comments / Instructions
run STLC and TCLP if sample ~~passes~~ exceeds threshold(s)

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp ____ °C Initials ____

General COC

MAI Work Order # 1910B43

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701
Telephone: (877) 252-9262 / Fax: (925) 252-9269
www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush		2 Day Rush		3 Day Rush		STD	●	Quote #	
J-Flag / MDL		ESL	●	Cleanup Approved		Dry Weight		Bottle Order #	
Delivery Format:	PDF	●	GeoTracker EDF		EDD		Write On (DW)		Detect Summary

Report To: Minh Ngo Bill To:
Company: Essel Environmental
Address: 1035 22nd Avenue, Suite 9, Oakland, CA 94606
Email: mngo@esseltek.com Tele: (510) 650-7730
Project Name: RCD Project #: 19272
Project Location: 3823 MLK Jr. Way, Oakland PO #
Sampler Signature: Minh Ngo

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	Multi Range as Gas, Diesel, and Motor Oil (8021/8015)	BTEX & TPH as Gas (8021/ 8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)*	Baylands Requirements	Lab to filter sample for dissolved metals analysis	HOLD	STLC Cr 10/30/17 STAT	
B1-0.5	10/22	10:45	1	S	1																	X		
B1-4	↓	↓	↓	↓	↓	X							X	X	X	X	X	X						
B2-5	↓	↓	↓	↓	↓	X							X	X	X	X	X	X					+	
SV3-0.5	↓	↓	↓	↓	↓																	X		
SV3-4	↓	12:00	↓	↓	↓																	X		

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
	10/23/19	1045	UAP	10/23/19	1045
UAP	10/23/19	1540	Nancy Palacios	10-23-19	1540

Comments / Instructions

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp ____ °C Initials ____

APPENDIX D

CHAIN-OF-CUSTODY FORM
AND
LABORATORY ANALYTICAL REPORT
FOR
SOIL VAPOR SAMPLES

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

30 October 2019

Minh Ngo
Essel Environmental Engineering & Consulting
1035 22nd Avenue
Oakland, CA 94606

RE: 3823 MLK Jr Way

Enclosed are the results of analyses for samples received by the laboratory on 10/23/19 09:42. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Jaroudi
Project Manager

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Essel Environmental Engineering & Consulting	Project: 3823 MLK Jr Way	
1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV1	T193683-01	Air	10/22/19 11:54	10/23/19 09:42
SV2	T193683-02	Air	10/22/19 11:48	10/23/19 09:42
SV3	T193683-03	Air	10/22/19 11:50	10/23/19 09:42

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Essel Environmental Engineering & Consulting	Project: 3823 MLK Jr Way	
1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

DETECTIONS SUMMARY

Sample ID: SV1 **Laboratory ID:** T193683-01

Analyte	Result	Reporting Limit	Units	Method	Notes
Acetone	**150**	12	ug/m³ Air	TO-15	
Carbon Disulfide	**79**	3.2	ug/m³ Air	TO-15	
Cyclohexane	**43**	3.5	ug/m³ Air	TO-15	
Heptane	**27**	4.2	ug/m³ Air	TO-15	
Styrene	**3.2**	4.3	ug/m³ Air	TO-15	J
Tetrachloroethene	**2.3**	6.9	ug/m³ Air	TO-15	J
Trichlorofluoromethane	**2.1**	5.7	ug/m³ Air	TO-15	J
1,3,5-Trimethylbenzene	**2.2**	5.0	ug/m³ Air	TO-15	J
1,2,4-Trimethylbenzene	**11**	5.0	ug/m³ Air	TO-15	
Methyl isobutyl ketone	**28**	42	ug/m³ Air	TO-15	J
Benzene	**31**	3.3	ug/m³ Air	TO-15	
Ethylbenzene	**11**	4.4	ug/m³ Air	TO-15	
m,p-Xylene	**10**	8.8	ug/m³ Air	TO-15	
o-Xylene	**6.4**	4.4	ug/m³ Air	TO-15	

Sample ID: SV2 **Laboratory ID:** T193683-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Acetone	**81**	12	ug/m³ Air	TO-15	
Cyclohexane	**36**	3.5	ug/m³ Air	TO-15	
Heptane	**7.7**	4.2	ug/m³ Air	TO-15	
Dichlorodifluoromethane	**14**	5.0	ug/m³ Air	TO-15	
4-Ethyltoluene	**3.1**	5.0	ug/m³ Air	TO-15	J
Styrene	**1.0**	4.3	ug/m³ Air	TO-15	J
Tetrachloroethene	**86**	6.9	ug/m³ Air	TO-15	
1,3,5-Trimethylbenzene	**2.3**	5.0	ug/m³ Air	TO-15	J
1,2,4-Trimethylbenzene	**6.8**	5.0	ug/m³ Air	TO-15	
Vinyl acetate	**10**	3.6	ug/m³ Air	TO-15	
Methyl isobutyl ketone	**9.2**	42	ug/m³ Air	TO-15	J
Benzene	**14**	3.3	ug/m³ Air	TO-15	
Toluene	**25**	3.8	ug/m³ Air	TO-15	

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Essel Environmental Engineering & Consulting	Project: 3823 MLK Jr Way	
1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

Sample ID: SV2 **Laboratory ID:** T193683-02

Analyte	Result	Reporting Limit	Units	Method	Notes
Ethylbenzene	**6.1**	4.4	ug/m³ Air	TO-15	
m,p-Xylene	**5.7**	8.8	ug/m³ Air	TO-15	J
o-Xylene	**3.3**	4.4	ug/m³ Air	TO-15	J

Sample ID: SV3 **Laboratory ID:** T193683-03

Analyte	Result	Reporting Limit	Units	Method	Notes
Acetone	**170**	12	ug/m³ Air	TO-15	
Cyclohexane	**53**	3.5	ug/m³ Air	TO-15	
Heptane	**25**	4.2	ug/m³ Air	TO-15	
Hexane	**26**	3.6	ug/m³ Air	TO-15	
Styrene	**2.0**	4.3	ug/m³ Air	TO-15	J
Tetrahydrofuran	**2.4**	3.0	ug/m³ Air	TO-15	J
Tetrachloroethene	**190**	6.9	ug/m³ Air	TO-15	
1,2,4-Trimethylbenzene	**8.0**	5.0	ug/m³ Air	TO-15	
Methyl isobutyl ketone	**19**	42	ug/m³ Air	TO-15	J
Benzene	**25**	3.3	ug/m³ Air	TO-15	
Toluene	**50**	3.8	ug/m³ Air	TO-15	
Ethylbenzene	**9.5**	4.4	ug/m³ Air	TO-15	
m,p-Xylene	**7.8**	8.8	ug/m³ Air	TO-15	J
o-Xylene	**4.7**	4.4	ug/m³ Air	TO-15	

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PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Essel Environmental Engineering & Consulting	Project: 3823 MLK Jr Way	
1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

SV1

T193683-01(Air)

SunStar Laboratories, Inc.

TO-15

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acetone	**150**	0.49	12	ug/m³ Air	1.7	9102345	10/23/19	10/24/19	TO-15	
1,3-Butadiene	ND	0.29	4.5	"	"	"	"	"	"	
Carbon Disulfide	**79**	0.22	3.2	"	"	"	"	"	"	
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	0.26	7.7	"	"	"	"	"	"	
Isopropyl alcohol	ND	0.55	13	"	"	"	"	"	"	
Bromodichloromethane	ND	0.16	6.8	"	"	"	"	"	"	
Bromoform	ND	0.23	11	"	"	"	"	"	"	
Bromomethane	ND	0.55	4.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.055	6.4	"	"	"	"	"	"	
Chlorobenzene	ND	0.098	4.7	"	"	"	"	"	"	
Chloroethane	ND	0.35	2.7	"	"	"	"	"	"	
Chloroform	ND	0.15	5.0	"	"	"	"	"	"	
Chloromethane	ND	0.46	11	"	"	"	"	"	"	
Cyclohexane	**43**	0.16	3.5	"	"	"	"	"	"	
Heptane	**27**	0.15	4.2	"	"	"	"	"	"	
Hexane	ND	0.43	3.6	"	"	"	"	"	"	
Dibromochloromethane	ND	0.26	8.7	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.18	7.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.36	6.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.43	6.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.44	6.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.18	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.23	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.16	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.28	4.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.25	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.22	4.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.13	4.7	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.21	4.6	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.21	4.6	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.25	5.0	"	"	"	"	"	"	
Methylene chloride	ND	0.079	3.5	"	"	"	"	"	"	

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Essel Environmental Engineering & Consulting	Project: 3823 MLK Jr Way	
1035 22nd Avenue	Project Number: 19272	Reported:
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

SV1
T193683-01(Air)

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TO-15										
Styrene	**3.2**	0.19	4.3	ug/m³ Air	1.7	9102345	10/23/19	10/24/19	TO-15	J
1,1,2,2-Tetrachloroethane	ND	0.54	7.0	"	"	"	"	"	"	
Tetrahydrofuran	ND	0.25	3.0	"	"	"	"	"	"	
Tetrachloroethene	**2.3**	0.21	6.9	"	"	"	"	"	"	J
1,1,2-Trichloroethane	ND	0.19	5.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.24	5.6	"	"	"	"	"	"	
Trichloroethene	ND	0.21	5.5	"	"	"	"	"	"	
Trichlorofluoromethane	**2.1**	0.24	5.7	"	"	"	"	"	"	J
1,3,5-Trimethylbenzene	**2.2**	0.49	5.0	"	"	"	"	"	"	J
1,2,4-Trimethylbenzene	**11**	0.33	5.0	"	"	"	"	"	"	
Vinyl acetate	ND	0.18	3.6	"	"	"	"	"	"	
Vinyl chloride	ND	0.052	2.6	"	"	"	"	"	"	
1,4-Dioxane	ND	0.97	18	"	"	"	"	"	"	
2-Butanone (MEK)	ND	0.45	15	"	"	"	"	"	"	
Methyl isobutyl ketone	**28**	0.14	42	"	"	"	"	"	"	J
Benzene	**31**	0.14	3.3	"	"	"	"	"	"	
Toluene	ND	0.14	3.8	"	"	"	"	"	"	
Ethylbenzene	**11**	0.14	4.4	"	"	"	"	"	"	
m,p-Xylene	**10**	0.20	8.8	"	"	"	"	"	"	
o-Xylene	**6.4**	0.085	4.4	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene			*83.6 %*	*40-160*		"	"	"	"	

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PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Essel Environmental Engineering & Consulting	Project: 3823 MLK Jr Way	
1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

SV2
T193683-02(Air)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

TO-15

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acetone	**81**	0.49	12	ug/m³ Air	1.5	9102345	10/23/19	10/24/19	TO-15	
1,3-Butadiene	ND	0.29	4.5	"	"	"	"	"	"	
Carbon Disulfide	ND	0.22	3.2	"	"	"	"	"	"	
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	0.26	7.7	"	"	"	"	"	"	
Isopropyl alcohol	ND	0.55	13	"	"	"	"	"	"	
Bromodichloromethane	ND	0.16	6.8	"	"	"	"	"	"	
Bromoform	ND	0.23	11	"	"	"	"	"	"	
Bromomethane	ND	0.55	4.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.055	6.4	"	"	"	"	"	"	
Chlorobenzene	ND	0.098	4.7	"	"	"	"	"	"	
Chloroethane	ND	0.35	2.7	"	"	"	"	"	"	
Chloroform	ND	0.15	5.0	"	"	"	"	"	"	
Chloromethane	ND	0.46	11	"	"	"	"	"	"	
Cyclohexane	**36**	0.16	3.5	"	"	"	"	"	"	
Heptane	**7.7**	0.15	4.2	"	"	"	"	"	"	
Hexane	ND	0.43	3.6	"	"	"	"	"	"	
Dibromochloromethane	ND	0.26	8.7	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.18	7.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.36	6.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.43	6.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.44	6.1	"	"	"	"	"	"	
Dichlorodifluoromethane	**14**	0.18	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.23	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.16	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.28	4.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.25	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.22	4.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.13	4.7	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.21	4.6	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.21	4.6	"	"	"	"	"	"	
4-Ethyltoluene	**3.1**	0.25	5.0	"	"	"	"	"	"	J
Methylene chloride	ND	0.079	3.5	"	"	"	"	"	"	

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949.297.5020 Phone
949.297.5027 Fax

Essel Environmental Engineering & Consulting	Project: 3823 MLK Jr Way	
1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

SV2
T193683-02(Air)

SunStar Laboratories, Inc.

TO-15

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Styrene	**1.0**	0.19	4.3	ug/m³ Air	1.5	9102345	10/23/19	10/24/19	TO-15	J
1,1,2,2-Tetrachloroethane	ND	0.54	7.0	"	"	"	"	"	"	
Tetrahydrofuran	ND	0.25	3.0	"	"	"	"	"	"	
Tetrachloroethene	**86**	0.21	6.9	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.19	5.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.24	5.6	"	"	"	"	"	"	
Trichloroethene	ND	0.21	5.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.24	5.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**2.3**	0.49	5.0	"	"	"	"	"	"	J
1,2,4-Trimethylbenzene	**6.8**	0.33	5.0	"	"	"	"	"	"	
Vinyl acetate	**10**	0.18	3.6	"	"	"	"	"	"	
Vinyl chloride	ND	0.052	2.6	"	"	"	"	"	"	
1,4-Dioxane	ND	0.97	18	"	"	"	"	"	"	
2-Butanone (MEK)	ND	0.45	15	"	"	"	"	"	"	
Methyl isobutyl ketone	**9.2**	0.14	42	"	"	"	"	"	"	J
Benzene	**14**	0.14	3.3	"	"	"	"	"	"	
Toluene	**25**	0.14	3.8	"	"	"	"	"	"	
Ethylbenzene	**6.1**	0.14	4.4	"	"	"	"	"	"	
m,p-Xylene	**5.7**	0.20	8.8	"	"	"	"	"	"	J
o-Xylene	**3.3**	0.085	4.4	"	"	"	"	"	"	J
Surrogate: 4-Bromofluorobenzene			*83.9 %*	*40-160*		*"*	*"*	*"*	*"*	

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Essel Environmental Engineering & Consulting	Project: 3823 MLK Jr Way	
1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

SV3

T193683-03(Air)

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TO-15										
Acetone	**170**	0.49	12	ug/m³ Air	1.74	9102345	10/23/19	10/24/19	TO-15	
1,3-Butadiene	ND	0.29	4.5	"	"	"	"	"	"	
Carbon Disulfide	ND	0.22	3.2	"	"	"	"	"	"	
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	0.26	7.7	"	"	"	"	"	"	
Isopropyl alcohol	ND	0.55	13	"	"	"	"	"	"	
Bromodichloromethane	ND	0.16	6.8	"	"	"	"	"	"	
Bromoform	ND	0.23	11	"	"	"	"	"	"	
Bromomethane	ND	0.55	4.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.055	6.4	"	"	"	"	"	"	
Chlorobenzene	ND	0.098	4.7	"	"	"	"	"	"	
Chloroethane	ND	0.35	2.7	"	"	"	"	"	"	
Chloroform	ND	0.15	5.0	"	"	"	"	"	"	
Chloromethane	ND	0.46	11	"	"	"	"	"	"	
Cyclohexane	**53**	0.16	3.5	"	"	"	"	"	"	
Heptane	**25**	0.15	4.2	"	"	"	"	"	"	
Hexane	**26**	0.43	3.6	"	"	"	"	"	"	
Dibromochloromethane	ND	0.26	8.7	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.18	7.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.36	6.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.43	6.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.44	6.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.18	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.23	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.16	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.28	4.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.25	4.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.22	4.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.13	4.7	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.21	4.6	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.21	4.6	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.25	5.0	"	"	"	"	"	"	
Methylene chloride	ND	0.079	3.5	"	"	"	"	"	"	

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Providing Quality Analytical Services Nationwide

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Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Essel Environmental Engineering & Consulting	Project: 3823 MLK Jr Way	
1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

SV3

T193683-03(Air)

SunStar Laboratories, Inc.

TO-15

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Styrene	**2.0**	0.19	4.3	ug/m³ Air	1.74	9102345	10/23/19	10/24/19	TO-15	J
1,1,2,2-Tetrachloroethane	ND	0.54	7.0	"	"	"	"	"	"	
Tetrahydrofuran	**2.4**	0.25	3.0	"	"	"	"	"	"	J
Tetrachloroethene	**190**	0.21	6.9	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.19	5.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.24	5.6	"	"	"	"	"	"	
Trichloroethene	ND	0.21	5.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.24	5.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.49	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**8.0**	0.33	5.0	"	"	"	"	"	"	
Vinyl acetate	ND	0.18	3.6	"	"	"	"	"	"	
Vinyl chloride	ND	0.052	2.6	"	"	"	"	"	"	
1,4-Dioxane	ND	0.97	18	"	"	"	"	"	"	
2-Butanone (MEK)	ND	0.45	15	"	"	"	"	"	"	
Methyl isobutyl ketone	**19**	0.14	42	"	"	"	"	"	"	J
Benzene	**25**	0.14	3.3	"	"	"	"	"	"	
Toluene	**50**	0.14	3.8	"	"	"	"	"	"	
Ethylbenzene	**9.5**	0.14	4.4	"	"	"	"	"	"	
m,p-Xylene	**7.8**	0.20	8.8	"	"	"	"	"	"	J
o-Xylene	**4.7**	0.085	4.4	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene			*88.8 %*	*40-160*		"	"	"	"	

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949.297.5020 Phone
949.297.5027 Fax

Essel Environmental Engineering & Consulting	Project: 3823 MLK Jr Way	
1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

TO-15 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9102345 - Canister Analysis											
Blank (9102345-BLK1)					Prepared: 10/23/19 Analyzed: 10/25/19						
Surrogate: 4-Bromofluorobenzene	*268*			*ug/m³ Air*	*362*		*74.0*	*40-160*			
1,1-Difluoroethane (Freon 152)	ND	3.3	27	"							
Acetone	ND	0.49	12	"							
1,3-Butadiene	ND	0.29	4.5	"							
Carbon Disulfide	ND	0.22	3.2	"							
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	0.26	7.7	"							
Isopropyl alcohol	ND	0.55	13	"							
Bromodichloromethane	ND	0.16	6.8	"							
Bromoform	ND	0.23	11	"							
Bromomethane	ND	0.55	4.0	"							
Carbon tetrachloride	ND	0.055	6.4	"							
Chlorobenzene	ND	0.098	4.7	"							
Chloroethane	ND	0.35	2.7	"							
Chloroform	ND	0.15	5.0	"							
Chloromethane	ND	0.46	11	"							
Cyclohexane	ND	0.16	3.5	"							
Heptane	ND	0.15	4.2	"							
Hexane	ND	0.43	3.6	"							
Dibromochloromethane	ND	0.26	8.7	"							
1,2-Dibromoethane (EDB)	ND	0.18	7.8	"							
1,2-Dichlorobenzene	ND	0.36	6.1	"							
1,3-Dichlorobenzene	ND	0.43	6.1	"							
1,4-Dichlorobenzene	ND	0.44	6.1	"							
Dichlorodifluoromethane	ND	0.18	5.0	"							
1,1-Dichloroethane	ND	0.23	4.1	"							
1,2-Dichloroethane	ND	0.16	4.1	"							

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1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

TO-15 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9102345 - Canister Analysis											
Blank (9102345-BLK1)					Prepared: 10/23/19 Analyzed: 10/25/19						
1,1-Dichloroethene	ND	0.28	4.0	ug/m³ Air							
cis-1,2-Dichloroethene	ND	0.25	4.0	"							
trans-1,2-Dichloroethene	ND	0.22	4.0	"							
1,2-Dichloropropane	ND	0.13	4.7	"							
cis-1,3-Dichloropropene	ND	0.21	4.6	"							
trans-1,3-Dichloropropene	ND	0.21	4.6	"							
4-Ethyltoluene	ND	0.25	5.0	"							
Methylene chloride	ND	0.079	3.5	"							
Styrene	ND	0.19	4.3	"							
1,1,2,2-Tetrachloroethane	ND	0.54	7.0	"							
Tetrahydrofuran	ND	0.25	3.0	"							
Tetrachloroethene	ND	0.21	6.9	"							
1,1,2-Trichloroethane	ND	0.19	5.6	"							
1,1,1-Trichloroethane	ND	0.24	5.6	"							
Trichloroethene	ND	0.21	5.5	"							
Trichlorofluoromethane	ND	0.24	5.7	"							
1,3,5-Trimethylbenzene	ND	0.49	5.0	"							
1,2,4-Trimethylbenzene	ND	0.33	5.0	"							
Vinyl acetate	ND	0.18	3.6	"							
Vinyl chloride	ND	0.052	2.6	"							
1,4-Dioxane	ND	0.97	18	"							
2-Butanone (MEK)	ND	0.45	15	"							
Methyl isobutyl ketone	ND	0.14	42	"							
Benzene	ND	0.14	3.3	"							
Toluene	ND	0.14	3.8	"							
Ethylbenzene	ND	0.14	4.4	"							
m,p-Xylene	ND	0.20	8.8	"							

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1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

TO-15 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9102345 - Canister Analysis											
Blank (9102345-BLK1)					Prepared: 10/23/19 Analyzed: 10/25/19						
o-Xylene	ND	0.085	4.4	ug/m³ Air							
Duplicate (9102345-DUP1)		**Source: T193675-01**			Prepared: 10/23/19 Analyzed: 10/25/19						
Surrogate: 4-Bromofluorobenzene	*293*			*ug/m³ Air*	*362*		*81.1*	*40-160*			
1,1-Difluoroethane (Freon 152)	ND	3.3	27	"		ND					
1,1-Dichloroethene	ND	0.28	4.0	"		ND				30	
cis-1,2-Dichloroethene	ND	0.25	4.0	"		ND				30	
trans-1,2-Dichloroethene	ND	0.22	4.0	"		ND				30	
Tetrachloroethene	2.80	0.21	6.9	"		2.69			3.77	30	J
Trichloroethene	1.07	0.21	5.5	"		1.07			0.00	30	J
Vinyl chloride	ND	0.052	2.6	"		ND				30	

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Essel Environmental Engineering & Consulting	Project: 3823 MLK Jr Way	
1035 22nd Avenue	Project Number: 19272	**Reported:**
Oakland CA, 94606	Project Manager: Minh Ngo	10/30/19 10:36

Notes and Definitions

J	Detected but below the Standard Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

AIR LABORATORY
Chain of Custody Record

SunStar Laboratories
25712 Commercentre Drive, Lake Forest, CA 92630
949-297-5020

Client: Essel Environmental
Address: 1035 22ND Avenue, Suite 9
Phone: (510) 650-7730 Fax:
Project Manager: Minh Ngo

Date: 10/22/19 Page: 1 Of 1
Project Name: 3823 MLK Jr Way
Collector: Minh Ngo Client Project #: 19272
Batch #: T193683 EDF #:

Laboratory ID #	Sample ID	Date Sampled	Start Time	Finish Time	Sample Type : Soil Gas / Indoor Air	Container Type: Summa Can / Tedlar	Initial Pressure	Final Pressure	TO-3	TO-14	TO-15	8015m Methane	8015m Gasoline	Fixed Gases by TCD		Summa Can # / Comments
01	SV1	10/22	11:54	12:08	SG	Summa	-31	-2			X					SSAT-0842
02	SV2	↓	11:48	11:57	↓	↓	-31	-2			X					SSAT-0753
03	SV3	↓	11:50	12:02	↓	↓	-31	-2			X					SSAT-0249

Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time
FedEx	10-23-19 9:42	[signature]	10-23-19 9:42

Total # of containers
Chain of Custody seals Y/N/NA
Seals intact? Y/N/NA
Received good condition/cold

Turn around time:

Notes

* TO-15 SIM analysis available upon prior notification. **(Precertified Summa cans needed)**

COCAL 180348

SunStar Laboratories Inc.
25712 Commercentre Dr.
Lake Forest, CA 92630

(949)297-5020
(949)297-5027 fax
(530)304-5525 Bill Hannell

Form F-LP0005-1.2

Effective Date: 01/01/2017

* PLEASE DO ***NOT*** WRITE ON OR PLACE LABELS ON SUMMA CANS

SunStar Laboratories

Celebrating 20 Years!

Canister Data Sheet

Client: ESSEL ENV._MINH_10-18-19_8+3_19272

Shipping Information				Sampling Information					
Canister Serial #		CHECK Date	Pressure (-30 +/- 2 psia)	Sample ID	Sample Date	Initial Pressure	Final Pressure	Sample Start Time	Sample Finish Time
SSAT:	0249	10/17/2019	-30	SV3	10/22	-31	-2	11:50	12:02
SSAT:	0753	10/17/2019	-30	SV2	10/22	-31	-2	11:48	11:57
SSAT:	0790	10/17/2019	-30						
SSAT:	0842	10/17/2019	-30	SV1	10/22	-31	-2	11:54	12:08
SSAT:	0132	10/17/2019	-30	PURGE CAN					
SSAT:	0180	10/17/2019	-30.	PURGE CAN	SV2	-30	-2		
SSAT:	0456	10/17/2019	-30	PURGE CAN	SV1	-30	-5		
SSAT:	0469	10/17/2019	-30	PURGE CAN	SV3	-30	-5		
		10/17/2019							
SSAT:	2081	10/17/2019	N/A	MANIFOLD (150)	SV2				
SSAT:	2101	10/17/2019	N/A	MANIFOLD (150)	SV3				
SSAT:	2120	10/17/2019	N/A	MANIFOLD (150)	SV1				

SunStar Laboratories

Rev. 02 Date 07/19
Receiving Form 001

SAMPLE RECEIVING REVIEW SHEET

Batch/Work Order #: T193683

Client Name: Essel Env.

Project: 3823 MLK Jr Way

Delivered by: ☐ Client ☐ SunStar Courier ☐ GSO ☒ FedEx ☐ Other

If Courier, Received by: ____________

Date/Time Courier Received: ____________

Lab Received by: Sunny

Date/Time Lab Received: 10.23.19 / 9:42

Total number of coolers received: 0 Thermometer ID: ____________ Calibration due : 6/27/20

Temperature:	Cooler #1 –	°C +/- the CF (+ 1.2°C)	= –	°C corrected temperature
Temperature:	Cooler #2	°C +/- the CF (+ 1.2°C)	=	°C corrected temperature
Temperature:	Cooler #3	°C +/- the CF (+ 1.2°C)	=	°C corrected temperature

Temperature criteria = ≤ 6°C (no frozen containers) Within criteria? ☐ **Yes** ☐ **No**

If NO:

Samples received on ice? ☐ Yes ☐ No → **Complete Non-Conformance Sheet**

If on ice, samples received same day collected? ☐ Yes → Acceptable ☐ No → **Complete Non-Conformance Sheet**

Custody seals intact on cooler/sample	☐ Yes	☐ No*	☒ N/A
Sample containers intact	☒ Yes	☐ No*	
Sample labels match Chain of Custody IDs	☒ Yes	☐ No*	
Total number of containers received match COC	☒ Yes	☐ No*	
Proper containers received for analyses requested on COC	☒ Yes	☐ No*	
Proper preservative indicated on COC/containers for analyses requested	☐ Yes	☐ No*	☒ N/A
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times	☒ **Yes**	☐ **No***	

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date: SL 10.23.19

Comments:

SunStar Laboratories Celebrating 20 Years!

Project Name: 19272			Rebecca
Company: ESSEL ENV.			
Name: MINH NGO			

Item	Quantity	Unit	
2 oz Jars 24/CS			
4 oz Jars 24/CS			
8 oz Jars 12/CS			
40 ml unpreserved VOAs 100/box			
40 ml HCL-preserved VOAs 72/box			
250 ml Poly 120/CS			
1 Liter Poly 36/CS			
500 ml Poly 60/CS			
500 ml Amber Bottle Wide 12/CS			
1 Liter Amber Bottle 12/CS			
1 Gallon Poly 4/box			
5035 kits:(2)Sodium Bisulfate VOAs 72/box			
(1) Methanol VOA 72/box			
(1)Syringe 50/pack			
Lock-N-Load Handle 1/ea			
Tedlar Bags 10/pack			
Sub Slab Insert w/ washer & N/F			
Soil Gas SS 16" Drop Tubes			
Gas Extraction Fittings			
Soil Gas Filters			

	Volume of Summa	# Sent	Used	Unused	Unreturned
Batch Certified Summa Canisters	400cc				
	1L	4	CHARGE - 3	1	0
	3L				
	6L				
Purge cans		4	4	0	0
Nitrogen cans					
Ind. Certified Summa Cannisters	1L				
	3L				
	6L				

63/153 Manifolds, Var. Sampler, etc. Calibrated Correctly - Gauge Reads at 0		
Manifolds: Inst. Sampler, Variable Sampler	3-MANIFOLDS (150)	CHARGE - 2
Swagelok Fittings: Nuts/Ferrules, Ts	4-NUTS/FERRULES	CHARGE - 4
Cooler (Sm, Med, Lrg) Number & Quantity		
Other: Poly Tube, Valves,Silicon Tape, etc.		
Prepared By: DAN	Date: 10/17/19	
Reviewed By:	Date:	

Comments:

Asset Check-In Receipt

SunStar Laboratories Inc.

Check-In Date: 10/23/2019 **User Name:** Lounethone, Sunny

Asset Tag	Asset Type	Serial No	Location	Customer No.	Customer Name
0132	1000cc: 1000cc Summa	0132	Sunstar Labs, Tustin Air Lab	Essel - Minh	Minh Ngo
0180	1000cc: 1000cc Summa	0180	Sunstar Labs, Tustin Air Lab	Essel - Minh	Minh Ngo
0249	1000cc: 1000cc Summa	0249	Sunstar Labs, Lake Forest Air Lab	Essel - Minh	Minh Ngo
0456	1000cc: 1000cc Summa		Sunstar Labs, Tustin Air Lab	Essel - Minh	Minh Ngo
0469	1000cc: 1000cc Summa		Sunstar Labs, Tustin Air Lab	Essel - Minh	Minh Ngo
0753	1000cc: 1000cc Summa	0753	Sunstar Labs, SunStar Labs - South	Essel - Minh	Minh Ngo
0790	1000cc: 1000cc Summa	0790	Sunstar Labs, SunStar Labs - South	Essel - Minh	Minh Ngo
0842	1000cc: 1000cc Summa	0842	Sunstar Labs, SunStar Labs - South	Essel - Minh	Minh Ngo
2081	Chameleon-150: Chameleon 150 Manifold	2081	Sunstar Labs, SunStar Labs - South	Essel - Minh	Minh Ngo
2101	Chameleon-150: Chameleon 150 Manifold	2101	Sunstar Labs, SunStar Labs - South	Essel - Minh	Minh Ngo
2120	Chameleon-150: Chameleon 150 Manifold	2120	Sunstar Labs, SunStar Labs - South	Essel - Minh	Minh Ngo

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

Printed: 10/23/2019 1:25:01PM

WORK ORDER

T193683

Client: **Essel Environmental Engineering & Consulting** **Project Manager:** **Mike Jaroudi**
Project: **3823 MLK Jr Way** **Project Number:** **19272**

Report To:
Essel Environmental Engineering & Consulting
Minh Ngo
1035 22nd Avenue
Oakland, CA 94606

Date Due:	10/30/19 17:00 (5 day TAT)		
Received By:	Sunny Lounethone	Date Received:	10/23/19 09:42
Logged In By:	Sunny Lounethone	Date Logged In:	10/23/19 10:44

Samples Received at:

Custody Seals	No	Received On Ice	No
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confiri	No		

Analysis	Due	TAT	Expires	Comments
T193683-01 SV1 [Air] Sampled 10/22/19 11:54 (GMT-08:00) Pacific Time (US &				
TO-15	10/30/19 15:00	5	11/21/19 11:54	
T193683-02 SV2 [Air] Sampled 10/22/19 11:48 (GMT-08:00) Pacific Time (US &				
TO-15	10/30/19 15:00	5	11/21/19 11:48	
T193683-03 SV3 [Air] Sampled 10/22/19 11:50 (GMT-08:00) Pacific Time (US &				
TO-15	10/30/19 15:00	5	11/21/19 11:50	

Reviewed By

Date

APPENDIX E

LIMITATIONS

LIMITATIONS

The environmental investigation described in this report has been conducted in accordance with current regulatory guidance and the standards of environmental and geological practice performed in the general project area. No warranty, expressed or implied, is made regarding the professional opinions presented in the report.

Essel Environmental Engineering & Consulting's descriptions, conclusions, and recommendations in the report, with respect to environmental conditions, are based on a limited number of sampling points and chemical analyses. Field observations made during the investigation and the samples collected and submitted for testing are considered to be representative of the area evaluated. Subsurface soil and ground-water conditions; however, may vary between and beyond sampling or observation points. Additional work, including further subsurface investigation, can reduce the inherent uncertainties associated with this type of investigation.

The interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. Chemical testing was conducted by an analytical laboratory that is certified by the state of California to perform the analyses requested for this investigation. Essel Environmental Engineering & Consulting is not associated with the laboratory that performed the analyses and claims no responsibility for any inaccuracy in laboratory results.

This document is intended to be used in its entirety. No portion of the document, by itself, is designed to completely represent every aspect of the project. Essel Environmental Engineering & Consulting should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

This report, furthermore, is intended for the exclusive use by the client. Any use of the contents of this report by parties other than the client is undertaken at those parties' sole risk.

PHASE I
ENVIRONMENTAL SITE ASSESSMENT
OF
3801-3829 MARTIN LUTHER KING JR. WAY

ASSESSOR PARCEL NUMBERS
APN 012-0964-004
APN 012-0964-005
APN 012-0964-006
APN 012-0964-007

IN
OAKLAND, CALIFORNIA

August 23, 2019

Prepared for:

Resources for Community Development
2220 Oxford Street
Berkeley, CA 94704

Prepared by:

20 Years 1995-2015

environmental service
by Papineau

TABLE OF CONTENTS

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(CONTINUED)

1.0 EXECUTIVE SUMMARY

This report presents the results of a Phase I Environmental Site Assessment for improved and undeveloped lots at 3801-07, 3813-19, 3823, and 3829 Martin Luther King Jr. Way, in Oakland, California, the "Property" (Figure 1). Additional addresses associated with the Property include 652-654-656 MacArthur Boulevard. The Phase I Environmental Site Assessment of the Property was conducted by Environmental Service, during August 20109. The work was conducted under the authorization of Ms. Alexandra Arjo, in general accordance with Proposal Number 2019-017 dated June 6, 2019, and written authorization dated July 25, 2019.

Property Description The Property is located in the City of Oakland, north of I-580 and west of State Highway 24, along the west side of M.L.K. Jr. Way (formerly, Grove Street) and north side MacArthur Boulevard (formerly, 38th Street). By compass direction and convention in this report, the orientation of M.L.K. Jr. Way is north-south, and the orientation of MacArthur Boulevard is east-west.

The four parcels comprising the Property are listed below:

APN 012-0964-004 (3829 M.L.K. Jr. Way),
APN 012-0964-005 (3823 M.L.K. Jr. Way),
APN 012-0964-006 (3813-19 M.L.K. Jr. Way, and,
APN 012-0964-007 (3801-07 M.L.K. Jr. Way).

Combined, the four parcels contain approximately 0.48 acre of land (see Figure 2). The overall lot dimension along M.L.K. Jr. Way is approximately 170 feet and the MacArthur Boulevard frontage, or lot depth from M.L.K. Jr. Way, is approximately 124 feet. The existing buildings include a former store, house, and garage, all of wood-framed construction. The buildings currently are vacant.

The City of Oakland's General Plan designates the Property for Neighborhood Center Mixed Use, and the Property is zoned Neighborhood Center (CN-3) with a 45-foot building height limit. The current buildings on the Property are over 100 years old, except for the small garage which is newer.

Neighborhood At the time of the reconnaissance on August 9, 2019, the Property was observed to be located in a mixed residential and commercial area with housing west and north of the Property, and some commercial uses to the east and south. Automotive repair was apparent on the adjoining parcel to the east. Dry cleaning was not apparent in any adjoining or nearby neighborhood shops.

Historical Uses Based upon review of historical Oakland City Directories (Appendix C) and Sanborn Fire Insurance Rate Maps (Appendix D), the first developed uses of the Property were for three houses in 1902, and likely in the years before. The original three houses have been demolished or demolished and replaced. The former house at 3801 Grove Street (today, 3801 Martin Luther King Jr. Way) was replaced with two flats and store during 1903-1910. The former house at 3809 Grove Street (today, 3823 M.L.K. Jr. Way) was demolished *circa* 1975-1979 and was not replaced. The former house at 3813 Grove Street (today, 3829 M.L.K. Jr, Way) was replaced with a store during 1912-1930 which was later demolished *circa* 2006-2007. The current buildings have been used for a drug store, Pacific

Telephone and Telegraph, barber shop, hair salon, stereo store, hat store, and residences. Except for the corner store and flats which remain today, all other buildings on the Property were demolished by 2007.

The Property has had many uses which can be classified generally as office, retail, and residential. The Property has no history of use for automotive repair, auto fuel service, dry cleaning, electronics manufacturing, metal plating, row crops or orchards, waste disposal or other uses recognized as being associated with potential uses of hazardous substances including petroleum products.

Property Reconnaissance The assessor looked for visible signs of potential environmental impairment such as oil staining or machinery leaks, staining or etching of the concrete floor by chemicals, bulk storage of hazardous materials or waste, past or current underground or above-ground storage tanks, and stressed or dead landscape. These conditions were looked for but were not observed.

No quantity of hazardous material was observed on August 9, 2019. Soil stockpiles were not observed. Solid waste is disposed by the municipal collection and landfill service. Drinking water is provided through the municipal water delivery system by East Bay Municipal Utility District (EBMUD). EBMUD's water currently meets federal Safe Drinking Water Standards (EBMUD, 2018).

Sites Adjoining the Property The Property is adjoined on the south by former gas stations. However, these sites are no longer used as gas stations. One has been completely rebuilt with a church. See Figures 2 and 3 for locations. In view of the location and direction of groundwater movement generally toward the west, west-southwest, or southwest, these adjoining sites do not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

National Priority List (NPL) and Other Selected Federal Databases U.S. Brownfields and Comprehensive Environmental Response and Compensation Liability Act (CERCLA) sites were identified within the ASTM search distances from the Property. The nature and locations of the identified sites is such that they pose neither an obvious likelihood nor an apparent risk of environmental impairment for the owner of the Property. No federal Superfund site, proposed or de-listed Superfund site, Resource Conservation and Recovery Act (RCRA) Corrective Actions (CORRACTS) or Treatment-Storage-Disposal (TSD) site was reported within the ASTM standard distance from the Property. The above list is incomplete, and search results for additional federal databases are presented in Section 5.2 and Appendix B.

Selected State of California Databases According to ERS's search of the public agency databases, the following leaking underground storage tank sites are located close to the Property:

- J&H Auto Repair (3701 M.L.K. Jr. Way), 0.0.7 mile south of the Property;
- Grove Street Wash Rack (3884 M.L.K. Jr. Way), 0.11 mile northeast of the Property; and,
- ARCO/Westco Gas Food (731 W. MacArthur Boulevard), 0.12 mile west).

In view of their distance or location west or south of the Property, none poses an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Toxic Pit sites and solid waste landfill (WMUD/SWAT, SWF/LF) sites were not identified by ERS as being located within the ASTM standard distances from the Property. The above list is incomplete, and search results for additional State of California databases are presented in Section 5.2 and Appendix B.

Conclusions and Recommendations This assessment has made the following conclusions and recommendations:

- This assessment confirms presence of lead residues in near-surface soil on the Property which likely will necessitate remedial action.

- This assessment has not revealed evidence of any obvious Recognized Environmental Condition (REC), historic REC, or controlled REC in connection with the Property.

- The adjoining auto repair use and former gas station uses do not pose any obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

- Use of the adjoining lot at 3831-33 Grove Street (today, 3833 M.L.K. Jr. Way) for U C Cleaners during 1967-1969 may have entailed use of perchloroethylene (PCE) cleaning fluid.

Business Environmental Risk The contemplated use of the Property for a residential CN-3 use will entail demolition of the existing improvements. Demolition sometimes requires removal of regulated asbestos-containing materials (RACMs). Costs for removal would depend on additional information such as, for example, the locations and quantities of confirmed ACMs. Estimates could be prepared by local qualified contractors based on results of an asbestos survey. However, in view of the expected small areas of vinyl asbestos floor tile (VAT) or sheet linoleum, the cost for removal of ACM is expected to be low.

Subsequent Phase II Investigation Preliminary screening identified concentrations of lead in near-surface soil, which substantially exceed the locally applicable RWQCB-SFB Table S-1 ESL for lead for unrestricted residential land use. A Soil Management Plan is recommended for proper handling and landfill disposal of soil excavated for the foundation and utilities.

Soil vapor screening along the northern Property line could rule out the possibility of significant concentrations of volatile organic compounds (VOCs) in soil vapor left from the past cleaning works on the adjoining parcel in the period 1967-1969, 1935, and 1928. PCE was used in dry cleaning after 1950. Before 1950, other cleaning solvents were used in the earlier period. Soil vapor screening would test for presence or absence of PCE, TCE, carbon tetrachloride, and benzene in soil vapor.

Costs of Corrective & Regulatory Compliance Actions Corrective action tentatively is recommended to remove lead-affected soil for off-site disposal in appropriate landfills. A cost at this time is based on assumption about the volume of soil to be disposed and waste soil classification. For approximately 1,000 tons of soil (*e.g.*, 15,000 square feet of surface area and 1-foot excavation depth),—all classified as California, non-RCRA hazardous waste,—the cost for disposal at Class I Kettleman Hills Landfill is approximately $160,000 (complete with disposal fees, local and State BOE taxes). Additional costs would accrue for sampling, laboratory testing, loading and trucking.

Before demolition, an asbestos consultant should be retained. Building demolition in the jurisdiction of the City of Oakland and BAAQMD requires a pre-demolition asbestos survey to obtain a "J-Number" before the City of Oakland will issue a demolition or building permit. Cal/OSHA Construction Safety Orders will apply during demolition.

Certification This Phase I Environmental Site Assessment was performed by an environmental assessor, Marc Papineau, in general conformance with the scope and limitations of ASTM Practice E 1527-13, for the property located at 3801-07, 3813-3819, 3823, and 3829 Martin Luther King Jr. Way, and 652-656 MacArthur Boulevard, in Oakland, California. Any exceptions to, or deletions from, this practice are described in Section 2.2 of this report. Resources for Community Development, its affiliates and lender, their successors or assigns, can rely upon the information presented herein as factual, true and accurate, and in general accordance with the ASTM E 1527-13 Standard for Practice.

2.0 INTRODUCTION

This report presents the results of Phase I Environmental Site Assessment for the Property located at 3801-3807-3823-3829 Martin Luther King Jr. Way[1] in Oakland, the Property (Figure 1). Additional addresses associated with the Property include 652-654-656 MacArthur Boulevard. The Phase I environmental site assessment was conducted by the environmental assessor during August 2019 in connection with purchase and redevelopment of the Property with an affordable housing use. Environmental Service was retained by Ms. Alexandra Arjo to conduct the Phase I Environmental Site Assessment in general accordance with the agreement and Proposal Number 2019-017 dated dated June 6, 2019.

2.1 Purpose

The purpose of this Phase I Environmental Site Assessment is to provide an environmental assessment that meets ASTM Standards and which:

- Evaluates and describes the presence of any RECs in connection with the Property.
- Where RECs are assessed present, if reasonably possible, presents estimates for the cost of remedial actions to a prudent owner of the Property.
- If necessary, recommends the scope of any subsequent study to assess the existence of an actual release of any hazardous substance or petroleum product, or to estimate the cost of any needed remedial actions.

2.2 Definitions of Terms and Limitations

Definitions of Terms

Controlled REC—A Controlled REC (CREC) is an REC resulting from "*a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a NFA letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls).*" *CRECs are listed in the Findings Section of the Phase I ESA report, and as RECs in the Conclusions Section of the report.*

Data gap—A "data gap" means missing or unattainable information. See also "significant data gap."

***De minimis* conditions**—Hazardous substances or petroleum products may be present on a property without being an REC. If 1) the condition does not represent a threat to human health or the environment and if 2) the condition would not be subject to an enforcement action if brought to the attention of a regulatory agency,

[1] Martin Luther King Jr. Way was previously known as Grove Street, and 38th Street also was renamed to MacArthiur Boulevard.

the condition is termed “de minimis” and is not an REC. For a condition to be classified as “de minimis” or “less-than-significant,” the condition cannot represent a threat to either human health or the environment AND the condition would not be subject to an enforcement action if brought to the attention of a regulatory agency.

Environment—The environment can be viewed as the ground, groundwater, surface water, or soil vapor of a property. Under CERCLA, the term “environment” includes precisely (A) navigable waters, the waters of the contiguous zone, and the ocean waters…and (B) any other surface water, groundwater, drinking water supply, land surface or subsurface strata…”

Impairment—The words "impair" and "impairment" are used to mean the result of a release of a hazardous substance or petroleum product assessed to be a REC.

Hazardous Substance—The term "hazardous substance" is used here in general accordance with its usage as defined in the following documents:

- Comprehensive Environmental Responsibility, Compensation, and Liability Act (CERCLA) of 1980, as amended; and
- Resource Conservation and Recovery Act (RCRA) of 1976, as amended.

The terms “hazardous substance,” “hazardous material,” and “hazardous waste” are used interchangeably in this report, and no legal distinction is implied among the terms as used herein.

Historical REC—An HREC is an REC resulting from “*a past release of any hazardous substances or petroleum products that has occurred in connection with a property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls).*” *Before calling a past release an HREC, the environmental assessor must determine whether the past release is an REC at the time the Phase I ESA is conducted (e.g., if there has been a change in the regulatory criteria). If the environmental assessor considers this past release to be an REC at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as an REC.*

Limiting condition—a constraint imposed by obstruction or barrier, ground cover, weather or access. Examples: Intervening buildings or walls might block the view of an adjoining auto repair shop. Pavement precludes viewing of surface soil. A box sump cover may preclude viewing of the inside of the box.

Migration—Migration, movement, or chemical trespass refers to the “*movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface*.”

Recognized Environmental Condition (REC)—The term Recognized Environmental Condition (REC) is used to describe an environmental condition or impairment assessed to warrant further inquiry. This includes the interpreted "presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment."

Release—A "release" means "*any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discharging of barrels, containers, and other closed receptacles containing any hazardous substances or pollutant or contaminant*." Presence of hazardous substances at a property "due to any release to the environment" encompasses the potential scenario in which an on-site or off-site release occurs and, if the release occurs off site, migration results in "chemical trespass" on the property.

Significant data gap—A significant data gap, as defined in §312.10 of the AAI final rule and §12.7 of ASTM E1527-13, is one which actually has the effect of limiting the assessor's ability to identify or evaluate RECs. A data gap is significant only if it may preclude identification of conditions indicative of a past release, a present release or imminent threatened release of hazardous substances, hazardous waste or petroleum products, or reduce the ability of the assessor to interpret the degree of risk. A Phase I environmental site assessment must identify and comment on significant data gaps.

Non-Scope Items and Limitations

Known or suspected RECs, CRECs, and HRECs are listed in Section 6.0, the findings of RECs. However, in Section 7.0, "Conclusions," known or suspected RECs and CRECs are the focus. HRECs are not a focus of Section 7.0 because HRECs warrant awareness by the Report User but normally would not warrant further investigation or a corrective action.

Certain information contained in this report may have been rightfully provided to the environmental assessor by third parties or other outside sources. The environmental assessor does not make any warranties or representations, whether expressed or implied, regarding the accuracy of such information, and shall not be held accountable or responsible in the event that any such inaccuracies are present.

Sampling and testing assessments of naturally-occurring radon; polychlorinated biphenyls (*e.g.*, in transformers, other electrical equipment, joint compound); asbestos and lead in building materials, and lead-based paint are not within the scope of ASTM E 1527-13 unless made so by agreement with the client for whom the Phase I report is prepared. Only one such agreement was made for supplemental screening of near-surface soil for lead and organo-chlorine pesticide residues (see Tables 1 and 2 and Figure 4).

Local and/or federal regulations and laws require pre-demolition surveys of structures by a qualified California Asbestos Consultant and certified Lead-Based Paint Inspector. This or any Phase I Environmental Site Assessment does not constitute an asbestos or lead-based paint survey and is insufficient for compliance with federal, state, or local regulations governing asbestos and lead during construction, demolition or removal operations. Radon survey; asbestos or lead inspection are non-scope items which were not specifically requested by the client.

Deletions and deviations from the ASTM Standard E 1527-13 standard practice: none.

2.3 Methods and Limiting Conditions

The following readily available information resources were utilized during the course of this assessment.

- Interviews of knowledgeable parties. The individuals interviewed, and the dates and kinds of communications are as follows:
  - Ms. Alexandra Arjo, RCD project manager, July 25, 2019, August 1, and August 8, 2019, email communications.
- Reconnaissance to observe Property and neighborhood, and to look for evidence of current operations that use or have used hazardous materials or petroleum products. Reconnaissance of the Property was conducted by Marc Papineau on August 9, 2019.
- Review of historical records:
  - Alameda County Local Oversight Program for information regarding historical geological/hydrogeological conditions and hazardous/toxic waste investigations or remedial actions
  - Federal/State/County/City information regarding hazardous waste compliance/violations
  - Aerial photographs at U.S.G.S. in Menlo Park
  - City of Oakland Planning Department records
  - Review of City of Oakland Building Department records
  - Haines and Polk's Reverse Directories, and Sanborn Fire Insurance Rate Maps
- Agency databases
  - Federal and State lists regarding Superfund Sites
  - State or County information regarding landfills
  - State/County/City information regarding underground storage tanks
  - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)
  - Federal Resource Conservation and Recovery Act (RCRA) Facilities and Generators List
  - Federal Emergency Response Notification System (ERNS) List
  - Historical CORTESE
  - Toxic Pits and Hazardous Waste Sites (Deed Restrictions)
  - Landfills (SWLF), Toxic Pits, and Hazardous Waste Sites (Deed Restrictions)
  - RWQCB North Bay Toxics List
  - EnviroStor database
  - Other databases listed in Appendix B but not listed above

Limiting Conditions -- Limiting conditions were not encountered during preparation of this Phase I Environmental Site Assessment. Files relevant to the Property were readily accessible and available for review. Access to the exterior of the Property was not constrained by fences, vegetation, other features, or coverings other than asphalt or concrete pavement, which is considered common for commercial land in an urban setting. Building interiors were not observed except through windows or gaps in closed openings.

3.0 PROPERTY DESCRIPTION

3.1 Location and Legal Description

The Property is located in the City of Oakland, north of I-580 and west of State Highway 24, along the west side of Martin Luther King Jr. Way (M.L.K. Jr. Way) and north side of West MacArthur Boulevard. M.L.K. Jr. Way was formerly named Grove Street and MacArthur Boulevard was formerly named 38th Street. By compass direction and convention in this report, the orientation of M.L.K. Jr. Way is north-south, and the orientation of MacArthur Boulevard is east-west.

The Property consists of four parcels designated by the Alameda County Assessor's Office as Assessor Parcel Numbers (APNs) 012-0964-004, 012-0964-005, 012-0964-006 and 012-0964-007. In aggregate, the combined land area in both parcels is approximately 0.48 acre in four narrow rectangular-shaped lots. The combined lot dimension along M.L.K. Jr. Way is approximately 170 feet, and the lot depth from M.L.K. Jr. Way is approximately 124 feet. Photographs of the Property are presented in Appendix A.

3.2 Nature of Property

The City of Oakland's General Plan designates the Property for Neighborhood Center Mixed Use (Oakland, City of, 2015). The City of Oakland Zoning is Neighborhood Center (CN-3) (Oakland, City of, 2016). The current store building and house on the Property are at least 108 years old. But the first buildings on the Property pre-dated 1902.

The parcels do not appear to carry a Potential Designated Historic (PDH) property status. The PDH status, if applicable, could affect allowed and conditionally permitted uses of the Property. Details are available from the City of Oakland Planning Department which should be consulted in regard to proposed land uses.

The Property and adjoining neighbors were viewed by the assessor on August 9, 2019. The assessor looked for visible signs of potential environmental impairment such as oil staining or machinery leaks, staining by chemicals, bulk storage of hazardous materials or waste, past or current underground or above-ground storage tanks, and stressed or dead landscape. These conditions were looked for but were not observed. One minor soil stockpile of approximately 1-2 cubic yards was apparent on 3823 M.L.K. Jr. Way. The stockpile appears to contain only soil, and the origin is unknown.

No quantity of hazardous material was observed on August 9, 2019. The contents of the garage were viewed through windows or gaps in the siding. Dry storage boxes, and furniture was apparent in the garage. Containers of motor oil, coolant, brake or steering fluid were not observed on the Property.

The Property does not have a hydraulic elevator. Pole-mounted transformers were not observed over the Property and none was noted around the Property perimeter.

Liquid or solid hazardous wastes are not routinely generated by the Property, which includes vacant buildings on one lot and three other undeveloped lots. The lots at 3823 an 3829 M.L.K. Jr. Way are used only for parking. Search on DTSC's Hazardous Waste Tracking System (HWTS) found no record of hazardous waste shipment from the Property. See Section 5.2, Chart A. A permanent or one-time EPA waste generator number has not been assigned to the Property based on the search of the HWTS and database search prepared by ERS (see Appendix B).

Solid waste is collected by Oakland Scavenger or Waste Management of Alameda County. The East Bay Municipal Utility District water pollution control plant provides treatment and disposal of municipal waste water. Treated effluent is discharged to the San Francisco Bay from the public-owned treatment facility northwest of the Property in Oakland near the I580/I880 interchange. The East Bay Municipal Utility District delivers potable water. The water supply and production facilities themselves are owned and operated by the East Bay Municipal Utility District. Annual water quality testing has shown compliance with federal Safe Drinking Water Standards.

Environmental land use restrictions, other than CN-3 zoning district requirements and 45-foot building height limitation, are not known to exist for the Property. Regulatory guidelines (*e.g.*, for storage of hazardous materials or wastes), hazardous waste, hazardous materials, and storm water pollution prevention discharge regulations apply in general. The Report User should independently ascertain Potential Designated Historic (PDH) property status.

3.3 Nature of Vicinity

The Property is located in a mixed use neighborhood with commercial uses. For the purpose of theses descriptions, by convention, the compass orientation of Martin Luther King Jr. Way (formerly, Grove Street) is taken as north-south, and the compass orientation of MacArthur Boulevard, Apgar Street and 39th Street is taken as east-west. The vicinity of the Property was observed to consist of the following:

To the north: a building with apartments (3833-3837 M.L.K. Jr. Way);

To the east: HK Auto Repair (3806 M.L.K. Jr. Way), a small house (3810-12 M.L.K. Jr. Way), a warehouse (3820 M.L.K. Jr. Way), a former church (3832 M.L.K. Jr. Way), and a duplex (3836-3638 M.L.K. Jr. Way);

To the southeast: Good Samaritan Cathedral Church of God (625 MacArthur Boulevard);

To the south: a former car wash and service station (657 MacArthur Boulevard);

To the southwest: Houses at 663-65 and 669 MacArthur Boulevard;

To the west: A house at 668 MacArthur Boulevard (APN 012-964-8), and,

To the northwest: A duplex house and apartments (663-665 Apgar Street.

Figures 2 and 3 illustrate the neighborhood with addresses and parcel numbers shown for the Property and nearby parcels. There are no nearby active service stations or dry cleaners; however, the adjoining sites at 657 MacArthur Boulevard and 625 MacArthur Boulevard (also known as 3740 M.L.K. Jr. Way) formerly were service stations. In 1969, these service stations were ENCO (657 MacArthur Boulevard) and Kimbrough Chevron (3740 M.L.K. Jr. Way).

Additional past service stations were located at 3701, 3881 and 3884 M.L.K. Jr. Way (formerly, Grove Street), as discussed in Section 4.2

Jacob Pearlman conducted a clothes cleaning & pressing business and resided at 3829 Grove Street in 1935. In 1969, a dry cleaning business named UC Cleaners was present at 3833 Grove Street. The lot located at 3829 Grove Street (or, M.L.K. Jr. Way) is designated as APN 012-964-4 and is the northernmost lot on the Property. The lot located at 3833 M.L.K. Jr. Way adjoins the Property.

3.4 Topography and Hydrogeology

The Property is located on a broad alluvial plain of Temescal Creek and Glen Echo Creek that extends from the base of the Oakland Hills north and east of the Property to the Oakland Estuary west of the Property. The Property is at an elevation of approximately 65 feet above mean sea level (National Geodetic Vertical Datum of 1929). See Figure 1.

The area including the Property is mapped as being underlain by Holocene-age alluvial fan or fluvial deposits (see Figure 5). Alluvial fan deposits

(Qhaf) are illustrated on the Property. The Property is expected to be underlain by inter-bedded layers of silty and sandy clays, clayey sands and clayey gravels. (Radbruch, 1957; URS, 2004).

Throughout most of the Alameda County portion of the East Bay Plain, from Hayward north to Albany, well gauging and water level contours show that the general direction of groundwater flow is from east to west. The local direction of groundwater movement generally correlates well with local topography. Flow direction and velocity are also influenced by buried stream channels, which tend generally to be oriented in an east-to-west direction. Historical groundwater flow direction at the Property is expected to be predominantly towards the west or west-southwest. The nearest natural drainages are Glen Echo Creek, located south of the Property, and Temescal Creek, located north of the Property (Impact Environmental Services, 2009).

Review of groundwater flow direction at nearby sites having groundwater monitoring wells shows that the groundwater flow direction at 3701 Martin Luther King Jr. Way is toward the northwest, west and west-southwest (IES, 2010). At 3884 M.L.K. Jr. Way, the groundwater flow direction historically has been toward the west-southwest or west (ERM, 2017a,b; ERM, 2015). The shallow groundwater surface has sloped down consistently toward the west-southwest, west or northwest depending on location. See Figure 2 or 3.

3.5 Interviews of Knowledgeable Parties

The two southern lots of the Property are vacant and has not had any tenants since 2006 owing to its condition and pending development status for 19 units of mixed-income housing as proposed by A.F. Evans Co., Inc. (AFE). AFE gave up ownership of the southern lots of the Property in 2011. The two northern lots are used for unattended surface parking.

4.0 PROPERTY HISTORY

4.1 Prior Owners

Current and past owners are not known from chain-of-title research, which was not part of the agreed scope of service for this Phase I environmental site assessment. From other information sources, the most recent partnership or owner was Grove Park LLC[2] and, subsequently, U.S. Bank.

In 2010, "Grove Park" became a 60-unit residential project concept on the four combined lots (collectively, the "Property" or "Grove Park"). However, during 2006-2008, the southern lots of "Grove Park" controlled by A.F. Evans Co., Inc. (AFE) were only the two southern lots on which 19 mixed income housing units were proposed. AFE was sole member of

[2] Deed instrument number 2006408891 recorded in Alameda County on November 1, 2006.

Grove Park LLC and gave up ownership of the two AFE parcels as approved in Chapter 11 bankruptcy on July 25, 2011.

Circa 2006, AFE/Grove Park LLC borrowed $741,000 from Washington Mutual Bank (now U.S. Bank) for site acquisition of the two southern parcels.[3] AFE/Grove Park LLC also obtained an $800,000 loan from the City's Redevelopment Agency under the Vacant Housing Acquisition and Rehab Program (VHARP). VHARP use included recorded restrictions requiring that 25 percent of the units of any development would be affordable at 80 percent of annual median income. The deed of trust for the VHARP loan was subordinated to the WAMU/U.S. Bank loan.

As of 2010, periodic abatement work on the Grove Park site was performed through the City of Oakland's Code Compliance Department. This resulted in accumulated liens over $25,000 on the four parcels making up the Grove Park site.

Circa October 2010, AMCAL-LANDIS asked the City of Oakland to apply NSP3 funds to acquire the two (2) AFE parcels—then still owned by AFE/Grove Park LLC. At that point in time, the City or its Redevelopment Agency had major loans on all four Mac-MLK parcels, including the $800,000 loan on the two (2) AFE parcels. According to City internal memorandum, in 2010 the acquisition cost for the AFE parcels would have been approximately $500,000.

The four Mac-MLK parcels are 3801-3807, 3813-3819, 3823 and 3829 M.L.K. Jr. Way. As of 2010, the parcel located at 3823 M.L.K. Jr. Way was city-owned. The parcel at 3829 M.L.K. Jr. Way was in receivership and the trustee had told City staff it would not pursue the parcel.

4.2 Prior Uses

Overview

The subject Property has been developed since before 1902. The area is believed by the assessor to have been part of Tract No. 37 and is further believed to have been developed *circa* 1890-1902. Lots for sale on the adjacent Montgomery Tract, north of 40th Street and west of Telegraph Avenue were advertised for sale by Richard J. Montgomery in 1905.[4] On the basis of the advertisement, it is reasonable to expect the land south of 40th Street, which is more central to Oakland, was developing at an even earlier date before 1905. In fact, three houses had been built on the Property by 1902.

During 1868-1883, in Oakland's industrial boom, factories were started along the lower stretches of 23rd Avenue. The first factories prompted construction of the city's sewer system, which was essential infrastructure integral to the city's growth. During 1874-1884, three terra-cotta pipe and

[3] The fair market value of the Property in 2006 was $1.23 million but fell sharply by 2008 (Oakland, City of, 2008).

[4] http://servlet1.lib.berkeley.edu:8080/mapviewer/searchcoll.execute.logic?coll=eartmaps&catno=b22254205

pottery companies started on or near 23rd Avenue, to provide the terra cotta sewer pipes of the period (Urban Ecology, 2005).

There were no fuel islands or "Oil & Gas" labels on the Property in any of the Sanborn maps viewed by the assessor. The nearest historical service stations were located north and south of the Property along Grove Street, 38th Street which was renamed MacArthur Boulevard, and 39th Street. Two service stations across the street on the south side of 38th Street (today, MacArthur Boulevard) adjoined the Property.

There were no indications in the Oakland City Directory research that dry cleaning, automotive fuel service or auto repair, metal plating, or printing has ever been performed on the Property. Past uses of the Property included two residential flats at 654 and 656 38th Street (same as MacArthur Boulevard), a corner drug store at 3801 Grove Street, (M.L.K. Jr. Way), ground-level retail stores or services at 3807, 3813, and 3819 Grove Street (M.L.K. Jr. Way), apartments at 3817 Grove Street, a house at 3823 Grove Street, a house and, later, a store or restaurant at 3829 Grove Street (see Appendices C and D).

Aerial Photograph Review

Aerial photographic images of the Property were viewed on-line on Google Earth and also were downloaded from U.S. Geological Survey's Earth Explorer and from UC Santa Barbara's Aerial Imagery Collection. Aerial photographic images from Earth Explorer, UC Santa Barbara, and Google Earth are reproduced in Appendix E for years 1931, 1946, 1958, 1965, 1968, 1974, 1980, 1991, 2002, 2007 and 2012. Additional aerial photographic images were viewed on-line on Google Earth for additional years during 2002-2019.

1931—The Property was improved with houses A, D, and E at 654-656 38th Street, 3823 and 3829-31 Grove Street. There were stores at B and C (3801 and 3813-19 Grove Street). Buildings at F and G are garages or sheds. Off site, the Shaw & Garland service station at 3740 Grove was apparent southeast of the Property.

1946—The Property was improved with the same main buildings A–E with possible alterations at Building E. There was no obvious vacant lot on the Property. There were no discernible conditions such as excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property.

Off site, the corner parcels in the southeast and southwest corners of two intersections at Grove (M.L.K. Jr. Way)/38th Street (MacArthur) and Grove (M.L.K. Jr. Way)/39th Street were improved with service stations.

1958—There were no obvious changes on the Property from 1946. Main buildings A–E and minor structures at F and G remained. There were no discernible conditions such as excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property. The four off-site service stations remained on the corner parcels located in the southeast and southwest corners of two intersections at Grove (M.L.K. Jr. Way)/38th Street (MacArthur) and Grove (M.L.K. Jr. Way)/39th Street.

1965—The Property was improved with the same main buildings A–E and ancillary structures at F and G.

1968—The Property was improved with five main buildings plus garages and a shed. Building C fronting on M.L.K. Jr. Way appeared to be divided into two long portions. There was no obvious vacant lot on the Property. Off site, the corner parcels in the southeast and southwest corners of Grove Street (M.L.K. Jr. Way)/38th Street (MacArthur Boulevard) appeared to be service stations.

1974—The 1974 aerial photographic image shows the same buildings on the Property as in 1968. There were no discernible conditions such as excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property. Off site, the parcels located in the southeast and southwest corners of Grove Street (M.L.K. Jr. Way)/38th Street (MacArthur Boulevard) appeared to be service stations.

1980—By October 1980, former buildings C and D at 3813-19 and 3823 M.L.K. Jr. Way had been demolished, leaving two vacant lots. There were no discernible conditions such as excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property. Off site, the parcel located in the southeast corner of M.L.K. Jr. Way/MacArthur Boulevard appeared to have been redeveloped with the existing church building. The parcel located in the southwest corner of M.L.K. Jr. Way/MacArthur Boulevard appeared to remain a service station.

1991—The resolution was so limited that information was not generally discernible. There were no obvious or discernible changes on the Property from 1980.

2002—There were no discernible differences from 1991 and no visible conditions such as open excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property. Buildings A, B and G remained.

2007—There were no discernible differences since 2002 and no visible conditions such as open excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property. Buildings A, B and G remained.

2012—In August 2012 the lot at 3813-3819 M.L.K. Jr. Way appeared to be used for gardening and composting. There were no discernible conditions such as excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property. Buildings A, B and G remained.

Sanborn Fire Insurance Rate Maps
In view of the length of historical use of the Property and urban setting, Sanborn Fire Insurance Rate Maps dated 1911, 1952-54, 1967, and 1969-70 researched and assembled by ERS were reviewed (ERS, 2017a). Thumbnails are provided in Appendix D.

Based on the Sanborn Maps, three houses were present in 1902 and likely before. In an unspecified year during 1902-1911, the two retail buildings on Grove Street (M.L.K. Jr. Way) and new flats at 654-656 38th Street (W. MacArthur) were added. The auto garage was added during 1911-1946, being apparent in the aerial photographic image dated 1946 and in the Sanborn Map dated 1951.

Building C at 3813-3819 Grove Street (M.L.K. Jr. Way) was demolished *circa* 1974-1980. Building C was labeled as a pair of stores ("S") on the Sanborn maps reviewed. Addresses associated with Building C were 3813-15 and 3817-19 Grove Street. The northeastern retail building was present there through October 1974 and was no longer present in the aerial photographic image dated October 1980.

Review of Sanborn maps indicates that Building A was residential and was used for two flats, having 38th Street (same as MacArthur Boulevard) addresses of 654-656 38th Street. Building A had no commercial element.

Building B at 3801-3807 M.L.K. Jr. Way was simply labelled as a store ("S") in 1911, and was labelled specifically as a drug store ("Drugs") in 1951. Addresses associated with the corner building included 652 38th Street (MacArthur Boulevard), 3801, 3805 and 3807 Grove Street (M.L.K. Jr. Way). This corner building may have had upstairs apartments.

Truck rental, dry cleaning, rug cleaning, auto or truck repair, and service station uses were not obviously apparent on the Sanborn map images for the Property. Off site, the adjoining building along the northern side of the Property was labeled as a "Cleaning Works" on the 1911 Sanborn map. Perchloroethylene was not in use as a dry cleaning fluid in that early year. Research of directories, therefore, was conducted to ascertain the nature of past occupants on the Property.

Directory Research
Independent directory research and directory research assembled by ERS (ERS, 2017b) is summarized in Appendix C. Various residents were listed at 652, 654 and 656 38th Street (MacArthur Boulevard) during 1928-2005. At 3801 Grove Street (M.L.K Jr. Way) Rose-Waterman Drug Co. drug store was listed since the 1930s. The store at 3801 Grove Street was a drug store continuously during 1930-1961. Later, during 1980-2005, 3801 Grove Street (M.L.K. Jr. Way) was used by Terry's Sound House.

There were few directory listings for 3805 or 3807 Grove Street (M.L.K. Jr. Way). Directory listings included E. Ray Lav barber (1935), Bush's Barber Shop (1956), Louise's Well Groomed (1961-1970), and Ishmallah's Hats (1990-2000). Bush's Barber Shop move to 3819 Grove Street and remained there until during 1966.

According to the directory research 3813 Grove Street was occupied by Newbridge Inn from 1946 to 1961. The store at 3819 Grove Street was occupied by barber shops from 1961 to 1970. There were no directory listings for 3813-3819 Grove Street after 1970. The building was present there at 3813-3819 M.L.K. Jr. Way through October 1974 and was no longer present in the aerial photographic image dated October 1980.

In the directory research, listings of dry cleaners, printers, or manufacturing on the Property were not encountered. Off-site, adjoining the northern side of the Property, a cleaning works was labeled on the 1911 Sanborn map. A directory listing was not ascertained owing to early year age of the land use. In 1928, a business at 3833 Grove Street was listed as Minute Kleen polish manufacturing and in 1969-70 a business was listed as U C Cleaners.

Also adjoining the Property, the corner parcel at 657 38th Street (MacArthur Boulevard) was a Signal or ENCO service station during 1946-1970. This parcel, located in the southwestern corner of Grove Street (M.L.K. Jr. Way)/38th Street (MacArthur Boulevard), was later used by Burley's Auto Detail Center. The corner parcel at 625 38th Street (MacArthur Boulevard), which is the same parcel as 3740 Grove Street, was a Shaw & Garland service station in 1928 and a Standard Oil service station during 1951-1961. The 3740 Grove Street parcel, located in the southeastern corner of Grove

Street (M.L.K. Jr. Way)/38th Street (MacArthur Boulevard), was redeveloped with the existing church building at an unspecified time during 1975-1979.

Farther off site, north of the Property, D.R. Hart's gas station or successor stations (*e.g*., Gowan's Mobil Service, Luckett's Phillip 66) were located at 3884 Grove Street, north of the Property, during 1928-1970. Also off site, north of the Property, at 3701 Grove Street, A.F. McAllen or Portz Bros. service station and, later, Halls Service Station and Hammond's Service were present during 1930-1996.

5.0 REVIEW OF ENVIRONMENTAL AGENCY RECORDS

5.1 Environmental Records Maintained at the Property

No such records are maintained and none would be expected in view of the vacant status of the buildings.

5.2 Public Agency Databases

The services of Environmental Record Search, ("ERS"), were used to conduct a search of public agency databases in general accordance with the ASTM E 1527-13 Standard for Practice, for potential facilities in the vicinity of the Property with reported releases that may have the potential to impact the Property. The following databases were searched by ERS and the following information was noted (ERS, Appendix B).

Federal NPL Superfund Site List: Distance Searched–1.0 mile

Superfund sites are sites that contain hazardous materials for which there is no responsible party for cleanup or for which Federal government oversight and management will be involved. According to ERS's search of this database, no federal Superfund site, de-listed Superfund site or proposed Superfund site is located within one mile of the Property.

Federal Liens (LIENS-US): Distance Searched–Target Property

This database contains sites that have had Federal Liens filed on them as reported by the U.S. EPA. According to ERS's search of the U.S. EPA database, there is no NPL lien on the Property.

U.S. Brownfields (BF-US): Distance Searched–0.5 mile

This database contains a listing of Brownfields sites listed under the "Cleanups in My Community" program maintained by the U.S. EPA. The Property is not identified as a U.S. Brownfields site. ERS identified one (1) U.S. Brownfields site which is located 0.09 mile northeast of the Property: Lucky Auto Body (3860/3884 M.L.K. Jr. Way). The Lucky Auto Body (3860/3884 M.L.K. Jr. Way) site does not pose any obvious risk or an apparent likelihood of environmental impairment for the Property.

Federal CERCLIS and CERC-NFRAP Lists: Distance Searched–0.5 mile

The Comprehensive Environmental Response and Compensation Liability Act Information System (CERCLIS) database is maintained by the U.S. Environmental Protection Agency (U.S. EPA) of potential hazardous waste sites that have come to the attention of the U.S. EPA. Sites on the CERC-NFRAP list are not necessarily hazardous waste sites, but rather sites that the U.S. EPA has already investigated and determined that "No Further Action is Planned" (NFRAP). According to ERS's search of this database, there is no CERCLIS or CERC-NFRAP site located within a 0.5-mile radius of the Property.

Federal RCRA Corrective Actions (RCRA-COR-US): Distance Searched–1.0 mile

The Resource Conservation and Recovery Act (RCRA) Corrective Actions (CORRACTS) database is maintained by the U.S EPA for facilities having been cited under RCRA Section 3008(h) for release of hazardous waste to the environment from a RCRA facility. According to ERS's search of this database, there is no RCRA CORRACTS facility within approximately one mile of the Property.

Federal RCRIS-TSD Facilities: Distance Searched–0.5 mile

The Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and Disposal (TSD) facilities database is maintained by the U.S EPA for facilities at which treatment, storage and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA. According to ERS's search of this database, there is no RCRA TSD facility within 0.5 mile of the Property.

Federal RCRA-Hazardous Waste Generators (LQG and SQG): Distance Searched –0.25 mile

The RCRA-hazardous waste generators database is maintained by the U.S. EPA of those facilities, entities, or persons that generate hazardous waste as defined and regulated by RCRA. According to ERS's search of the database, there are not any large-quantity or small-quantity generators of RCRA-hazardous waste located within 0.25 mile of the Property.

Federal TRIS List: Distance Searched – Target Property

The federal Toxic Release Inventory System (TRIS) List is the U.S. EPA list generated by facilities which complete FORM R Toxic Chemical Release. The inventory is required by SARA Title III, the Community Right-to Know Act of 1986. The Property is not listed on the TRIS database, according to ERS's search of this database.

Federal ERNS List: Distance Searched–Target Property

The ERNS List is the U.S. EPA Emergency Response Notification Systems List of reported CERCLA hazardous substance releases or spills in quantities greater than the minimum reportable quantity, as maintained at the National Response Center. According to ERS's search of the ERNS database, the Property is not listed.

California DTSC Response: Distance Searched–1.0 mile

The "DTSC Response" database is from California DTSC and identifies sites having confirmed hazardous materials or waste releases for which DTSC provides oversight in a remedial response. Three (3) DTSC jurisdictional sites are located within 1 mile of the Property. The DTSC Response sites are:

- Cal Tech Metals (825-29-41 31st Street), 0.55 mile southwest of the Property
- Lane Metal Finishers (2942 San Pablo Avenue), 0.65 mile southwest of the Property
- Harris Dry Cleaners (2801 M.L.K. Jr. Way), 0.67 mile south of the Property

NOTE: The Hercules Inc. site identified by ERS is located in the City of Hercules.

In view of their distances and locations, the DTSC Response sites do not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Cal/EPA Department of Toxic Substances Control Historical Cal-Sites (Hist-CALSITES-CA): Distance Searched–0.25 mile

According to ERS's search of the historical Cal-Sites databases, no historical Cal-Site site is located within a 0.25-mile radius of the Property.

California Annual Workplan Sites (Hist-AWS-CA): Distance Searched–0.25 mile

The State of California equivalent programs are administered by the California Environmental Protection Agency (Cal/EPA). According to ERS's search of the Cal/EPA databases, a historical Annual Workplan Site is not located within a 0.25-mile radius of the Property.

Toxic Pits (Hist-Toxic Pits-CA): Distance Searched–0.25 mile

No site of a Toxic Pit was reported as being located within 0.25 mile of the Property.

Waste Landfills (SWIS-CA, Hist-SWIS-CA, Hist-SWF-CA and Hist-WMUDS-CA): Distances Searched–0.5 mile (SWIS-CA, SWLF-US) and 0.25 mile (Hist-SWIS-CA, Hist-WMUDS-CA)

The California Department of Resources Recycling and Recovery (CalRecycle) was formerly known as the California Integrated Waste Management Board (CIWMB). CalRecycle maintains a Solid Waste Information System database of active and inactive landfills in California. The California Water Resources Control Board maintains the Waste

Management Unit Database System (WMUDS). SWLF-US is a federal database of municipal waste disposal sites currently permitted and active.

According to ERS's search of the landfill databases, no active or inactive landfill is located within 0.5 or 0.25 mile of the Property. For SWIS-CA and SWLF-US the search distance was 0.5 mile, and for Hist-SWIS-CA and Hist-WMUDS-CA the search distance was 0.25 mile.

Deed Restrictions (Controls-CA, Deed-CA): Distance Searched–0.5 mile

The Controls-CA database is maintained by California Department of Toxic Substances Control. A deed restricted site is a parcel where DTSC has placed limits or requirements on future use of the property due to varying levels of cleanup possible, practical, or necessary at the site. The deed restriction Deed-CA database includes sites reported by the State Water Resource Control Board as having a deed restriction/land use restriction and or covenant.

According to ERS's search of these databases, the Property does not have recorded restrictions for buried wastes or other recognized hazardous condition. A Deeds or Controls listed site is not located within 0.5 mile of the Property.

Waste Discharge Requirements (WDR-CA): Distance Searched–0.25 mile

The database is maintained by the California Regional Water Quality Control Board for sites having waste discharge requirements, generally for treated wastewater discharge to a sewer. ERS reported that the target Property does not have discharge requirements issued by the RWQCB. Also, no site located within 0.25 mile of the target Property is listed as a WDR site.

North Bay Toxics (SLIC-Open-CA, SLIC-Closed-CA) List: Distance Searched–0.5 mile

The California Water Resources Control Boards maintain databases of Spills, Leaks, and Contamination Incidents (SLIC). This North Bay Toxics database is maintained by RWQCB-San Francisco separately from the Leaking Underground Fuel Tank database. Five (5) open-case North Bay Toxics sites are reported by ERS as being located within 0.5 mile of the Property. The five (5) open-case SLIC sites are:

- 820 W. MacArthur Boulevard, 0.16 mile west of the Property
- BART Parcels B-1 and B-2 (3883 Turquoise Way, also 555 40th Street), 0.18 mile east of the Property
- MacArthur Commons, also known as BART Parcels A and C1, (Telegraph/40th Street), 0.22 mile northeast of the Property
- MacArthur BART Transit Village (Telegraph/40th Street), 0.27 mile east of the Property
- 411 MacArthur Redevelopment (411 W. MacArthur Boulevard), 0.43 mile southeast of the Property

The nearest closed-case SLIC site is:

- Shattuck Avenue Parcel (4501 Shattuck Avenue), 0.49 mile northeast

None of these sites adjoins the Property. Except for BART Transit Village and BART Parcels A, B and C1, the other listed open-case SLIC sites are either located downgradient from the Property or else are located at such distance 0.25 mile or farther from the Property as not to pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property. BART Transit Village and BART Parcels A, B and C1 are addressed further in Secton 5.3.

CORTESE and Historical Cortese List (Cortese-CA, Hist-Cort-CA, Hist-HWS-CA): Distance Searched–0.25 mile

According to ERS, there is no Cortese or Hist-Cortese site located within a 0.25-mile radius of the Property.

Leaking Underground Storage Tank (LUST) Database: Distance Searched–0.5 mile

The State of California Water Resources Control Board (SWRCB) maintains a database for sites that are currently involved in site assessment/mitigation resulting from reported unauthorized spills or releases from leaking underground storage tanks (LUSTs). ERS reports approximately sixteen (16) open-status or closed-status LUST cases involving unauthorized fuel releases from USTs on sites located within 0.5 mile of the Property.

None of the LUST sites adjoins the Property. With some exceptions, many of the LUST cases have been resolved and closed. The nearest LUST sites located within 0.4 mile of the Property which have open-status LUST cases include:

- J&H Auto Repair (3701 M.L.K. Jr. Way), 0.08 mile south of the Property;
- Grove Street Wash Rack (3884 M.L.K. Jr. Way), 0.09 mile northeast of the Property;
- ARCO #4931/Westco Gas Food (731 W. MacArthur Boulevard), 0.12 mile west;
- Chevron #9-2029 (890 W. MacArthur Boulevard), 0.27 mile west;
- CalTrans (Telegraph Avenue at Highway 24), 0.29 mile southeast;
- CHP (3601 Telegraph Avenue), 0.28 mile southeast; and,
- San Francisco French Bread (3924 Market Street), 0.31 mile northwest.

Sites located within 0.25 mile of the Property which have closed-status cases include:

- RD Miner Company (750 37th Street), 0.12 mile southwest of the Property;

- Neighborhood Laundromat (3838 West Street), 0.13 mile west of the Property;
- BART parcel (3924 M.L.K. Jr. Way), 0.14 mile northeast;
- Shell station #12-9452 (500 40th Street), 0.27 mile northeast.

Two (2) of the listed open-status LUST cases are listed by ERS as having both open-status and closed-status. According to independent verification using GeoTracker, the LUST case for Neighborhood Laundromat (3838 West Street) was closed by ACDEH-LOP on March 31, 2004.[5] The LUST case for Shell station #12-9452 (500 40th Street) was closed by ACDEH-LOP on March 25, 2014.[6] The open-status case for CHP (3601 Telegraph Avenue) is eligible for closure. On June 19, 2019, RWQCB issued a request for comment notice and intent to issue a No Further Action letter.[7]

None of the open-status or closed-status LUST sites adjoins the Property. None of the open-case or closed-case LUST sites poses an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

State Registered Underground Storage Tanks (UST-CA, UST-CRSP, UST-Priority, County-UST-CA, Hist-CalFID, HIST-UST, and SWEEPS): Distance Searched–0.25 mile

According to ERS's search of these databases, eight (8) sites have registered USTs or have had past USTs within a 0.25-mile radius of the Property. UST sites include:

- Hammond Service (3701 M.L.K. Jr. Way), 0.08 mile south of the Property;
- ARCO/Mobil/Westco Gas Food (731 W. MacArthur Boulevard), 0.12 mile west of the Property;
- Grove Street Wash Rack (3884 M.L.K. Jr. Way), 0.11 mile northeast;
- Frank's Auto Repair (3924 M.L.K. Jr. Way), 0.14 mile northeast;
- Apostolic Church (4006 M.L.K. Jr. Way), 0.16 mile north;
- Apartment (544 37th Street), 0.19 mile southeast;
- Regal Station #102 (3875 Telegraph Avenue), 0.23 mile east;
- CHP (3601 Telegraph Avenue), 0.25 mile southeast;
- Former Shell #12-9452 (500 40th Street), 0.27 mile northeast; and,
- Chevron station #9-2029 (890 MacArthur Boulevard), 0.27 mile west.

Numerous past UST sites were reported by ERS as being listed in the historical Fuel Inventory Database (Hist-CalFID-CA). Twelve (12) separate CalFID sites were listed by ERS as being located within 0.25 mile of the Property, including three (3) UST sites co-listed above. The co-listed CalFID sites are:

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5 https://geotracker.waterboards.ca.gov/site_documents/7154057145/CLOS_L_2004-03-31.pdf
6 https://geotracker.waterboards.ca.gov/view_documents?global_id=T0600101265&enforcement_id=6199027
7 https://geotracker.waterboards.ca.gov/view_documents?global_id=T0619763665&enforcement_id=6405358

- Hammond Service/J&H Auto Repair (3701 M.L.K. Jr. Way), 0.09 mile south of the Property
- Apartment (544 37th Street), 0.19 mile southeast; and,
- Regal Station #102/East Bay Surgery Center (3875 Telegraph Avenue, 0.23 mile east of the Property

Nine (9) additional CalFID sites, which are not listed above, include:

- Quality Tune-Up #35 (640 W. MacArthur Boulevard), 0.03 mile east of the Property;
- Fiber Removal Corp. (3852 M.L.K. Jr. Way), 0.06 mile northeast;
- Insta Lube (736 W. MacArthur Boulevard), 0.11 mile west of the Property;
- Neighborhood Laundromat (3838 West Street), 11 mile northwest;
- Big O Tire (810 W. MacArthur Boulevard), 0.16 mile west;
- Tune Dynamics / Best Auto Repair (801 W. MacArthur Boulevard), 0.15 west of the Property;
- Sacred Heart Church (675 41st Street), 0.21 mile north of the Property;
- Lithographic Reproduction (4120 M.L.K. Jr. Way), 0.25 mile north of the Property; and,
- Telegraph Avenue Limited Partnership (3833 Telegraph Avenue), 0.22 mile east of the Property.

The Property is not listed in the UST, FID, Hist-UST and SWEEPS databases. None of the UST sites adjoins the Property. The former Quality Tune-Up #35 (640 W. MacArthur Boulevard), which is currently used for U-Haul Truck Rentals, is located east of the adjoining parcel at 3806 M.L.K. Jr. Way (also addressed as 648 W. MacArthur Boulevard). None of the UST sites poses an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Above-Ground Storage Tanks (AST-CRST, City-AST, County-AST): Distance Searched – 0.25 mile

The Property and adjoining parcels are not listed in a database searched by ERS as having above-ground storage tanks (ASTs) used for storing hazardous substances. Water tanks are excluded. The nearest listed AST site is CHP (3601 Telegraph Avenue), which is located 0.25 mile southeast of the Property. In view of its distance this AST site does not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Dry Cleaners (Cleaners-CA, DryCleaners-CA, Hist-AFS-US, Hist-AFS2-US): Distance Searched–0.25 mile

Hist-AFS-US and Hist-AFS2-US are databases created by U.S. EPA of air pollutant emissions from regulated sources including dry cleaners and other emitters. According to ERS's search of these databases, dry cleaning sites located within a 0.25-mile radius of the Property are not listed.

The Cleaners-CA database is a list of dry cleaners maintained by California DTSC. According to ERS's search of this database, three (3) separate dry cleaning sites are located within 0.25 mile from the Property. These include:

- Uniclean (705 37th Street), 0.13 mile southwest of the Property;
- R & R Wash /G J Whirl & Twirl Laundromat (3838 West Street), 0.13 mile west of the Property; and,
- Yupi Building Services (3715 West Street), 0.16 mile west.

The DryCleaners-CA database of dry cleaning facilities also was searched by ERS, which identifies one dry cleaning site which is located at the same address as above, 3838 West Street. G J Whirl & Twirl Laundromat is the name of the listed business. Harris Dry Cleaners is listed in California's Response database. Harris Dry Cleaners (2801 M.L.K. Jr. Way) is located 0.67 mile south of the Property.

In view of their distances from the Property, or locations west, southwest, or south of the Property, the listed dry cleaning sites do not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Historical Dry Cleaners (Hist-Cleaners): Distance Searched - 0.25 mile

The historical dry cleaners database is a proprietary database created by ERS. Hist-Cleaners is a created database built by ERS using historical information sources such as telephone directories or Polk's Reverse Directories, for example. Dry cleaning facilities listed on created databases may include some facilities which did not perform dry cleaning or did not perform dry cleaning on the premises.

Two (2) sites identified by ERS as potential historical dry cleaning sites are Yupi Building Services (3715 West Street) and Uniclean (705 37th Street). In view of their locations 0.13-0.16 mile west or southwest of the Property, neither poses an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Historical Auto Dealers and Auto Repair (Hist-AutoDealers, Hist-AutoRepair): Distance Searched–0.25 mile

The historical auto repair and auto dealers databases are proprietary databases created by ERS from sources such as Polk's Reverse Directories. Six (6) Auto Dealer or Auto Repair sites identified by ERS potentially include some sites that have also been used in the past for fuel service.

Auto Dealer or Auto Repair sites located nearest the Property include:

- Quality Tune Up /U-Haul (640 W. MacArthur Blvd.), 0.05 mile southeast of the Property
- It's About Cars / Discount Auto (622 W. MacArthur Blvd.), 0.06 mile east of the Property

- Insta Lube (736 W. MacArthur Blvd.), 0.11 mile west of the Property
- Yem Honda (3909 M.L.K. Jr. Way), 0.12 mile north of the Property
- Big O Tires (810 W. MacArthur Blvd.) 0.15 mile west
- Al Manning Body Shop (4101 M.L.K. Jr. Way), 0.23 mile north

None of the above-listed sites is a LUST site with open-case or closed-case status. Quality Tune-Up #35 (640 W. MacArthur Boulevard), Insta Lube (736 W. MacArthur Boulevard), and Big O Tire (810 W. MacArthur Boulevard), are also listed on the CalFID database for past motor fuel inventory. These three listed sites, therefore, had engaged in auto fuel storage in addition to tune-up and repair.

Border Zone or Hazardous Waste Property (Cal-BZ-HazWaste-CA): Distance Searched–0.5 mile

This database identifies parcels that went through the Border Zone Property or Hazardous Waste Property process of evaluation as reported by California Department of Toxic and Substance Control. Potential Border Zone properties are located within 2,000 feet of a significant disposal of hazardous waste; Hazardous Waste Property facilities/sites have a significant disposal of hazardous waste. According to ERS's search of the database, there is no border zone parcel located within 0.5 mile from the Property.

Hazardous Waste Sites Database: Distance Searched–0.25 mile

DTSC maintains databases of hazardous waste sites and site generating hazardous waste. The Hazardous Waste Tracking System is the name of the database for manifested waste shipments. The Property is not listed in the HWTS database. Independent search for sites listed on HWTS found several listings for waste generator sites located near the Property. [8]

Quality Tune-Up (640 W. MacArthur Blvd.) generated water with organic residues in the approximate amount of 1–6.5 tons per year during 1996-2000. It's About Cars (622 W. MacArthur Blvd.) generated approximately 0.1 tons of oil/water separator sludge which was shipped for disposal in 1997.

ARCO Products Co. (731 W. MacArthur Blvd.) generated water mixed with organic residues in the approximate amount of 0.04–1.26 tons per year during 1995-2001. K& H Gas City (731 W. MacArthur Blvd.) generated water mixed with organic residues in the approximate amount of 0.32 ton per year during 2008. BP West Coast Products (731 W. MacArthur Blvd.) generated water with organic residues in the approximate amount of 0.13 - 1.9 tons per year during 2002-2004. In 1995, Big O Tires (810 W. MacArthur Blvd.) manifested 0.08 ton of unspecified solvent mixture.

[8] California DSTSC HWTS, http://hwts.dtsc.ca.gov/report_search.cfm?id=5

Chart A
HWTS Waste Generation Database

EPA ID	GENERATOR SITE ADDRESS	GENERATOR NAME	YEAR
CAL000408081	3806 M.L.K. Jr. Way	HK Auto Care	NR
CAL000116066	622 W. MacArthur Blvd	IT'S ABOUT CARS	1997
CAL000278915	640 W. MacArthur Blvd	SIDE B CORP dba QUALITY TUNE-UP #35	NR
CAL000287650		LARRY LOPEZ dba QUALITY TUNE-UP #35	NR
CAL000329277		SIDE B CORP dba QUALITY TUNE-UP #35	NR
CAL000074673		QUALITY TUNE UP #35	'96-'00
CAL000334097		AS TUNE-UP SHOP	NR
CAL000344862		DISCOUNT SMOG CHECK CENTERS #5	NR
CAL000361616	657 W. MacArthur Blvd	ANGEL CASTILLEJOS	NR
CAL000048687	731 W. MacArthur Blvd	ARCO PRODUCTS COMPANY	'95-'01
CAL000244269		BP WEST COAST PRODUCTS	'02-'04
CAL000332355		K & H GAS CITY INC	'08
CAL000281500		MANUS GAS CITY	NR
CAL000336267		WESTCO GAS	NR
CAL000442252		WESTCO GAS	NR
CAX000048736		1X ARCO SERVICE STATION	NR
CAL000171415	736 W. MacArthur Blvd	INSTA LUBE	NR
CAL000045783		INSTA LUBE	NR
CAL000366948	801 W. MacArthur Blvd	AUTOMECHS	NR
CAL921533467		TUNE DYNAMICS	NR
CAL000075868	810 W. MacArthur Blvd	BIG O TIRE	1995
CAL000160651		BIG O TIRE	'98,'03
CAL912524974		BIG O TIRE	NR
SOURCE: California DTSC HWTS, http://hwts.dtsc.ca.gov/report_search.cfm?id=5			

Of these sites, only 657 W. MacArthur Boulevard adjoins the Property. For 657 W. MacArthur Boulevard, a record of waste manifesting or shipment was not found.

Proposition 65 (Hist-Prop65-CA): Distance Searched–0.25 mile

The Proposition 65 database is from the State Water Resources Control Board's Proposition 65 database. The database contains information based on notices to facilities about any hazardous materials, hazardous waste, or other release that could impact drinking water. A Proposition 65 site was not identified as being located within 0.25 mile of the Property.

EnviroStor Voluntary Clean-Up Program (Cal-VCP-Active, Cal-VCP-NFA, Cal-VCP-Other): Distance Searched– 0.5 mile

DTSC's Site Mitigation and Brownfields Reuse Program EnviroStor database identifies sites having known hazardous materials or waste releases or reasons for further investigation. Some of the sites having known contamination have been approved for reuse with recorded deed restrictions to prevent inappropriate land uses for which DTSC provides oversight in a remedial response. In the Voluntary Clean-up Program (VCP), project proponents have requested that DTSC oversee evaluations, investigations, and/or clean-up activities and have agreed to reimburse for DTSC's staff labor costs. According to ERS's search of the VCP database there is no VCP site located within 0.5 mile of the Property.

EnviroStor School Site Evaluation (Cal-School-Active, Cal-School-NFA, Cal-School-Other): Distance Searched– 0.5 mile

DTSC's School Site Evaluation database identifies proposed and existing school sites which are being evaluated or else have been evaluated by DTSC for possible contamination issues. According to ERS's search of the School Site Evaluation database there is no Cal-School Site Evaluation site located within 0.5 mile of the Property.

5.3 Regulatory Status

The listed Leaking Underground Storage Tank (LUST) sites are within the current local jurisdiction of the Alameda County Department of Environmental Health Local Oversight Program (ACDEH-LOP) and/or Regional Water Quality Control Board, San Francisco Bay Region (RWQCB). RWQCB also oversees SLIC investigations and clean-ups. California Department of Toxic Substances Control (DTSC) oversees school site evaluations and shares oversight of Voluntary Clean-up Program (VCP) and major cases with RWQCB.

MacArthur Transit Village—BART Parcels B1 and B2
The MacArthur Transit Village site is located 880-1,230 feet east or northeast of the Property on the east side of Highway 24. In view of its location and prevailing slope of the groundwater potentiometric surface down toward the west, west-southwest, and southwest, MacArthur Transit Village is located upgradient of the Property. Closure of the case, which involved remedial excavation and disposal of petroleum-affected soil, was requested and closure is pending agency action (Langan, 2018).

The main excavation, which is the area labeled "Area 1" in Figure 6, was performed during November 2011–April 2012 to remove petroleum-affected soils. The main excavation was conducted to a depth of approximately 10 fbgs, which is 2 feet below the shallow groundwater elevation. Approximately 12,500 tons of petroleum-affected soil from the main excavation were off-hauled for landfill disposal. A total of 3,555 tons of clean imported fill material was used to backfill the remedial excavation in Area 1 (Iris, 2913).

On the northern end of the Property, shallow excavation, which is the area labeled as Area 2 in Figure 6, was performed during March–May 2012 to remove additional petroleum-affected soils. The depth of excavation varied in the range 3 fbgs to 5 fbgs. Approximately 3,300 tons of soil were excavated, and the excavation was backfilled with clean imported fill material (Iris, 2013).

In September 2012, stained and odorous soils were encountered during excavation of a grade beam within the footprint of the future BART parking garage at the southwest corner of the site (see Figure 6, "BART parking garage" and Area 5). In Area 5, petroleum hydrocarbon-affected soils were observed in the interval 5-7 feet below the basement floor elevation of the garage. Approximately 480 tons of TPH-affected soil were excavated from the parkng garage site and were characterized for offsite disposal at Keller Canyon Landfill. Groundwater extracted from the parking garage construction site was processed through an on-site treatment system consisting of a 21,000-gallon settling tank, particulate filtration unit, and activated carbon unit. Treated groundwater was discharged to the sanitary sewer system under EBMUD Special Discharge Permit No. 50654672 and a City of Oakland Temporary Discharge Permit (Iris, 2013).

Construction of the MacArthur Transit Village on the 1.2-acre site (BART Parcels B1 and B2) was performed under an approved Soil Management Plan. Construction during June 6-August 12, 2018 included excavation for a mat foundation and utilities and handling of non-hazardous waste soil. Artificial fill on Parcels B1 and B2 was 1.5-2 feet in thickness. Approximately 7,300 tons of waste soil were loaded and transported for disposal at Altamont Landfill in Livermore (Langan, 2018).

MacArthur Transit Village—Parcel C1

Parcel C1 is located along the south side of 39th Street between Turquoise Way and Telegraph Avenue (see Figure 6). The RWQCB has approved soil vapor mitigation measures and a vapor extraction pilot test (RWQCB, 2018). As of May 9, 2018, Parcel C1 was being developed with a multi-story residential building. A parking garage level covers approximately one-half of Parcel C1.

Soil vapor sampling performed in July 2017 found concentrations of methane on the south central portion of Parcel C1 and found concentrations of TPH-gasoline, TPH-Stoddard, and benzene along the eastern property line of Parcel C1. Concentrations in the soil vapor samples collected from soil vapor probes exceeded RWQCB's Table SG-1 ESLs for unrestricted residential land use (Ninyo & Moore, 2017). Maximum concentrations were reported as follow:

Methane: 50% (Probe NMSVC-7)
TPH-Stoddard: 240,000 $\mu g/m^3$ (Probe NMSVC-3) compared to the Table SG-1 ESL, 11,000 $\mu g/m^3$

TPH-gasoline: 6,100,000 µg/m^3 (Probe NMSVC-3) compared to the Table SG-1 ESL, 20,000 µg/m^3
Benzene: 1,100 µg/m^3 (Probe NMSVC-3) compared to the Table SG-1 ESL, 3.2 µg/m^3

MacArthur Transit Village—Parcel A and Parcel C1
Parcel A is located along 40th Street west of Telegraph Avenue. Parcel C1 is located along the south side of 39th Street between Turquoise Way and Telegraph Avenue (see Figure 6).

Soil vapor sampling performed in December 2015 found water in all four of the soil vapor probes located on Parcel C1 and in one of three soil vapor probes on Parcel A. Vapor sampling could be performed only at probes NMSV-5 and NMSV-6 on Parcel A.

The laboratory reported concentrations of TPH-gasoline, benzene, carbon tetrachloride perchloroethylene (PCE), and trichloroethylene in the soil vapor samples collected from Probe NMSV-5 and reported concentrations of TPH-gasoline and benzene in the soil vapor samples collected from Probe NMSV-6. Concentrations in the samples collected from soil vapor probes exceeded RWQCB's Table SG-1 ESLs (Ninyo & Moore, 2016). Maximum concentrations were reported as follow:

TPH-gasoline: 17,000 µg/m^3 (Probe NMSVC-6)
Benzene: 46 µg/m^3 (Probe NMSVC-5) compared to the Table SG-1 ESL, 3.2 µg/m^3
Carbon tetrachloride: 60 µg/m^3 (Probe NMSVC-5) compared to the Table SG-1 ESL, 2.2 µg/m^3
PCE: 24,000 µg/m^3 (Probe NMSVC-5) compared to the Table SG-1 ESL, 15 µg/m^3
TCE: 160 µg/m^3 (Probe NMSVC-5) compared to the Table SG-1 ESL, 16 µg/m^3

3884 Martin Luther King Jr. Way Street
The Grove Street Wash Rack site (3884 Martin Luther King Jr. Way) is located in the southeastern corner of 39th Street and M.L.K. Jr. Way. The location is approximately 600 feet north-northeast from the Property. The site previously was a D.R. Hart gas station and Luckett's Phillips 66 gas station in the during 1928–1969 and H & L Luckett vehicle repair facility during 1995–2004. Underground storage tanks were removed in 1995. The LUST case was recently closed by ACDEH-LOP on October 24, 2018 ACDEH-LOP, 2018).

A 500-gallon gasoline underground storage tank (UST) and two (2) 650 gallon gasoline USTs were removed on January 5, 1995. Confirmation soil samples collected from 7.5–9 feet below ground surface (fbgs) beneath each UST detected up to 140 milligrams per kilogram (mg/Kg) Total Petroleum Hydrocarbons as gasoline (TPHg), 0.61 mg/Kg benzene 0.96 mg/Kg toluene, 1.3 mg/Kg ethylbenzene, and 9.7 mg/Kg xylenes. In 2004 and

2006, soil and groundwater investigations were performed which detected elevated concentrations of TPHg and BTEX in soil and groundwater. In November 2006, a CAP was submitted and approved but it was not implemented.

Wells MW-2, MW-3, and MW-7 are located along the southern perimeter of 3884 M.L.K. and, therefore, are the groundwater monitoring wells located closest to the Property. Concentrations of gasoline, benzene, ethylbenzene and toluene were below reporting limits in groundwater samples collected from these perimeter wells except for well MW-2 which had 1,500 μg/L as benzene, 52 μg/L as ethylbenzene, 35 μg/L as toluene, and 42 μg/L as xylenes (ERM, 2017a).

Monitoring wells MW-2, MW-3, and MW-7 and five additional wells, both on-and off-site, were installed in 2013-2014. The depth to the shallow groundwater surface is generally in the range from 11–15 feet below grade surface and wells are screened in the intervals 11-18, 11-19, 12-19, 13-20 or 15-21 fbgs. The prevailing slope of the shallow groundwater surface is slope down toward the west or west-southwest (ERM, 2017a, 2017b, 2015).

In view of the location of the Property, 600 foot separation distance from the Property, and prevailing direction of groundwater flow toward the west-southwest, and in view of the low measured concentrations of TPHg and volatile aromatic hydrocarbons in groundwater, the Grove Street Wash Rack site does not pose an obvious likelihood or an apparent risk of environmental impairment of soil, soil gas, or groundwater for the owner of the Property.

5.4 Other

The Lucky Auto Body site consists of two parcels located at 3884 and 3860 M.L.K. Jr. Way and therefore contains the Grove Street Wash Rack. The combined site was investigated by URS on behalf of California DTSC in 2004. Work included soil borings and collected of grab groundwater samples. Locations of G13, G17 and G19 for groundwater sampling were located on 3860 M.L.K. Jr. Way south of 3884 3860 M.L.K. Jr. Way. Therefore, these sample locations were located G13, G17 and G19 toward the Property.

Concentrations of TPH gasoline-range were not detected at or above reporting limits in samples G13, G17, and G19. Benzene and toluene concentrations where reported in samples G13, G17 and G19 were less than 0.7 μg/L (URS, 2004). Based upon results of grab groundwater sampling and testing, the combined site does not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

6.0 RECOGNIZED ENVIRONMENTAL CONDITIONS

Hazardous materials or petroleum products were not noted on the Property which is currently vacant or used for parking.

6.1 Use of Hazardous Substances

Current or Recent Uses
Paint spray booths, above-ground tanks and parts cleaners were not seen during the current reconnaissance in August 2019. On August 9, 2019, the premises was observed by the assessor to be vacant or used for parking. No quantity of hazardous material or petroleum product was observe in storage on the Property. The environmental assessor, therefore, considers that current or recent uses of hazardous substances does not constitute an REC for the Property.

Historical Uses
Before 2006, the Property had been used historically for a stereo store, drug store, hair salon, barber shop, apartments and single-family house (see Appendix C). Past stereo, drug store and hair styling business uses of the Property are not commonly associated with the use of hazardous substances. The environmental assessor, therefore, considers that past use of hazardous substances is unlikely and does not constitute an REC for the Property.

6.2 Solid and Liquid Waste Handling

Hazardous Waste Solids
The Property is not reported to be a small- or large-quantity generator of RCRA-hazardous waste (ERS, 2019; DTSC, 2019). The non-hazardous solid wastes or recyclable materials likely to have been generated at the Property by stores and residences include spray containers, paper, cardboard and card stock, paint, and other domestic solid waste. The above kinds of waste and disposal do not constitute RECs for the Property. On August 9, 2019, one (1) small soil stockpile was observed in the central area of 3823 M.L.K. Jr. Way, which is used for parking. This soil stockpile is shown in Appendix A, Plate 10.

Hazardous Waste Liquids
Hazardous waste liquids are not generated by the Property. DTSC's Hazardous Waste Tracking System (HWTS) was checked, and the Property was not listed. HWTS indicates hazardous waste liquids were shipped from the following sites:

3806 Martin Luther King Jr. Way
622 W. MacArthur Boulevard
640 W. MacArthur Boulevard
657 W. MacArthur Boulevard
731 W. MacArthur Boulevard
810 W. MacArthur Boulevard

In the past, liquid wastes shipped from the above-listed neighbors were varied and included waste oil, water with organic residues, oil/water separator sludge, and unspecified solvent. There were no records of shipments of liquid waste from the

Property. There were no apparent signs on the Property of on-site plating or degreasing, drum rings, surface impoundments of liquids, or above-ground or underground storage tanks.

There has been no apparent commercial-scale agriculture on the Property. Sanitary wastewater is conveyed through the municipal collection system to EBMUD's wastewater treatment plant. Storm water runoff from the lot and runs overland to W. MacArthur Boulevard and M.L.K. Jr. Way.

6.3 On-Site and Off-Site Contamination

On-Site Sources

Evidence of on-site contamination on the Property was not observed during the reconnaissance performed on August 9, 2019. Based upon the reconnaissance and review of historical information, weathering of lead-based paint and past applications of lead-based paint or pest control chemicals are potential source of lead or organo-chlorine pesticide (OCP) residues in the near-surface soil; therefore, several soil samples were collected and were tested by a certified environmental laboratory for lead and OCPs. Test results are presented in Tables 1, 2, and 3, and also are shown in Figure 4. The available test results indicate that elevated lead in shallow soil will require special handling and off-site landfill disposal.

Off-Site Sources

HK Auto Auto Care does not have a record of hazardous waste generation in DTSC's HWTS database. One past dry cleaner adjoined the northern property line. The adjoining parcel is 3833-35 Grove Street (M.L.K. Jr. Way) which has been used by Minute Kleen Polish Manufacturing and A.A. Harris cleaners & presser (1928), Jacob Pearlman cleaners & presser (1935), and U C Cleaners (1969). There is no detailed information about these past businesses other than their names, addresses, and approximate periods of occupancy. The older cleaners & pressers were present on the adjoining parcel in the timeframe 1911-1935. U C Cleaners was present on the adjoining parcel less than approximately 3 years, during 1967-1969.

6.4 Aboveground/Underground Storage Tanks (ASTs/USTs)

Evidence of past or present ASTs or USTs was not observed at the Property during the assessor's recent reconnaissance of the Property on August 9, 2019. Fuel islands or above-ground tanks on the Property were not apparent in the Sanborn maps (Appendix D) or aerial photographs (Appendix E) viewed for this assessment. Several former gas stations were located in the area, including two stations located on adjoining off-site parcels south of the Property and two other former gas stations located north of the Property (see Figure 3 and Appendix E). MacArthur Transit Village, which is located 750 feet east to 1,200 feet northeast of the Property, had TPH-affected soil.

In view of their locations or distances, and the direction of groundwater flow toward the west-southwest, west, or northwest, the former service stations and MacArthur Transit Village do not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

6.5 Polychlorinated Biphenyls (PCBs)

Pole-mounted transformers were not noted on the Property or around the Property's perimeter. Certain older light ballasts do generally contain PCBs and these vintage light fixtures with potential PCB-containing ballasts, if present, were not observed because building interiors were not observed. If light ballasts not having the non-PCB label are encountered in the subject buildings, they should be safely removed and containerized for proper disposal.

6.6 Asbestos-Containing Materials (ACMs)

ACMs were not observed due to lack of access into the buildings. Small areas of ACMs the form of vinyl asbestos tiles (VAT), in general, could be expected in the former stores and in the kitchen or bathrooms of the former residences. VAT in floor coverings or in the roofing felt or is categorized herein as a business environmental risk but not an REC. Survey of potential asbestos-containing materials by means of sampling and laboratory testing is not within the scope of ASTM E 1527-13 or of this particular assignment.

The general regulatory framework addresses demolition/renovation, asbestos waste disposal, and worker safety. The regulations are contained in the California Code of Regulations, Title 8, Section 1529, Construction Safety Orders, and also in local regulations of the Bay Area Air Quality Management District (BAAQMD). Building demolition or partial demolition "gutting" generally requires asbestos survey and notification of the BAAQMD to obtain a J-number and avoid potential release of asbestos fibers during demolition. These notices are routine and removal of small quantities of ACMs before demolition is normal practice which is not an REC for the prospective buyer or owner of the Property.

6.7 Lead-Based Paint and Lead Solder

In view of the pre-1911 year of construction of the present and past buildings on the Property, lead-based paint was likely on painted woodwork, window sashes, sills, door thresholds, and exterior surfaces. Lead-affected soil caused by painting drips or weathering are likely to be encountered in any exposed soil areas around the drip lines of the present and past buildings. Lead-affected here means above background concentration or above 80 mg/Kg which is the RWQCB's 2019 Environmental Screening Level (ESL) and DTSC's Screening Level (SL).

Lead levels in near-surface soil were assessed by means of sampling and laboratory testing. Results are presented in Tables 1 and 2 and are shown in Figure 4. Levels in soil at 0–6 inch depth around the building edges and along the western fence line generally exceed the RWQCB's ESL and DTSC's SL for unrestricted residential land use (80 mg/Kg). Lead levels in near-surface soil are elevated including lead levels in near-surface soil on the undeveloped parcels APN 012-964-004, 012-964-005, and 012-964-006. This should not be a surprise in view of the former buildings on these parcels and tendency for lead residues to remain in the near-surface soil.

Surveys of potential lead-based paint and lead in drinking water are not within the scope of ASTM E 1527-13 or of this particular assignment. Lead survey is not required by local, state or federal law, except in the context of demolition or renovation where determination of lead hazard may be necessary for worker protection. Cal/OSHA has written Construction Safety Orders, LEAD, Section 1532.1, amended May 6, 2014, codified in Title 8, California Code of Regulations. When originally effective (November 4, 1993), this standard was identical to the federal standard, 29 CFR 1926.62. California now has some additional revisions, which are no less stringent than their federal counterparts. For the purposes of Cal/OSHA's Construction Safety Orders, 0.06 percent lead dry weight (600 ppm) demonstrates the presence of lead surface coatings or material that constitute a health hazard to employees engaged in lead-related construction work.

6.8 Radon

In thirty-two (32) tests conducted in Zip Code areas 94608 and 94609, of which the Property is a part, five of the tests equaled or exceeded 4 pCi/L (California DPH, 2016). Based upon California EPA's radon survey of the state, therefore, the Property is not expected to be in an area having airborne or soil gas radon concentrations above the standard 4 pCi/L. Holocene alluvial fan deposits mapped in the area, including the Property, are not prone to have radon levels at or above 4 pCi/L (Figure 5). Radon is not, therefore, an expected or obvious REC for the Property.

7.0 CONCLUSIONS

The environmental assessor has performed a Phase I Environmental Site Assessment, in general conformance with the scope and limitations of ASTM Standard Practice E 1527-13, for 3801-07, 3813-3819, 3823, and 3829 Martin Luther King Jr. Way, and 652-656 W. MacArthur Boulevard in Oakland, California, the Property. Any exception to, or deletions from, the Standard Practice are described in Section 2.2 of this report. This assessment confirms presence of lead residues in near-surface soil on the Property.

Based on the information obtained during this investigation by the environmental assessor, professional experience, and current regulatory guidelines, the following conditions have been identified:

- Existing soil lead levels that are elevated above the RWQCB-SFB environmental screening levels.
- Current presence of one (1) approximately 1-2 cubic yards of soil in a stockpile. (*NOTE: Debris, containers, discolored or malodorous soil were not observed.*).
- Historical presence of a cleaning works (possibly a dry cleaners) in 1911, 1928, 1935, and 1969, which was located on the adjoining parcel at 3833-3837 Grove Street (M.L. K Jr. Way).
- The adjoining auto repair use and a former gas station do not pose any obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

This assessment has revealed no other evidence of a Recognized Environmental Condition (REC), that is, a past release, a current release, or an imminent threatened release of a hazardous substance, petroleum product or waste, in connection with the Property.

Business Environmental Risk The contemplated use of the Property for a residential CN-3 use will entail demolition of the existing improvements. Demolition sometimes requires removal of regulated asbestos-containing materials (RACMs). Costs for removal of RACMs would depend on additional information such as, for example, the locations and quantities of confirmed RACMs. Estimates could be prepared by local qualified contractors based on results of an asbestos survey. However, in view of the expected small areas of vinyl asbestos floor tile (VAT) or sheet linoleum, the cost for removal of potential RACMs, if any, is expected to be low.

8.0 RECOMMENDATIONS

8.1 Corrective & Regulatory Compliance Actions

Corrective action tentatively is recommended to remove the stockpiled soil and in-place lead-affected soil for off-site disposal in appropriate landfills. Pre-demolition asbestos survey and removal of regulated ACMs (RACMs) is recommended to comply with local BAAQMD regulation.

8.2 Subsequent Phase II Study

Preliminary near-surface soil screening identified lead residues in shallow soil which substantially exceed the local applicable RWQCB-SFB 2019 Table S-1 ESL for unrestricted residential land use. A Soil Management Plan is recommended for proper handling and landfill disposal of soil excavated for the foundation and utilities.

Soil vapor screening along the northern Property line could rule out the possibility of significant concentrations of volatile organic compounds (VOCs) in soil vapor left from the past cleaning works on the adjoining parcel in the period 1967-1969, 1935, and 1928. PCE was used in dry cleaning after 1950. Before 1950, other cleaning solvents were used in the earlier period. Soil vapor screening would test for presence or absence of PCE, TCE, carbon tetrachloride, and benzene in soil vapor.

8.3 Projected Costs of Corrective & Regulatory Compliance Actions

Corrective action tentatively is recommended to remove lead-affected soil for off-site disposal in appropriate landfills. A cost at this time is based on assumption about the volume of soil to be disposed and waste soil classification. For 1,000 tons of soil (*e.g.*, 15,000 square feet of surface area and 1-foot excavation depth),—all classified as California, non-RCRA hazardous waste,—the cost for disposal at Class I Kettleman Hills Landfill is approximately $160,000 (complete with disposal fees, local and State BOE taxes). Additional costs would accrue for sampling, laboratory testing, loading and trucking.

Before demolition, an asbestos consultant should be retained. Building demolition in the jurisdiction of the City of Oakland and BAAQMD requires a pre-demolition asbestos survey to obtain a "J-Number" before the City of Oakland will issue a demolition or building permit. Cal/OSHA Construction Safety Orders will apply during demolition.

9.0 CERTIFICATION

This Phase I Environmental Site Assessment was performed by the undersigned, who is a qualified environmental professional, in general conformance with the scope and limitations of ASTM Practice E 1527-13, for the Property located at 3801-3807-382-3829 Martin Luther King Jr. Way, in Oakland, California. Any exceptions to, or deletions from, this practice are described in Section 2.2 of this report.

The undersigned assessor meets the qualifications requirements of the U.S. EPA All Appropriate Inquiries standard, Final Rule (40 CFR 312.10). All appropriate inquiries (AAI) were conducted in accordance with the requirements of the Final Rule (40 CFR 312.20 *et seq*.) except as noted in Section 2.2.

The prospective buyer, Resources for Community Development, its affiliates and lender, their successors or assigns, can rely upon the information presented herein as factual, true and accurate, and in general accordance with the ASTM E 1527-13 Standard for Practice.

Marc Papineau

Marc Papineau

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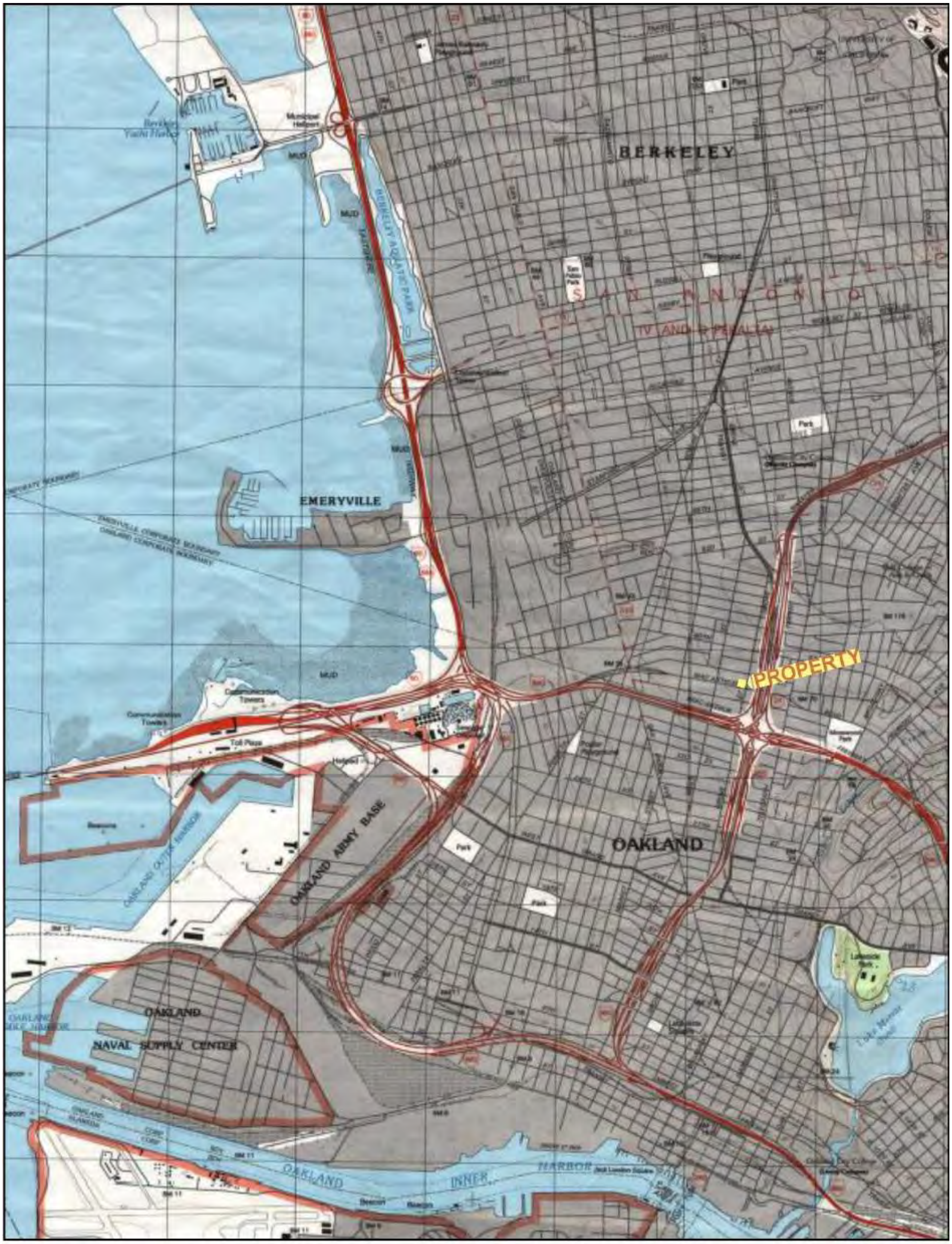

20 Years
1995-2015

environmental service
by Papineau

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Figure 1
Property Location Map
3801-07-23-29 M.L.K. Jr. Way
Oakland, California

20 Years

1995-2015

environmental service

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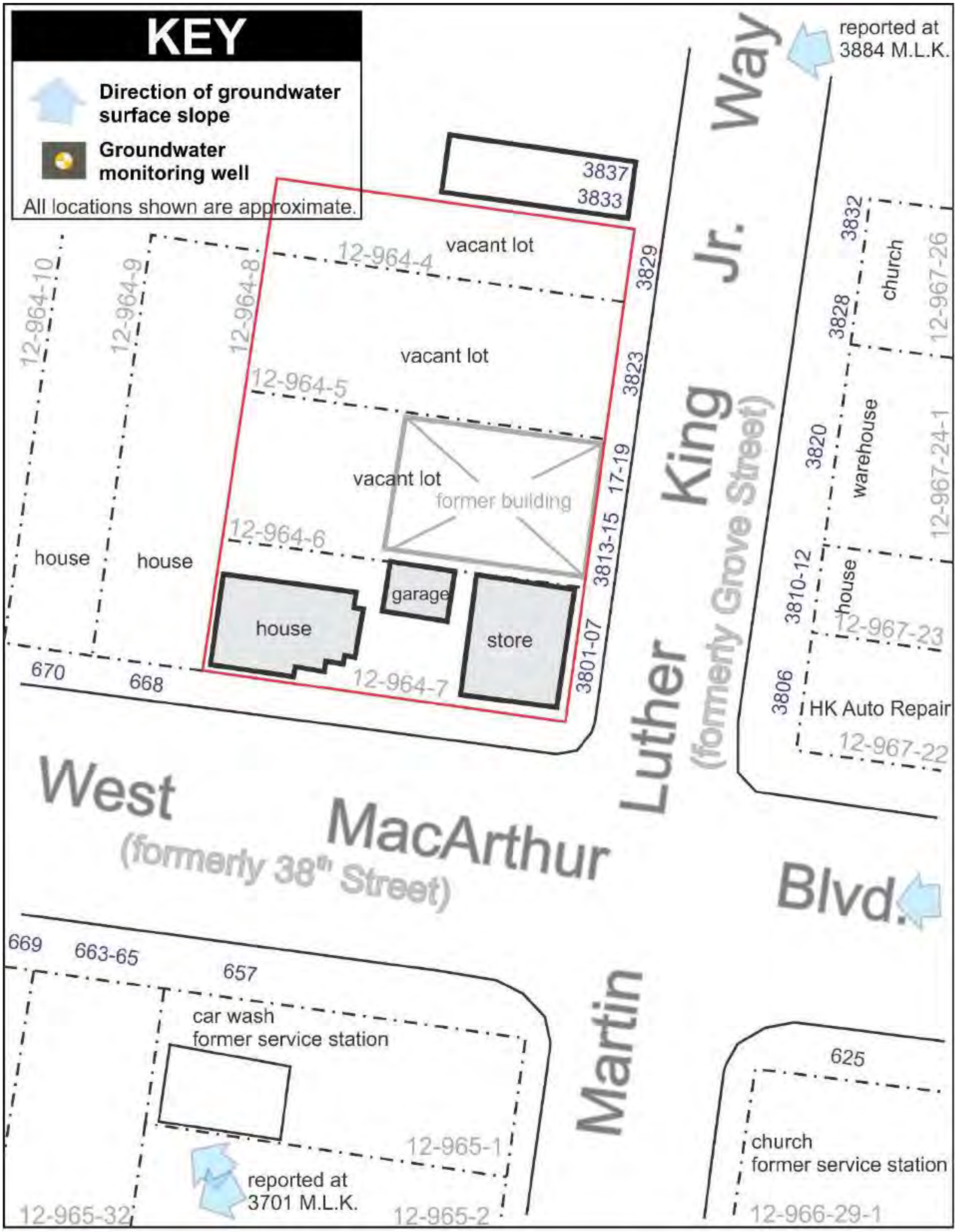
Figure 2

Neighborhood Map
M.L.K./MacArthur Blvd.
Oakland, California



20 Years 1995-2015

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Figure 3

Neighborhood Detail
3801-07-23-29 M.L.K. Jr. Way
Oakland, California

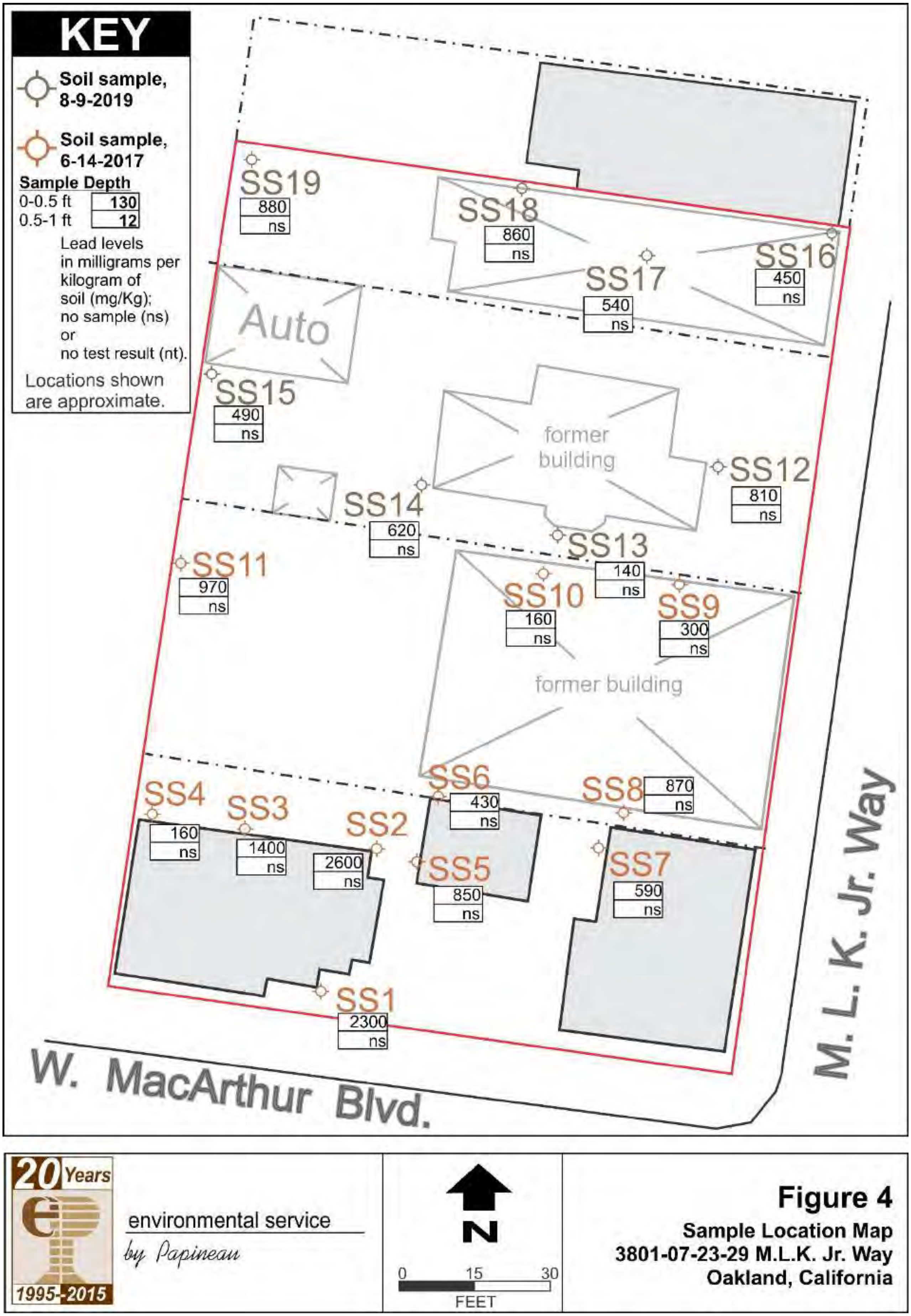
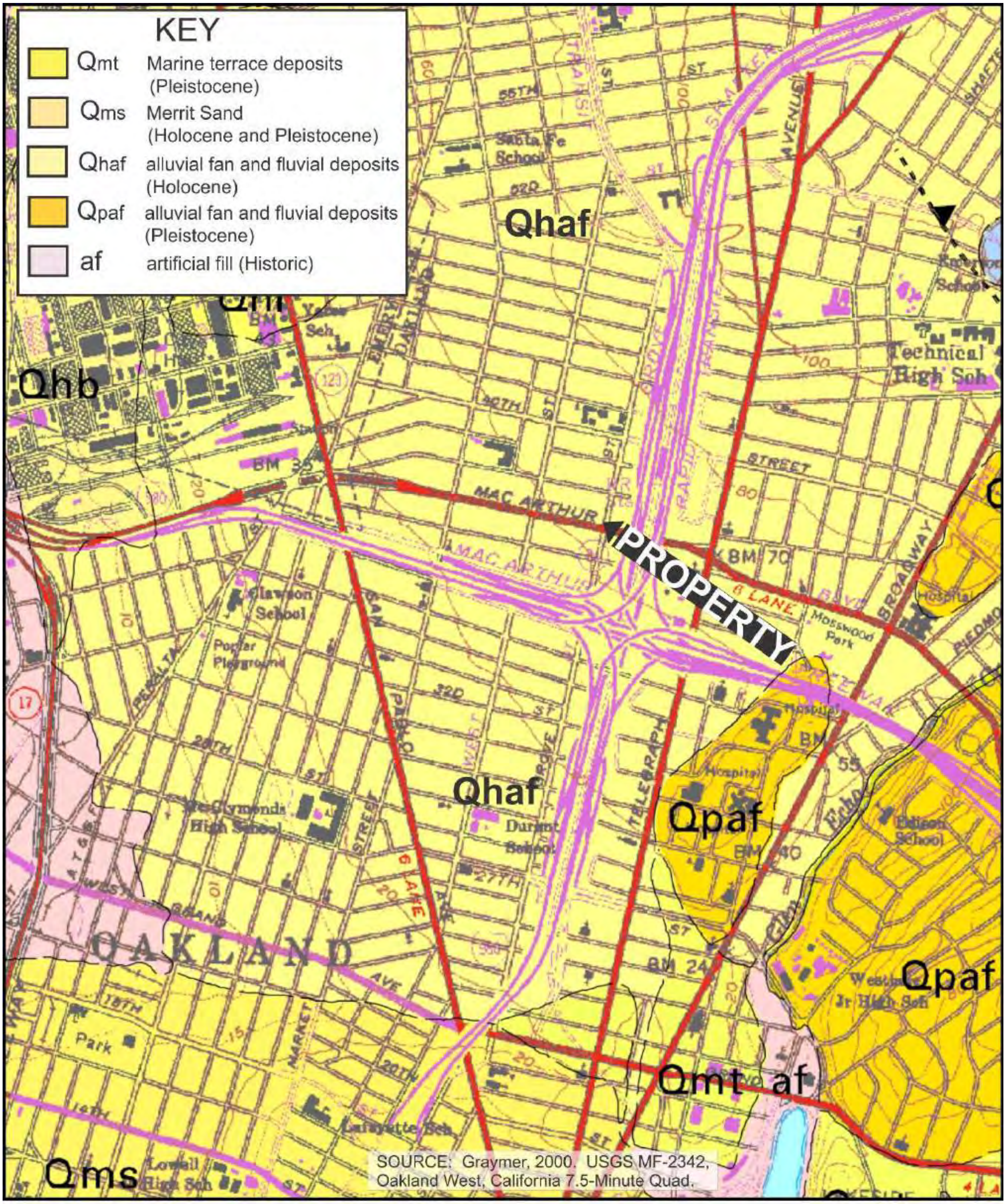


Figure 4

Sample Location Map
3801-07-23-29 M.L.K. Jr. Way
Oakland, California



20 Years 1995-2015

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Figure 5
Geologic Map
M.L.K. Jr. Way
& MacArthur Blvd.
Oakland, California

Figure 6
MacArthur Transit Village

areas excavated to remove contaminated soil

TABLE 1

Summary of Lead & Organo-Chlorine Pesticide Test Results
3801-07-23-29 M.L.K. Jr. Way in Oakland, California
Sampling Performed on June 14, 2017 (SS1-SS11) and August 9, 2019 (SS12-SS19)

Organo-Chlorine Pesticide	RWQCB 2019 Residential ESLs			Evaluation		
	Resident exposure (mg/Kg)	Construction Worker exposure (mg/Kg)	Leaching to groundwater (mg/Kg)	Number of "hits"	Maximum Level (mg/Kg)	Field Point/ Sample ID (see Figure 4)
SAMPLES SS1 THROUGH SS19						
Lead	80	160	---	19 / 19	**2600**	SS2
Technical chlordane	0.48	14	23	12 / 19	**1.2**	SS3
α-Chlordane	0.48	14	23	19 / 19	0.19	SS3
γ-Chlordane	0.48	14	23	19 / 19	0.16	SS3
DDD	2.7	81	65	16 / 19	0.091	SS3
DDE	1.8	57	29	19 / 19	0.048	SS3, SS15
DDT	1.9	57	5.6	19 / 19	0.84	SS3
Dieldrin	0.037	1.1	0.00046	17 / 19	**0.16**	SS10
Endrin	21	74	0.0076	2 / 19	0.0022	SS10
Heptachlor	0.12	3.7	44	3 / 19	0.0025	SS1
Heptachlor epoxide	0.062	1.9	0.00018	8 / 19	0.0063	SS3
Hexachlorobenzene	0.18	7.7	0.0008	3 / 19	0.00076J	SS10
Methoxychlor	350	1200	0.13	2 / 19	0.012	SS4
EVALUATION OF INITIAL RESULTS						
Do test results exceed residential ESL for direct exposure?						YES (a)
Do test results exceed construction worker ESL for direct exposure?						YES (b)
Do test results indicate a widespread or site-wide soil leaching issue?						NO

NOTES:

J Result is lower than the reporting limit but more than the Method Detection Limit (MDL). Numbers reported with a "J flag" or "P-flag" appended are best estimates.

a Lead concentration exceeds the residential direct exposure ESL in all 19 samples and also exceeds the construction worker ESL in 16 of 19 samples. Dieldrin concentration exceeds the residential direct exposure ESL in two of nineteen samples. Technical chlordane concentration exceeds the residential direct exposure ESL in only one of eleven samples (see Table 2).

b Lead concentration exceeds the construction worker ESL in 16 of 19 samples and equals the ESL in two samples.

SOURCES: McCampbell Analytical, Inc., June 23, 2017, amended July 13, 2017; McCampbell, August 20, 2019; RWQCB, 2019.

TABLE 2

Previous Soil Screening Test Results (mg/Kg)
3801-3807 M.L.K. Jr. Way in Oakland, California
Sampling Performed on June 14, 2017

Parameter	Field Point / Soil Sample ID						
	SS1-0.5	SS2-0.5	SS3-0.5	SS4-0.5	SS5-0.5	SS6-0.5	SS7-0.5
Sample depth (in)	0”–6”	0”–6”	0”–6”	0”–6”	0”–6”	0”–6”	0”–6”
Lead	**2300**	**2600**	**1400**	**160**	**850**	**430**	**590**
Technical chlordane	0.083	0.21	**1.2**	0.035	0.28	0.10	0.074
α-Chlordane	0.012	0.035	0.19	0.0051	0.046	0.019	0.0066
γ-Chlordane	0.0097	0.027	0.16	0.0029	0.041	0.018	0.0075
DDD	0.015	0.041	0.091	0.0013	0.028	0.0030	0.0019
DDE	0.014	0.016	0.048	0.0041	0.0092	0.010	0.0038
DDT	0.11	0.36	0.84	0.048	0.42	0.040	0.052
Dieldrin	0.014	0.019 P	0.031 P	**0.041**	0.010 P	0.016	0.0021
Endrin	ND	ND	ND	0.0020	ND	ND	ND
Heptachlor	0.0025	ND	0.0021	ND	0.00044	ND	ND
Heptachlor epoxide	0.00080 JP	0.0019 P	0.0063 P	ND	0.0022 P	ND	ND
Hexachlorobenzene	0.00036 J	ND	ND	ND	0.00040 J	ND	ND
Methoxychlor	ND	ND	ND	0.012	ND	ND	ND
SCREENING RESULTS							
Do test results exceed residential ESL for direct exposure (see ESLs below)?							YES
Do test results exceed construction worker ESL for direct exposure (see lead ESL below)?							YES
Do test results indicate a substantial soil leaching issue?							NO

Parameter	Field Point / Soil Sample ID				RWQCB 2019 ESLs (mg/Kg)		
	SS8-0.5	SS9-0.5	SS10-0.5	SS11-0.5	Resident exposure	Trench worker	Soil leaching
Sample depth (in)	0”–6”	0”–6”	0”–6”	0”–6”			
Lead	**870**	**300**	**160**	**970**	80	160	---
Technical chlordane	0.25	ND	0.10	0.051	0.48	14	23
α-Chlordane	0.040	0.0022	0.019	0.0049	0.48	14	23
γ-Chlordane	0.029	0.0014	0.0096	0.0041	0.48	14	23
DDD	0.011	ND	0.0011	0.00054 J	2.7	81	65
DDE	0.016	0.0024	0.020	0.0059	1.8	57	29
DDT	0.065	0.0073	0.040	0.039	1.9	57	5.6
Dieldrin	0.0091	0.015	**0.16**	0.0020	0.037	1.1	0.00046
Endrin	ND	ND	0.0022	ND	21	74	0.0076
Heptachlor	ND	ND	ND	ND	0.12	3.7	44
Heptachlor epoxide	0.0025	ND	0.0028	ND	0.062	1.9	0.00018
Hexachlorobenzene	ND	ND	0.00076 J	ND	0.18	7.7	0.0008
Methoxychlor	ND	ND	ND	0.0024	350	1200	0.13
SCREENING RESULTS							
Do test results exceed residential ESL for direct exposure (see ESLs above)?							YES
Do test results exceed construction worker ESL for direct exposure (see lead ESL above)?							YES
Do test results indicate a substantial soil leaching issue?							NO

NOTES:

1. Field Point locations are as shown in Figure 4.
2. Concentrations are in parts per million (mg/Kg).
3. “<” means concentration of chemical was less than the stated reporting limit.
4. “J” means an estimated concentration above detection limit but less than the reporting limit.

SOURCE: McCampbell Analytical Inc., June 23, 2017, amended July 13, 2017

TABLE 3

Additional Soil Screening Test Results (mg/Kg)
3823-3829 M.L.K. Jr. Way in Oakland, California
Sampling Performed on August 9, 2019

Parameter	Field Point / Soil Sample ID						
	SS12-0.5	SS13-0.5	SS14-0.5	SS15-0.5	SS16-0.5	SS17-0.5	SS18-0.5
Sample depth (in)	0”–6”	0”–6”	0”–6”	0”–6”	0”–6”	0”–6”	0”–6”
Lead	**810**	**140**	**620**	**490**	**450**	**540**	**860**
Technical chlordane	0.14	ND	ND	ND	0.12	ND	ND
α-Chlordane	0.026	0.00069	0.0016	0.0033	0.013	0.0027	0.0011
γ-Chlordane	0.014	0.00053P	0.0015	0.032	0.0090	0.0022	0.00099
DDD	ND	0.00057P	0.0019	0.0052	ND	0.00062P	0.00068P
DDE	0.011	0.0066	0.015	0.048	0.00068	0.0016	0.0015
DDT	0.019	0.017	0.020	0.065	0.0071	0.0025	0.011
Dieldrin	0.0016	0.0017	0.0008	0.0011	0.00025	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	0.0020	ND	ND	ND	0.00030	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND
SCREENING RESULTS							
Do test results exceed residential ESL for direct exposure (see ESLs below)?							YES
Do test results exceed construction worker ESL for direct exposure (see lead ESLs below)?							YES
Do test results indicate a substantial soil leaching issue?							NO

Parameter	Field Point / Soil Sample ID				RWQCB 2019 ESLs (mg/Kg)		
	SS19-0.5				Resident exposure	Trench worker	Soil leaching
Sample depth (in)	0”–6”						
Lead	**880**				80	160	---
Technical chlordane	ND				0.48	14	23
α-Chlordane	0.0069				0.48	14	23
γ-Chlordane	0.0051				0.48	14	23
DDD	0.0019P				2.7	81	65
DDE	0.033				1.8	57	29
DDT	0.051				1.9	57	5.6
Dieldrin	0.0010				0.037	1.1	0.00046
Endrin	ND				21	74	0.0076
Heptachlor	ND				0.12	3.7	44
Heptachlor epoxide	ND				0.062	1.9	0.00018
Hexachlorobenzene	ND				0.18	7.7	0.0008
Methoxychlor	ND				350	1200	0.13
SCREENING RESULTS							
Do test results exceed residential ESL for direct exposure (see ESLs above)?							YES
Do test results exceed construction worker ESL for direct exposure (see lead ESL above)?							YES
Do test results indicate a substantial soil leaching issue?							NO

NOTES:
1. Field Point locations are as shown in Figure 4.
2. Concentrations are in parts per million (mg/Kg).
3. “<” means concentration of chemical was less than the stated reporting limit.
4. “J” means an estimated concentration above detection limit but less than the reporting limit.

SOURCE: McCampbell Analytical Inc., August 20, 2019; RWQCB, 2019.

APPENDIX A
PHOTOGRAPHS

Plate 1. View Looking North across W. MacArthur Boulevard to the Property (3801-07-23-29 Martin Luther King Jr. Way), in Oakland, California (August 9, 2019)

Plate 2. View Looking Northwest across Martin Luther King Jr. Way to the Property, in Oakland, California (August 9, 2019)

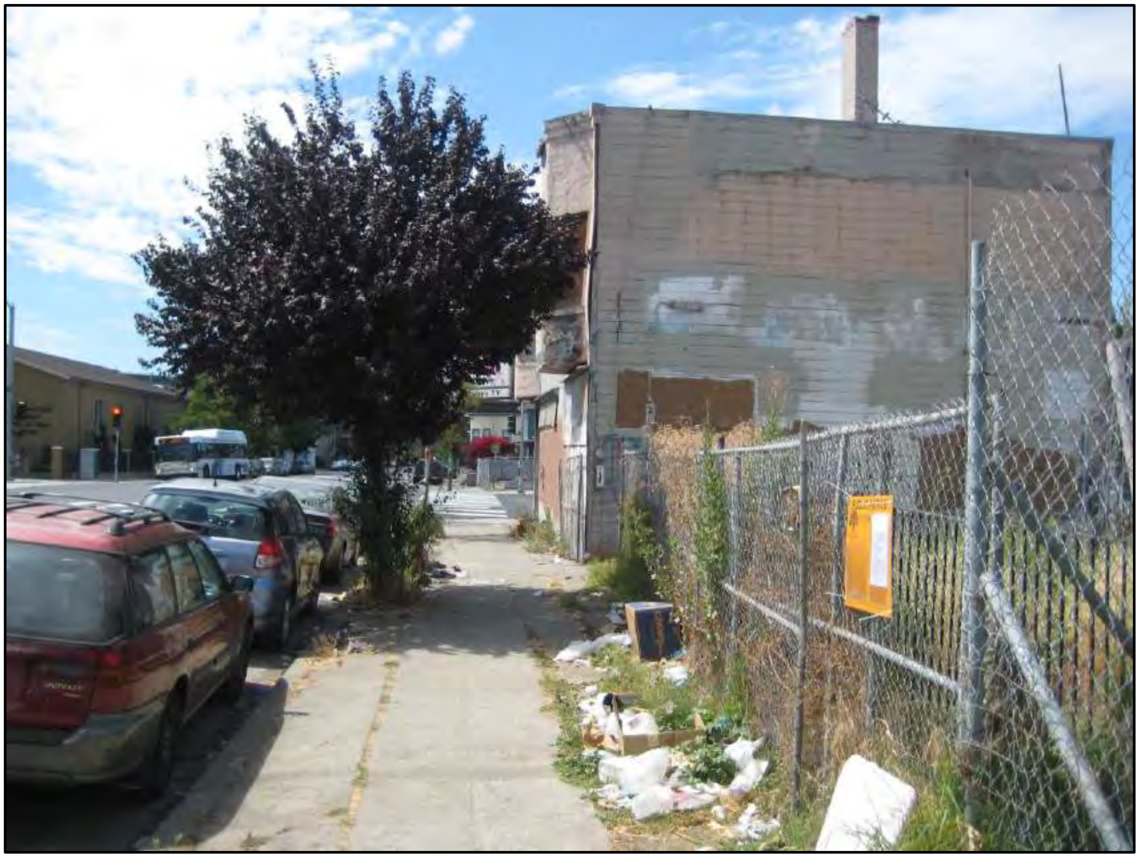

Plate 4. View Looking South along the Eastern Martin Luther King Jr. Way Frontage of the Property in Oakland, California (August 9, 2019)

Plate 3. View Looking Southwest across Martin Luther King Jr. Way to the Property (3801-07-23-29 Martin Luther King Jr. Way), Oakland, California (August 9, 2019)

Plate 5. **View Looking Southwest at the Property from the Adjoining 3833 Martin Luther King Jr. Way, in Oakland, California (August 9, 2019)**

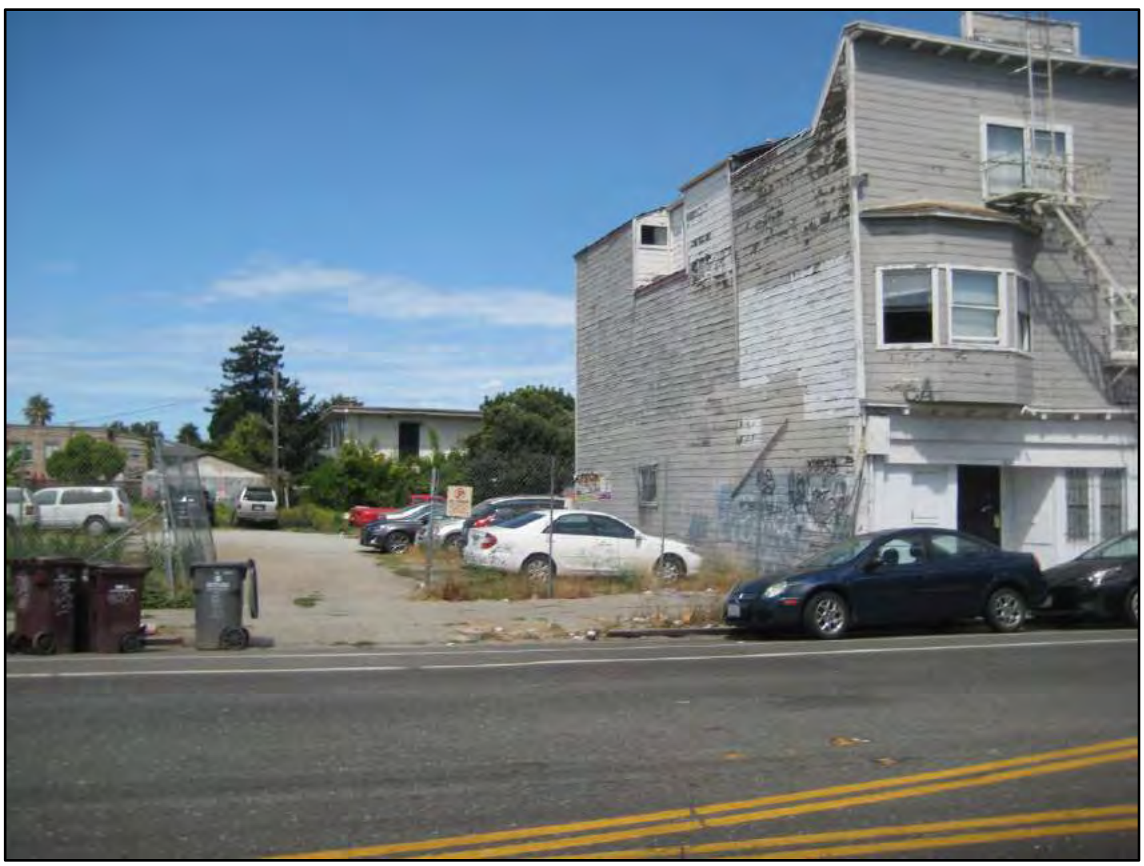

Plate 6. **View Looking West across the Northern End of the Property, 3801-07-23-29 Martin Luther King Jr. Way in Oakland, California (August 9, 2019)**

Plate 7. View Looking West across 3823 Martin Luther King Jr. Way in Oakland, California (August 9, 2019)

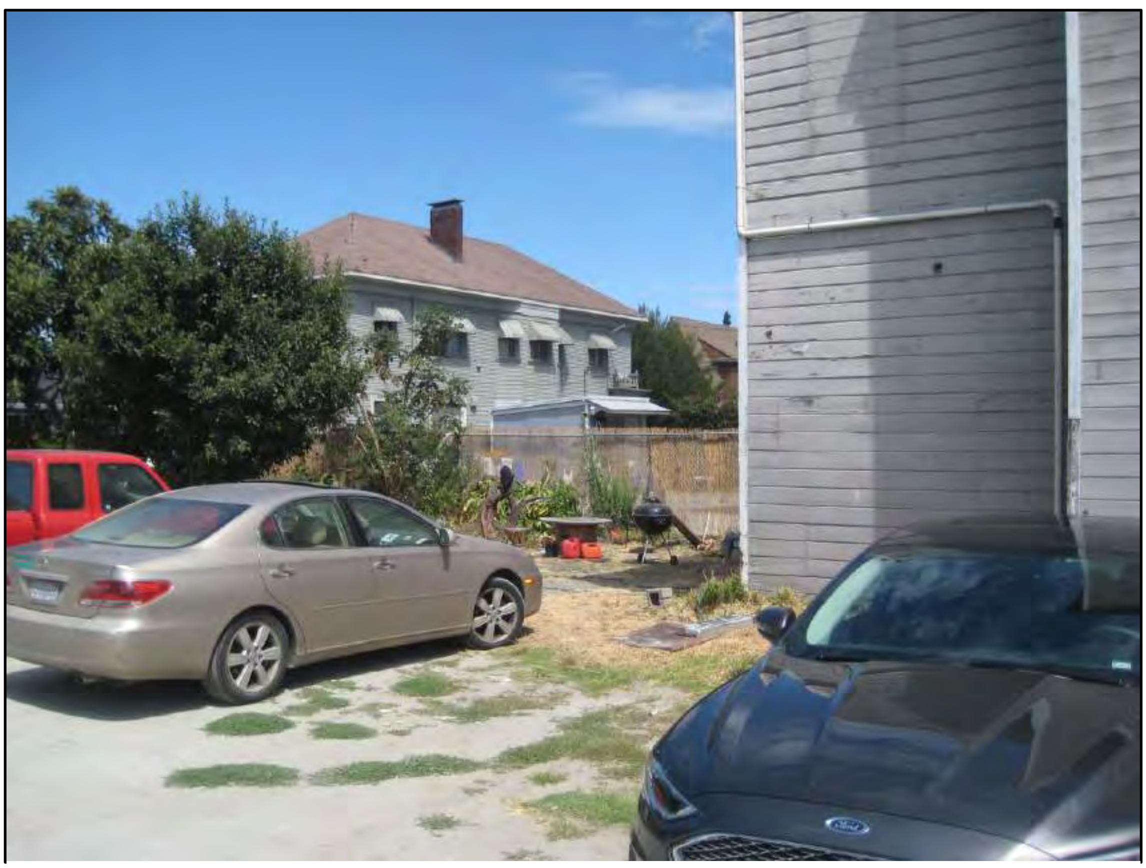

Plate 8. View Looking Northwest to Hip-Roofed House (663-665 Apgar Street) from the Northwestern Corner of the Property, 3829 Martin Luther King Jr. Way, in Oakland

Plate 9. View Looking Northwest across the Northwestern Corner of 3829 Martin Luther King Jr. Way in Oakland, California (August 9, 2019)

Plate 10. Close-Up View of Mounded Soil on 3823 Martin Luther King Jr. Way in Oakland, California (August 9, 2019)

APPENDIX B
DATABASE SEARCH REPORT

RecCheck

Report Results

The Standard for ASTM/AAI Radius Searches

(One Mile Environmental Records Search, Exceeds ASTM 1527/1528 and EPA All Appropriate Inquiry)

REPORT RESULTS

Site Location:

3801-3807-3823-3829 Martin Luther King Jr. Way
Oakland, CA 94609
(N 37-49-39, W 122-16-9) NAD83

Client:

environmental service

800-377-2430 www.RecCheck.com 2104712670

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EXECUTIVE SUMMARY

INFORMATION ON THE REQUESTED LOCATION

Site Address:	3801-3807-3823-3829 Martin Luther King Jr. Way Oakland, CA 94609
Client Project Name/Number:	MLK-MacArthur Parcels 2019-017
Coordinates:	N 37-49-39, W 122-16-9 (NAD 83) 37.827631, -122.269245
Date of Report	August 1, 2019
ERS Project Number:	2104712670
Subject Site Listed on the following lists:	Not Listed
Subject Site Listed as Map ID#:	N/A
USGS 7.5 Minute Quad Map:	Oakland West (2015-03-11)
Subject Site Located within a Potential Area of Concern:	No
Township, Section and Range:	Township: 01S Range: 04W Section: 23 Baseline: Mt. Diablo
Site Elevation: **(feet above or below (-) mean sea level)**	67
Flood Zone: **(FEMA Q3 Digital Data)**	Panel: 06001C0059G, Effective Date: 8/3/2009 Zone X - Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level.
Fire Insurance Map Coverage:	Coverage Likely Exists in Volume 1-1A of Oakland. Years: 1882, 1888, 1889, 1901, 1902, 1903, 1908, 1910, 1911, 1912, 1913, 1917, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1940, 1943, 1944, 1945, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1964, 1965, 1966, 1967, 1968, 1969, 1970. Sources: ERS; Oakland Public Library ; California State Univ., Northridge,Univ. of California, Berkeley photocopy ; California State Univ., Northridge,Univ. of California, Berkeley microform ; Huntington Library ; Oakland Public Library,Univ. of California, Berkeley ; ; California State Univ., Northridge ; Univ. of California, Berkeley ; California State Univ., Northridge,Univ. of California, Berkeley ; Formerly US Census Bureau, Jeffersonville, IN ; Oakland Public Library,California State Univ., Northridge

Radon Information:	EPA Radon Zone: 2 (Predicted avg for county: 2 to 4 pCi/L)For zip code 94609: Number of tests per zip code: 3 Number of tests where radon is > 4 pCi/L: 0 Percentage of test where radon is > 4 pCi/L: 0.00% Other Information: Not Reported
Search Radius Expansion Size: (In Miles)	0
Soil Type: (USDA Soil Survey Geographic Database) (SSURGO)	Urban land-Danville complex Map Unit Type: Complex Hydric: No Drainage Class: Well drained General Information: Fine, montmorillonitic, thermic Pachic Argixerolls
Zip Codes Searched for "Un-Mappable" Sites:	Not Researched
Occurrence Count:	212

SUMMARY OF OCCURRENCES

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
36 Maps: 1, 2, 4	BAY AQMD-BA-22703 BAY AREA RAPID TRANSIT	550 W MACARTHUR BLVD OAKLAND	Air-CA	Listed	0.19 E	5
43 Maps: 1, 2, 4	BAY AQMD-BA-22272 DAWIT AUTO BODY	4101 MARTIN LUTHR KNG WAY OAKLAND	Air-CA	Listed	0.23 N	13
48 Maps: 1, 2, 4	BAY AQMD-BA-12569 LITHOGRAPH REPRODUCTIONS INC	4120 MARTIN LUTHR KNG, JR WAY OAKLAND	Air-CA	Listed	0.24 N	14
52 Maps: 1, 4	T10000000406 MacArthur BART Transit Village	NONE 40TH STREET AND TELEGRAPH AVENUE (APNS 012-0969-053-03, 012-0968-055-01, 012-0967-049-01) Oakland	BF-MOA-CA	Listed	0.27 E	17
15 Maps: 1, 2, 4	60701 Lucky's Auto Body Shop	3860/3884 Martin Lurther King, Jr. Way Oakland	BF-US	Listed	0.09 NE	6
7 Maps: 1, 2, 3, 4	853256 OAKLAND F.D.	699 APGAR ST. OAKLAND	CHMIRS-CA	Listed	0.06 NW	1
22 Maps: 1, 2, 4	22827 Uni Clean	705 37th St Oakland	Cleaners-CA	Listed	0.13 SW	-8
23 Maps: 1, 2, 4	19882 R & R Wash	3838 West St Emeryville	Cleaners-CA	Listed	0.13 W	-3
23 Maps: 1, 2, 4	13439 G & J Whirl & Twirl Laundry Mt	3838 West St Emeryville	Cleaners-CA	Listed	0.13 W	-3
28 Maps: 1, 2, 4	24027 Yupi Building Svc	3715 West St Oakland	Cleaners-CA	Listed	0.16 W	-8
55 Maps: 1, 4	RO0003090-ALA Site Name Not Reported	0 TELEGRAPH AVE OAKLAND	County-LUST-CA	Listed	0.29 SE	-4

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
19 Maps: 1, 2, 4	RO0003064-ALA-C RD MINER COMPANY	750 37th ST OAKLAND	County-LUST-Closed-CA	Closed	0.12 SW	-8
23 Maps: 1, 2, 4	RO0000242-ALA-C NEIGHBORHOOD LAUNDROMAT	3838 WEST ST Oakland	County-LUST-Closed-CA	Closed	0.13 W	-3
24 Maps: 1, 2, 4	RO0000650-ALA-C BART PROPERTY	3924 MARTIN LUTHER KING JR WAY Oakland	County-LUST-Closed-CA	Closed	0.14 NE	8
51 Maps: 1, 4	RO0000264-ALA-C SHELL #12-9452	500 40TH ST Oakland	County-LUST-Closed-CA	Closed	0.27 NE	17
57 Maps: 1, 4	RO0000991-ALA-C SUMMIT MEDICAL CENTER	3420 TELEGRAPH AVE Oakland	County-LUST-Closed-CA	Closed	0.38 SE	-10
58 Maps: 1, 4	RO0000272-ALA-C WALTER BLUMERT COMPANY	490 43RD ST Oakland	County-LUST-Closed-CA	Closed	0.43 NE	29
60 Maps: 1, 4	RO0000270-ALA-C SIMPSON, RONN	489 43RD ST Oakland	County-LUST-Closed-CA	Closed	0.43 NE	28
61 Maps: 1, 4	RO0001041-ALA-C CITY OF OAKLAND FIRE STATION #5	934 34TH ST Oakland	County-LUST-Closed-CA	Closed	0.43 SW	-31
63 Maps: 1, 4	RO0000881-ALA-C KELLY AUTO PARTS	4400 TELEGRAPH AVE Oakland	County-LUST-Closed-CA	Closed	0.45 NE	32
64 Maps: 1, 4	RO0000985-ALA-C BLAZIC INDUSTRIAL BALANCING	1016 MACARTHUR BLVD Oakland	County-LUST-Closed-CA	Closed	0.47 W	-27
65 Maps: 1, 4	RO0000337-ALA-C CALIFORNIA LINEN SUPPLY CO	989 41ST ST Oakland	County-LUST-Closed-CA	Closed	0.47 NW	-12
66 Maps: 1, 4	RO0000006-ALA-C SHELL #13-9619	3420 SAN PABLO AVE Oakland	County-LUST-Closed-CA	Closed	0.48 W	-31
67 Maps: 1, 4	RO0002594-ALA-C SCOTT PROPERTY	1043 MACARTHUR BLVD EMERYVILLE	County-LUST-Closed-CA	Closed	0.48 W	-28

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
68 Maps: 1, 4	RO0000004-ALA-C THRIFTY OIL #49	3400 SAN PABLO AVE Oakland	County-LUST-Closed-CA	Closed	0.49 W	-32
69 Maps: 1, 4	RO0000186-ALA-C FIDELITY ROOF COMPANY	1075 40TH ST Oakland	County-LUST-Closed-CA	Closed	0.49 NW	-17
71 Maps: 1, 4	RO0000132-ALA-C ARCO	4401 MARKET ST Oakland	County-LUST-Closed-CA	Closed	0.49 NW	8
73 Maps: 1, 4	RO0001099-ALA-C LOOMIS ARMORED INC	936 BROCKHURST ST Oakland	County-LUST-Closed-CA	Closed	0.5 SW	-33
10 Maps: 1, 2, 4	RO0002910-ALA J&H AUTO REPAIR AND GAS STATION	3701 MARTIN LUTHER KING JR WAY OAKLAND	County-LUST-Open-CA	Open	0.08 S	-2
14 Maps: 1, 2, 4	RO0000027-ALA GROVE STREET WASH RACK	3884 MARTIN LUTHER KING JR WAY Oakland	County-LUST-Open-CA	Open	0.09 NE	6
19 Maps: 1, 2, 4	RO0003064-ALA RD MINER COMPANY	750 37th ST OAKLAND	County-LUST-Open-CA	Open	0.12 SW	-8
21 Maps: 1, 2, 4	RO0000076-ALA ARCO #04931	731 MACARTHUR BLVD Oakland	County-LUST-Open-CA	Open	0.12 W	-7
23 Maps: 1, 2, 4	RO0000242-ALA NEIGHBORHOOD LAUNDROMAT	3838 WEST ST Oakland	County-LUST-Open-CA	Open	0.13 W	-3
51 Maps: 1, 4	RO0000264-ALA SHELL #12-9452	500 40TH ST Oakland	County-LUST-Open-CA	Open	0.27 NE	17
53 Maps: 1, 4	RO0002438-ALA CHEVRON #9-2029	890 MACARTHUR BLVD OAKLAND	County-LUST-Open-CA	Open	0.27 W	-15
55 Maps: 1, 4	RO0003090-ALA CALTRANS TELEGRAPH & HWY 24	0 TELEGRAPH AVE OAKLAND	County-LUST-Open-CA	Open	0.29 SE	-4
56 Maps: 1, 4	RO0000490-ALA SAN FRANCISCO FRENCH BREAD	3924 MARKET ST Oakland	County-LUST-Open-CA	Open	0.31 NW	-7

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
59 Maps: 1, 4	RO0000251-ALA UNOCAL #3538	411 MACARTHUR BLVD Oakland	County-LUST-Open-CA	Open	0.43 SE	7
62 Maps: 1, 4	RO0003054-ALA TONG PROPERTY	3133 MARTIN LUTHER KING JR WAY OAKLAND	County-LUST-Open-CA	Open	0.45 S	-20
65 Maps: 1, 4	RO0000337-ALA CALIFORNIA LINEN SUPPLY CO	989 41ST ST Oakland	County-LUST-Open-CA	Open	0.47 NW	-12
66 Maps: 1, 4	RO0000006-ALA SHELL #13-9619	3420 SAN PABLO AVE Oakland	County-LUST-Open-CA	Open	0.48 W	-31
68 Maps: 1, 4	RO0000004-ALA THRIFTY OIL #49	3400 SAN PABLO AVE Oakland	County-LUST-Open-CA	Open	0.49 W	-32
69 Maps: 1, 4	RO0000186-ALA FIDELITY ROOF COMPANY	1075 40TH ST Oakland	County-LUST-Open-CA	Open	0.49 NW	-17
71 Maps: 1, 4	RO0000132-ALA ARCO	4401 MARKET ST Oakland	County-LUST-Open-CA	Open	0.49 NW	8
72 Maps: 1, 4	RO0000131-ALA FG GASOLINE	3314 SAN PABLO AVE Oakland	County-LUST-Open-CA	Open	0.49 SW	-33
21 Maps: 1, 2, 4	FA0321486-ALA MOBIL	731 W MacArthur Blvd Oakland	County-UST-CA	Listed	0.12 W	-7
3 Maps: 1, 2, 3, 4	436330 Hk auto care	3806 MARTIN LUTHER KING JR WAY OAKLAND	CRSP-CA	Listed	0.03 SE	1
10 Maps: 1, 2, 4	228758 J&H AUTO REPAIR AND GAS STATION	3701 MARTIN LUTHER KING JR WAY OAKLAND	CRSP-CA	Listed	0.08 S	-2
11 Maps: 1, 2, 4	197852 GROVE STREET WASH RACK	3884 MARTIN LUTHER KING JR OAKLAND	CRSP-CA	Listed	0.08 NE	5
13 Maps: 1, 2, 4	435238 Verizon Wireless Mosswood	3860 MARTIN LUTHER KING JR WAY OAKLAND	CRSP-CA	Listed	0.09 NE	5

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
17 Maps: 1, 2, 4	436566 INSTA LUBE	736 W MACARTHUR BLVD OAKLAND	CRSP-CA	Listed	0.11 W	-6
18 Maps: 1, 2, 4	192596 BART PROPERTY	3924 MARTIN LUTHER KING JR OAKLAND	CRSP-CA	Listed	0.12 N	7
19 Maps: 1, 2, 4	253549 RD MINER COMPANY	750 37TH ST OAKLAND	CRSP-CA	Listed	0.12 SW	-8
21 Maps: 1, 2, 4	85423 Mobil	731 W MACARTHUR BLVD OAKLAND	CRSP-CA	Listed	0.12 W	-7
21 Maps: 1, 2, 4	209625 ARCO #04931	731 W MACARTHUR BLVD OAKLAND	CRSP-CA	Listed	0.12 W	-7
23 Maps: 1, 2, 4	221809 NEIGHBORHOOD LAUNDROMAT	3838 WEST OAKLAND	CRSP-CA	Listed	0.13 W	-3
26 Maps: 1, 2, 4	366725 Big O Tire #83	810 W MACARTHUR BLVD OAKLAND	CRSP-CA	Listed	0.15 W	-8
29 Maps: 1, 2, 4	441008 automechs	801 W MACARTHUR BLVD OAKLAND	CRSP-CA	Listed	0.16 W	-7
31 Maps: 1, 2, 4	478710 MacArthur Transit Village Parcel B	515 APGAR STREET OAKLAND	CRSP-CA	Listed	0.17 E	3
33 Maps: 1, 2, 4	432973 MacArthur BART Parcels B-1 and B-2	3883 TURQUOISE WAY OAKLAND	CRSP-CA	Listed	0.18 E	3
38 Maps: 1, 2, 4	509952 MacArthur Transit Village Parcel B	MACARTUR TRANSIT VILLAGE OAKLAND	CRSP-CA	Listed	0.21 E	3
40 Maps: 1, 2, 4	11053 BART MacArthur Substation (KMA)	555 40TH ST OAKLAND	CRSP-CA	Listed	0.22 NE	14
42 Maps: 1, 2, 4	420696 MacArthur BART Parcels A and C-1 (aka MacArthur Commons)	0 40TH STREET AND TELEGRAPH OAKLAND	CRSP-CA	Listed	0.22 NE	3

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
44 Maps: 1, 2, 4	192532 REGAL #120 / EAST BAY SURGERY CENTER	3875 TELEGRAPH OAKLAND	CRSP-CA	Listed	0.23 E	13
44 Maps: 1, 2, 4	425791 The Surgery Center of Alta Bates Summit Medical Center	3875 TELEGRAPH AVE OAKLAND	CRSP-CA	Listed	0.23 E	13
46 Maps: 1, 2, 4	373650 1st choice auto repair	4101 MARTIN LUTHER KING JR WAY OAKLAND	CRSP-CA	Listed	0.23 N	14
46 Maps: 1, 2, 4	479069 MANNINGS BODY SHOP	4101 MARTIN LUTHER KING JR WAY OAKLAND	CRSP-CA	Listed	0.23 N	14
46 Maps: 1, 2, 4	444500 dawit auto body	4101 MARTIN LUTHER KING JR WAY OAKLAND	CRSP-CA	Listed	0.23 N	14
48 Maps: 1, 2, 4	477696 LITHOGRAPH REPRODUCTIONS INC	4120 MARTIN LUTHR KNG, JR WAY OAKLAND	CRSP-CA	Listed	0.24 N	14
48 Maps: 1, 2, 4	44638 Lithograph	4120 MARTIN LUTHER KING JR WAY OAKLAND	CRSP-CA	Listed	0.24 N	14
49 Maps: 1, 2, 4	102524 Caltrans-Telegraph	3605 TELEGRAPH AVE OAKLAND	CRSP-CA	Listed	0.25 SE	-1
50 Maps: 1, 2, 4	158605 Svartvik Metalworks	4126 MARTIN LUTHER KING JR WAY OAKLAND	CRSP-CA	Listed	0.25 N	16
23 Maps: 1, 2, 4	CAC000701240 1X NEIGHBORHOOD LAUNDRYMAT	3838 WEST STREET OAKLAND	DryCleaners-CA	Listed	0.13 W	-3
10 Maps: 1, 2, 4	T06019709592 J&H AUTO REPAIR AND GAS STATION	3701 MARTIN LUTHER KING JR WAY OAKLAND	ENF-CA	Listed	0.08 S	-2

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
11 Maps: 1, 2, 4	T0600102106 GROVE STREET WASH RACK	3884 MARTIN LUTHER KING JR Oakland	ENF-CA	Listed	0.08 NE	5
19 Maps: 1, 2, 4	T0600101123 RD MINER COMPANY	750 37TH ST OAKLAND	ENF-CA	Listed	0.12 SW	-8
21 Maps: 1, 2, 4	T0600100110 ARCO #04931	731 W MACARTHUR BLVD Oakland	ENF-CA	Listed	0.12 W	-7
33 Maps: 1, 2, 4	T10000011256 MacArthur BART Parcels B-1 and B-2	3883 Turquoise Way Oakland	ENF-CA	Listed	0.18 E	3
42 Maps: 1, 2, 4	T10000010286 MacArthur BART Parcels A and C-1 (aka MacArthur Commons)	0 40th Street and Telegraph Oakland	ENF-CA	Listed	0.22 NE	3
44 Maps: 1, 2, 4	T06019716388 REGAL #120 / EAST BAY SURGERY CENTER	3875 TELEGRAPH OAKLAND	ENF-CA	Listed	0.23 E	13
9 Maps: 1, 2, 3, 4	01990026 LUCKY'S AUTO BODY	3860/3884 MARTIN LUTHER KING JR. WAY OAKLAND	Eval-Hist-Other-CA	Refer: Other Agency	0.06 NE	4
6 Maps: 1, 2, 3, 4	546965-PD QUALITY TUNE-UP	640 W MACARTHUR BLVD OAKLAND	Hist-Auto Repair	Listed	0.05 SE	0
17 Maps: 1, 2, 4	464852-PD INSTA LUBE	736 W MACARTHUR BLVD OAKLAND	Hist-Auto Repair	Listed	0.11 W	-6
20 Maps: 1, 2, 4	611986-PD YEM HONDA HYUNDAI AUTO SVC	3909 MARTIN LUTHER KING JR WAY OAKLAND	Hist-Auto Repair	Listed	0.12 N	8
26 Maps: 1, 2, 4	39310 Big O Tires	810 W Macarthur Blvd Oakland	Hist-Auto Repair	Listed	0.15 W	-8
26 Maps: 1, 2, 4	10156 BIG O TIRES	810 W MACARTHUR BLVD Emeryville	Hist-Auto Repair	Listed	0.15 W	-8

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
46 Maps: 1, 2, 4	373049-PD AL MANNING BODY SHOP	4101 MARTIN LUTHER KING JR WAY OAKLAND	Hist-Auto Repair	Listed	0.23 N	14
5 Maps: 1, 2, 3, 4	1650025 Alex and Angel's Tires	657 W MacArthur Blvd Oakland	Hist-CA	No Longer Listed	0.04 S	0
9 Maps: 1, 2, 3, 4	ECC71C3A-1990026 LUCKY'S AUTO BODY	3860/3884 MARTIN LUTHER KING JR. WAY OAKLAND	Hist-CA	No Longer Listed	0.06 NE	4
9 Maps: 1, 2, 3, 4	01990026 LUCKY'S AUTO BODY	3860/3884 MARTIN LUTHER KING JR. WAY OAKLAND	Hist-CA	No Longer Listed	0.06 NE	4
9 Maps: 1, 2, 3, 4	01990026 LUCKY'S AUTO BODY	3860/3884 MARTIN LUTHER KING JR. WAY OAKLAND	Hist-CA	No Longer Listed	0.06 NE	4
9 Maps: 1, 2, 3, 4	1990026 LUCKY'S AUTO BODY	3860/3884 MARTIN LUTHER KING JR. WAY OAKLAND	Hist-CA	No Longer Listed	0.06 NE	4
6 Maps: 1, 2, 3, 4	7816513 QUALITY TUNE UP #35	640 W. MACARTHUR BLVD OAKLAND	Hist-CalFID-CA	Listed	0.05 SE	0
8 Maps: 1, 2, 3, 4	7814672 HAZARDOUS FIBRE REMOVAL CORP	3852 M L KING JR WAY OAKLAND	Hist-CalFID-CA	Listed	0.06 NE	4
12 Maps: 1, 2, 4	4034840 HAMMOND SERVICE	3701 MARTIN LUTHER KING OAKLAND	Hist-CalFID-CA	Listed	0.09 S	-2
17 Maps: 1, 2, 4	7815213 INSTA LUBE	736 W. MACARTHUR BLVD OAKLAND	Hist-CalFID-CA	Listed	0.11 W	-6
23 Maps: 1, 2, 4	7434979 1X NEIGHBORHOOD LAUNDRYMAT	3838 WEST ST OAKLAND	Hist-CalFID-CA	Listed	0.13 W	-3

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
26 Maps: 1, 2, 4	7732863 BIG O TIRE	810 W. MACARTHUR BLVD OAKLAND	Hist-CalFID-CA	Listed	0.15 W	-8
29 Maps: 1, 2, 4	7814157 BEST AUTO REPAIR	801 W. MAC ARTHUR BLVD OAKLAND	Hist-CalFID-CA	Listed	0.16 W	-7
29 Maps: 1, 2, 4	7817872 TUNE DYNAMICS	801 W. MACARTHUR BLVD OAKLAND	Hist-CalFID-CA	Listed	0.16 W	-7
34 Maps: 1, 2, 4	7730439 1X SACRED HEART CHURCH	4025 MARTIN LUTHER KING WAY OAKLAND	Hist-CalFID-CA	Listed	0.18 N	11
34 Maps: 1, 2, 4	7811224 1X SACARED HEART CHURCH	4025 MARTIN LUTHER KING WAY OAKLAND	Hist-CalFID-CA	Listed	0.18 N	11
37 Maps: 1, 2, 4	7812368 1X 544 37TH ST.	544 37TH ST OAKLAND	Hist-CalFID-CA	Listed	0.19 SE	1
39 Maps: 1, 2, 4	7808433 1X SACRED HEART	675 41ST ST OAKLAND	Hist-CalFID-CA	Listed	0.21 N	11
44 Maps: 1, 2, 4	7817042 EAST BAY SURGERY CENTER LP	3875 TELEGRAPH AVE OAKLAND	Hist-CalFID-CA	Listed	0.23 E	13
44 Maps: 1, 2, 4	7817041 1X JOSEPH DI GIORGIO & SONS INC	3875 TELEGRAPH AVE OAKLAND	Hist-CalFID-CA	Listed	0.23 E	13
44 Maps: 1, 2, 4	3203829 REGAL STATION #102	3875 TELEGRAPH AVE OAKLAND	Hist-CalFID-CA	Listed	0.23 E	13
45 Maps: 1, 2, 4	7817253 LITHOGRAPH REPRODUCTION INC	4120 MARTIN LUTHER KING JR. WA OAKLAND	Hist-CalFID-CA	Listed	0.23 N	13
47 Maps: 1, 2, 4	7808270 1X OAKLAND TELEGRAPH AVE LTD PARTNERSHIP	3833 TELEGRAPH AVE OAKLAND	Hist-CalFID-CA	Listed	0.23 E	10
10 Maps: 1, 2, 4	7851803 HAMMOND SERVICE	3701 MARTIN L KING WAY OAKLAND	Hist-City-UST-CA	Listed	0.08 S	-2

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
22 Maps: 1, 2, 4	43 Uniclean	705 37th St Oakland	Hist-Cleaners	Listed	0.13 SW	-8
28 Maps: 1, 2, 4	75671 Yupi Building Services	3715 West St Emeryville	Hist-Cleaners	Listed	0.16 W	-8
1 Maps: 1, 2, 3, 4	200109052 UNK	3820 MARTIN LUTHER KING JR BLVD OAKLAND	Hist-ERNS-US	Listed	0.02 E	2
7 Maps: 1, 2, 3, 4	200249125 UNKNOWN	699 APGAR ST OAKLAND	Hist-ERNS-US	Listed	0.06 NW	1
7 Maps: 1, 2, 3, 4	200221353 UNKNOWN	699 APGAR ST OAKLAND	Hist-ERNS-US	Listed	0.06 NW	1
19 Maps: 1, 2, 4	1607771 RD MINER COMPANY	750 37TH OAKLAND	Hist-HWS-CA	Listed	0.12 SW	-8
21 Maps: 1, 2, 4	930246 ARCO	731 MACARTHUR OAKLAND	Hist-HWS-CA	Listed	0.12 W	-7
23 Maps: 1, 2, 4	7434979 NEIGHBORHOOD LAUNDROMAT	3838 WEST OAKLAND	Hist-HWS-CA	Listed	0.13 W	-3
11 Maps: 1, 2, 4	7433498 GROVE STREET WASH RACK	3884 MARTIN LUTHER KING OAKLAND	Hist-LUSTIS-CA	Listed	0.08 NE	5
18 Maps: 1, 2, 4	5356196 BART	3924 MARTIN LUTHER KING OAKLAND	Hist-LUSTIS-CA	Listed	0.12 N	7
19 Maps: 1, 2, 4	930122 RD MINER COMPANY	750 37TH ST OAKLAND	Hist-LUSTIS-CA	Listed	0.12 SW	-8
21 Maps: 1, 2, 4	930246 ARCO	731 MACARTHUR BLVD W OAKLAND	Hist-LUSTIS-CA	Listed	0.12 W	-7

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
23 Maps: 1, 2, 4	4223133 NEIGHBORHOOD LAUNDROMAT	3838 WEST ST OAKLAND	Hist-LUSTIS-CA	Listed	0.13 W	-3
21 Maps: 1, 2, 4	8049-R2 ARCO # 04931	731 MACARTHUR BLVD W OAKLAND	HIST-MTBE-CA	Listed	0.12 W	-7
23 Maps: 1, 2, 4	8461-R2 NEIGHBORHOOD LAUNDROMAT	3838 WEST ST OAKLAND	HIST-MTBE-CA	Listed	0.13 W	-3
4 Maps: 1, 2, 3, 4	1171282-PD LEONG GRAPHICS	679 APGAR ST OAKLAND	Hist-Printers	Listed	0.04 N	1
11 Maps: 1, 2, 4	7433498 GROVE STREET WASH RACK	3884 MARTIN LUTHER KING OAKLAND	Hist-Regional-SLIC-CA	Listed	0.08 NE	5
18 Maps: 1, 2, 4	5356196 BART	3924 MARTIN LUTHER KING OAKLAND	Hist-Regional-SLIC-CA	Listed	0.12 N	7
19 Maps: 1, 2, 4	930122 RD MINER COMPANY	750 37TH ST OAKLAND	Hist-Regional-SLIC-CA	Listed	0.12 SW	-8
21 Maps: 1, 2, 4	930246 ARCO	731 MACARTHUR BLVD W OAKLAND	Hist-Regional-SLIC-CA	Listed	0.12 W	-7
23 Maps: 1, 2, 4	4223133 NEIGHBORHOOD LAUNDROMAT	3838 WEST ST OAKLAND	Hist-Regional-SLIC-CA	Listed	0.13 W	-3
10 Maps: 1, 2, 4	4034840 HAMMOND SERVICE	3701 MARTIN L KING WAY OAKLAND	Hist-Regional-UST-CA	Listed	0.08 S	-2
14 Maps: 1, 2, 4	7433498 GROVE STREET WASH RACK	3884 MARTIN L KING WAY OAKLAND	Hist-Regional-UST-CA	Listed	0.09 NE	6
16 Maps: 1, 2, 4	8586301 JOHNNY'S AUTOMOTIVE	3909 MARTIN L KING WAY OAKLAND	Hist-Regional-UST-CA	Listed	0.11 N	6
21 Maps: 1, 2, 4	930246 ARCO STATION #04931	731W MACARTHUR BLVD OAKLAND	Hist-Regional-UST-CA	Listed	0.12 W	-7

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
24 Maps: 1, 2, 4	8586302 FRANK'S AUTO REPAIR	3924 MARTIN L KING WAY OAKLAND	Hist-Regional-UST-CA	Listed	0.14 NE	8
30 Maps: 1, 2, 4	7006093 APOSTOLIC CHURCH OF DELIVERY	4006 MARTIN L KING WAY OAKLAND	Hist-Regional-UST-CA	Listed	0.16 N	10
37 Maps: 1, 2, 4	8568735 APARTMENT BUILDING	544 37TH ST OAKLAND	Hist-Regional-UST-CA	Listed	0.19 SE	1
44 Maps: 1, 2, 4	3203829 REGAL STATION #102	3875 TELEGRAPH AVE OAKLAND	Hist-Regional-UST-CA	Listed	0.23 E	13
21 Maps: 1, 2, 4	154399 K&H City Gas Beacon	731 W Macarthur Blvd Oakland	Hist-Service Stations	Listed	0.12 W	-7
21 Maps: 1, 2, 4	45869 Manu's Arco	731 W Macarthur Blvd Oakland	Hist-Service Stations	Listed	0.12 W	-7
21 Maps: 1, 2, 4	131851 GAS CITY	731 W MACARTHUR BLVD Oakland	Hist-Service Stations	Listed	0.12 W	-7
21 Maps: 1, 2, 4	200860 ARCO STATION #04931	731 WEST MACARTHUR BOULEVARD OAKLAND	Hist-Service Stations	Listed	0.12 W	-7
21 Maps: 1, 2, 4	34126-PD MANUS ARCO	731 W MACARTHUR BLVD OAKLAND	Hist-Service Stations	Listed	0.12 W	-7
21 Maps: 1, 2, 4	258353 RAJINDER K GOYAL	731 W MACARTHUR BLVD OAKLAND	Hist-UST-CA	Listed	0.12 W	-7
44 Maps: 1, 2, 4	259478 REGAL STATION 102	3875 TELEGRAPH AVE OAKLAND	Hist-UST-CA	Listed	0.23 E	13
65 Maps: 1, 4	T0600100249 Site Name Not Reported	989 41ST ST OAKLAND	Hist-UST-Cleanup-CA	Listed	0.47 NW	-12
68 Maps: 1, 4	T0600101365 Site Name Not Reported	3400 SAN PABLO AVE OAKLAND	Hist-UST-Cleanup-CA	Listed	0.49 W	-32

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
69 Maps: 1, 4	T0600102117 Site Name Not Reported	1075 40TH ST OAKLAND	Hist-UST-Cleanup-CA	Listed	0.49 NW	-17
5 Maps: 1, 2, 3, 4	342311-PD BURLEYS DETAIL	657 W MACARTHUR BLVD OAKLAND	Hist-Vehicle-Washing	Listed	0.04 S	0
6 Maps: 1, 2, 3, 4	CAL000074673 QUALITY TUNE UP #35	640 W MACARTHUR BLVD OAKLAND	HWIS-CA	Listed	0.05 SE	0
8 Maps: 1, 2, 3, 4	CAL000135916 PALMERS HAULING AND CLEANING	3856 MARTIN LUTHER KING JR WAY OAKLAND	HWIS-CA	Listed	0.06 NE	4
11 Maps: 1, 2, 4	T0600102106 GROVE STREET WASH RACK	3884 MARTIN LUTHER KING JR Oakland	LUST-Closed-CA	Completed - Case Closed	0.08 NE	5
18 Maps: 1, 2, 4	T0600101979 BART PROPERTY	3924 MARTIN LUTHER KING JR Oakland	LUST-Closed-CA	Completed - Case Closed	0.12 N	7
19 Maps: 1, 2, 4	T0600101123 RD MINER COMPANY	750 37TH ST OAKLAND	LUST-Closed-CA	Completed - Case Closed	0.12 SW	-8
23 Maps: 1, 2, 4	T0600101597 NEIGHBORHOOD LAUNDROMAT	3838 WEST Oakland	LUST-Closed-CA	Completed - Case Closed	0.13 W	-3
44 Maps: 1, 2, 4	T06019716388 REGAL #120 / EAST BAY SURGERY CENTER	3875 TELEGRAPH OAKLAND	LUST-Closed-CA	Completed - Case Closed	0.23 E	13
51 Maps: 1, 4	T0600101265 SHELL #12-9452	500 40TH Oakland	LUST-Closed-CA	Completed - Case Closed	0.27 NE	17
57 Maps: 1, 4	T0600100952 SUMMIT MEDICAL CENTER	3420 TELEGRAPH Oakland	LUST-Closed-CA	Completed - Case Closed	0.38 SE	-10
58 Maps: 1, 4	T0600100822 WALTER BLUMERT COMPANY	490 43RD Oakland	LUST-Closed-CA	Completed - Case Closed	0.43 NE	29

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
59 Maps: 1, 4	T0600101472 UNOCAL #3538	411 WEST MACARTHUR BOULEVARD Oakland	LUST-Closed-CA	Completed - Case Closed	0.43 SE	7
60 Maps: 1, 4	T0600102120 SIMPSON, RONN	489 43RD Oakland	LUST-Closed-CA	Completed - Case Closed	0.43 NE	28
63 Maps: 1, 4	T0600100790 KELLY AUTO PARTS	4400 TELEGRAPH Oakland	LUST-Closed-CA	Completed - Case Closed	0.45 NE	32
64 Maps: 1, 4	T0600101618 BLAZIC INDUSTRIAL BALANCING	1016 MACARTHUR Oakland	LUST-Closed-CA	Completed - Case Closed	0.47 W	-27
65 Maps: 1, 4	T0600100249 CALIFORNIA LINEN SUPPLY CO	989 41ST Oakland	LUST-Closed-CA	Completed - Case Closed	0.47 NW	-12
69 Maps: 1, 4	T0600102117 FIDELITY ROOF COMPANY	1075 40TH STREET Oakland	LUST-Closed-CA	Completed - Case Closed	0.49 NW	-17
71 Maps: 1, 4	T0600100430 ARCO	4401 MARKET Oakland	LUST-Closed-CA	Completed - Case Closed	0.49 NW	8
72 Maps: 1, 4	T0600102132 FORMER FG GASOLINE	3314 SAN PABLO AVE. Oakland	LUST-Closed-CA	Completed - Case Closed	0.49 SW	-33
73 Maps: 1, 4	T0600100849 LOOMIS ARMORED INC	936 BROCKHURST Oakland	LUST-Closed-CA	Completed - Case Closed	0.5 SW	-33
74 Maps: 1, 4	T0600101297 NIGHTINGALE PROPERTY	4629 MARTIN LUTHER KING JR Oakland	LUST-Closed-CA	Completed - Case Closed	0.5 N	30
75 Maps: 1, 4	T0600101253 SHELL #13-9619	3420 SAN PABLO Oakland	LUST-Closed-CA	Completed - Case Closed	0.5 W	-34
76 Maps: 1, 4	T0600101365 THRIFTY OIL #49	3400 SAN PABLO Oakland	LUST-Closed-CA	Completed - Case Closed	0.5 W	-34
10 Maps: 1, 2, 4	T06019709592 J&H AUTO REPAIR AND GAS STATION	3701 MARTIN LUTHER KING JR WAY OAKLAND	LUST-Open-CA	Open - Site Assessment	0.08 S	-2

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
21 Maps: 1, 2, 4	T0600100110 ARCO #04931	731 W MACARTHUR BLVD Oakland	LUST-Open-CA	Open - Eligible for Closure	0.12 W	-7
53 Maps: 1, 4	T0600173887 CHEVRON #9-2029	890 W. MACARTHUR BLVD OAKLAND	LUST-Open-CA	Open - Assessment & Interim Remedial Action	0.27 W	-15
54 Maps: 1, 4	T0619763665 CHP - OAKLAND	3601 TELEGRAPH AVENUE OAKLAND	LUST-Open-CA	Open - Eligible for Closure	0.28 SE	-3
56 Maps: 1, 4	T0600101187 SAN FRANCISCO FRENCH BREAD	3924 MARKET ST. Oakland	LUST-Open-CA	Open - Site Assessment	0.31 NW	-7
27 Maps: 1, 2, 4	T10000012542 820 W MACARTHUR BLVD	820 W MACARTHUR BLVD OAKLAND	NCI-CA	Informational Item	0.16 W	-6
3 Maps: 1, 2, 3, 4	CAL000408081 HK AUTO CARE	3806 MARTIN LUTHER KING JR WAY OAKLAND	RCRA-NON-US	Listed	0.03 SE	1
17 Maps: 1, 2, 4	CAL000171415 INSTA LUBE	736 W MACARTHUR BLVD OAKLAND	RCRA-NON-US	Listed	0.11 W	-6
21 Maps: 1, 2, 4	CAL000442252 WESSTCO GAS MART INC MOBIL	731 W MACARTHUR BLVD OAKLAND	RCRA-NON-US	Listed	0.12 W	-7
29 Maps: 1, 2, 4	CAL000366948 AUTOMECHS	801 W MACARTHUR BLVD OAKLAND	RCRA-NON-US	Listed	0.16 W	-7
40 Maps: 1, 2, 4	CAL000015927 BART/MACARTHU R STATION	555 40TH ST OAKLAND	RCRA-NON-US	Listed	0.22 NE	14
46 Maps: 1, 2, 4	CAL000350841 1ST CHOICE AUTO REPAIR	4101 MARTIN LUTHER KING JR WAY OAKLAND	RCRA-NON-US	Listed	0.23 N	14
46 Maps: 1, 2, 4	CAL000384246 DAWIT AUTO BODY	4101 MARTIN LUTHER KING JR WAY OAKLAND	RCRA-NON-US	Listed	0.23 N	14

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
48 Maps: 1, 2, 4	CAL000098709 LITHOGRAPH REPRODUCTIONS INC	4120 MARTIN LUTHER KING JR WAY OAKLAND	RCRA-NON-US	Listed	0.24 N	14
50 Maps: 1, 2, 4	CAL000316976 SVARTVIK METALWORKS LTD	4126 MARTIN LUTHER KING JR WAY OAKLAND	RCRA-NON-US	Listed	0.25 N	16
77 Maps: 1, 4	1340118 CAL TECH METALS	825, 829, 841 31ST STREET OAKLAND	Response-CA	ACTIVE	0.55 SW	-32
78 Maps: 1, 4	60000594 LANE METAL FINISHERS	2942 SAN PABLO AVENUE OAKLAND	Response-CA	ACTIVE	0.65 SW	-38
79 Maps: 1, 4	1720109 HARRIS DRY CLEANERS	2801 MARTIN LUTHER KING JR. WAY OAKLAND	Response-CA	ACTIVE	0.67 S	-32
80 Maps: 1, 4	7280156 HERCULES INC	CORNER OF SAN PABLO & SYCAMORE AVENUE HERCULES	Response-CA	CERTIFIED / OPERATION & MAINTENANC E - LAND USE RESTRICTION S	0.69 NW	-24
70 Maps: 1, 4	T06019777882 SHATTUCK AVE PROPERTY	4501 SHATTUCK OAKLAND	SLIC-Closed-CA	Completed - Case Closed	0.49 NE	35
27 Maps: 1, 2, 4	T10000012542 820 W MACARTHUR BLVD	820 W MACARTHUR BLVD OAKLAND	SLIC-Open-CA	Open - Site Assessment	0.16 W	-6
33 Maps: 1, 2, 4	T10000011256 MacArthur BART Parcels B-1 and B-2	3883 Turquoise Way Oakland	SLIC-Open-CA	Open - Remediation	0.18 E	3
42 Maps: 1, 2, 4	T10000010286 MacArthur BART Parcels A and C-1 (aka MacArthur Commons)	0 40th Street and Telegraph Oakland	SLIC-Open-CA	Open - Remediation	0.22 NE	3
52 Maps: 1, 4	T10000000406 MacArthur BART Transit Village	None 40th Street and Telegraph Avenue (APNs 012-0969-053-03, 012-0968-055-01, 012-0967-049-01) Oakland	SLIC-Open-CA	Open - Inactive	0.27 E	17

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
59 Maps: 1, 4	T10000007937 411 MACARTHUR REDEVELOPMENT	411 WEST MACARTHUR BLVD OAKLAND	SLIC-Open-CA	Open - Site Assessment	0.43 SE	7
2 Maps: 1, 2, 3, 4	833807 Martin Luther King Jr way & W. Macarthur Blvd Oakland ca	Not Reported by Agency	Spills-SSO-CA	Listed	0.03 S	1
25 Maps: 1, 2, 4	811301 37th St and West MacArthur Blvd	Not Reported by Agency	Spills-SSO-CA	Listed	0.15 SE	4
32 Maps: 1, 2, 4	767184 36 th & MLK	36th Oakland	Spills-SSO-CA	Listed	0.17 S	-6
32 Maps: 1, 2, 4	758732 36TH STREET & Martin Luther King Jr	Martin Luther King Jr. way Oakland	Spills-SSO-CA	Listed	0.17 S	-6
35 Maps: 1, 2, 4	738140 544 MacArthur Blvd	Not Reported by Agency	Spills-SSO-CA	Listed	0.18 E	6
41 Maps: 1, 2, 4	773405 4106 Martin Luther King Oakland, Ca	4106 Martin Luther King Avenue Oakland	Spills-SSO-CA	Listed	0.22 N	13
77 Maps: 1, 4	01340118 CAL TECH METALS	825, 829, 841 31ST STREET OAKLAND	State-Response-Active-CA	Active	0.55 SW	-32
78 Maps: 1, 4	60000594 Lane Metal Finishers	2942 San Pablo Avenue Oakland	State-Response-Active-CA	Active	0.65 SW	-38
79 Maps: 1, 4	01720109 HARRIS DRY CLEANERS	2801 MARTIN LUTHER KING JR. WAY OAKLAND	State-Response-Active-CA	Active	0.67 S	-32
21 Maps: 1, 2, 4	140046 Mobil	731 W MacArthur Blvd Oakland	UST-CA	Listed	0.12 W	-7
21 Maps: 1, 2, 4	85423 Mobil	731 W MACARTHUR BLVD OAKLAND	UST-CRSP-CA	Listed	0.12 W	-7
51 Maps: 1, 4	T0600101265 FORMER SHELL STATION #129452	500 40TH ST OAKLAND	UST-Priority-CA	Listed	0.27 NE	17

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
53 Maps: 1, 4	T0600173887 CHEVRON STATION #9-2029	890 MACARTHUR BLVD OAKLAND	UST-Priority-CA	Listed	0.27 W	-15
66 Maps: 1, 4	T0600101253 FORMER SHELL #139619	3420 SAN PABLO AVE OAKLAND	UST-Priority-CA	Listed	0.48 W	-31
21 Maps: 1, 2, 4	10050 Arco Station #04931	731 West Macarthur Boulevard Oakland	UST-Proposed-CA	Listed	0.12 W	-7

POTENTIAL AREAS OF CONCERN/CONTAMINATION SUMMARY

DATABASE SEARCHED	SUBJECT SITE WITHIN POTENTIAL AREA OF CONCERN	AREAS FOUND WITHIN 1-MILE RADIUS
NPL-R9-US	No	0
MethaneLF-CA	No	0
LA-LF-CA	No	0
Military-Bases-US	No	0
SGV-Deep-Plumes-CA	No	0
SGV-Shallow-Plumes-Puente-Valley-CA	No	0
SGV-Shallow-Plumes-CA	No	0

DATABASE OCCURRENCE SUMMARY

HIGH RISK* OCCURRENCES IDENTIFIED IN REQUESTED SEARCH RADIUS		
DATABASE SEARCHED	**DISTANCE SEARCHED (MILES)**	**HIGH RISK OCCURRENCES FOUND**
CERCLIS-US	0.5	0
CorAct-Open-CA	0.5	0
County-LUST-Open-CA	0.5	17
County-SLIC-Open-CA	0.5	0
Eval-Hist-Active-CA	0.5	0
Hist-UST-Cleanup-CA	0.5	3
LUST-Open-CA	0.5	5
Military-Active-CA	1	0
NPL-US	1	0
Proposed-NPL-US	1	0
Response-CA	1	4
SAA-Agreements-US	1	0
School-Active-CA	0.5	0
SLIC-Open-CA	0.5	5
State-Response-Active-CA	1	3
Superfund-Active-CA	1	0
Tribal-LUST-Open-Reg9	0.5	0
VCP-Active-CA	0.5	0

* For the purposes of this report, "high risk" occurrences are those that have known contamination and have not received a "case closed" or "no further action" status from the agency that maintains the records.

ASTM/AAI STANDARD RECORD SOURCES SUMMARY				
STANDARD ENVIRONMENTAL RECORD SOURCES	**ASTM MIN. SEARCH DIST. / ERS SEARCH DIST. (MILES)**	**ERS DATABASE NAME**	**TOTAL LISTINGS**	**MAP ID #'S**
Federal NPL site list	1.0 / 1.0	NPL-US	0	None Listed
		Proposed-NPL-US	0	None Listed

Federal Delisted NPL site list	0.5 / 1.0	Delisted-NPL-US	0	None Listed
Federal CERCLIS list	0.5 / 0.5	CERCLIS-US	0	None Listed
Federal CERCLIS NFRAP site list	0.5 / 0.5	CERCLIS-Archived-US	0	None Listed
Federal RCRA CORRACTS facilities list	1.0 / 1.0	RCRA-COR-US	0	None Listed
Federal RCRA non-CORRACTS TSD facilities list	0.5 / 0.5	RCRA-TSDF-US	0	None Listed
Federal RCRA generators list	Property and adjoining properties / 0.25	RCRA-CESQG-US	0	None Listed
		RCRA-LQG-US	0	None Listed
		RCRA-NON-US	9	3, 17, 21, 29, 40, 46, 46, 48, 50
		RCRA-SQG-US	0	None Listed
Federal Inst/Eng control registries	Property Only / 0.25	Controls-RCRA-US	0	None Listed
		Controls-US	0	None Listed
		Hist-US-EC	0	None Listed
		Hist-US-IC	0	None Listed
		LIENS-US	0	None Listed
Federal ERNS list	Property Only / 0.0625	ERNS-US	0	None Listed
State and Tribal-Equivalent NPL	1.0 / 1.0	Response-CA	4	77, 78, 79, 80
		State-Response-Active-CA	3	77, 78, 79
		State-Response-NFA-CA	0	None Listed
		State-Response-Other-CA	0	None Listed
State and Tribal-Equivalent CERCLIS	0.5 / 0.5	Superfund-Active-CA	0	None Listed
		Superfund-NFA-CA	0	None Listed
		Superfund-Other-CA	0	None Listed
State and Tribal landfill and/or solid waste disposal sites	0.5 / 0.5	County-SWF-CA	0	None Listed
		Debris-US	0	None Listed
		Hist-Dumps-US	0	None Listed
		Land-Disposal-CA	0	None Listed
		SWIS-CA	0	None Listed
		SWLF-US	0	None Listed
		Tribal-ODI-US	0	None Listed
State and Tribal Leaking Storage Tank Lists	0.5 / 0.5	County-LUST-CA	1	55
		County-LUST-Closed-CA	17	19, 23, 24, 51, 57, 58, 60, 61, 63, 64, 65, 66, 67, 68, 69, 71, 73

		County-LUST-Open-CA	17	10, 14, 19, 21, 23, 51, 53, 55, 56, 59, 62, 65, 66, 68, 69, 71, 72
		Hist-UST-Cleanup-CA	3	65, 68, 69
		LUST-Closed-CA	20	11, 18, 19, 23, 44, 51, 57, 58, 59, 60, 63, 64, 65, 69, 71, 72, 73, 74, 75, 76
		LUST-Open-CA	5	10, 21, 53, 54, 56
		Tribal-LUST-Closed-Reg9	0	None Listed
		Tribal-LUST-Open-Reg9	0	None Listed
State and Tribal Registered Storage Tank Lists	Property and adjoining properties / 0.25	AST-CA	0	None Listed
		AST-CRSP-CA	0	None Listed
		City-AST-CA	0	None Listed
		City-UST-CA	0	None Listed
		County-AST-CA	0	None Listed
		County-UST-CA	1	21
		FEMA-UST-US	0	None Listed
		Hist-UST-CA	2	21, 44
		Tribal-UST-Reg9	0	None Listed
		UST-Abandoned-CA	0	None Listed
		UST-CA	1	21
		UST-Closed-CA	0	None Listed
		USTComp-CA	0	None Listed
		UST-CRSP-CA	1	21
		UST-Priority-CA	3	51, 53, 66
		UST-Proposed-CA	1	21
State and Tribal Inst/Eng Control Registries	Property Only / 0.5	Controls-CA	0	None Listed
		Deed-CA	0	None Listed
		Hist-Controls-CA	0	None Listed
		HWMP-Controls-CA	0	None Listed
		Liens-CA	0	None Listed
State and Tribal Voluntary Cleanup Sites	0.5 / 0.5	Military-Active-CA	0	None Listed
		Military-NFA-CA	0	None Listed
		Military-Other-CA	0	None Listed
		School-Active-CA	0	None Listed
		School-NFA-CA	0	None Listed
		School-Other-CA	0	None Listed
		Tribal-VCP-US	0	None Listed

		VCP-Active-CA	0	None Listed
		VCP-NFA-CA	0	None Listed
		VCP-Other-CA	0	None Listed
State and Tribal Brownfield Sites	0.5 / 0.5	BF-MOA-CA	1	52
		BF-Tribal-US	0	None Listed

FEDERAL ASTM/AAI DATABASES

DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
BF-Tribal-US	0.5	0	0	0	0	-	0
BF-US	0.5	0	1	0	0	-	1
CERCLIS-Archived-US	0.5	0	0	0	0	-	0
CERCLIS-US	0.5	0	0	0	0	-	0
Controls-RCRA-US	0.5	0	0	0	0	-	0
Controls-US	0.5	0	0	0	0	-	0
Debris-US	0.5	0	0	0	0	-	0
Delisted-NPL-US	1	0	0	0	0	0	0
ERNS-US	0.0625	0	0	-	-	-	0
FEMA-UST-US	0.25	0	0	0	-	-	0
FTTS-ENF-US	0.25	0	0	0	-	-	0
Hist-Dumps-US	0.5	0	0	0	0	-	0
Hist-US-EC	0.5	0	0	0	0	-	0
Hist-US-IC	0.5	0	0	0	0	-	0
HMIS-US	0.0625	0	0	-	-	-	0
LIENS-US	0.0625	0	0	-	-	-	0
NPL-US	1	0	0	0	0	0	0
PADS-US	0.0625	0	0	-	-	-	0
PCB-US	0.25	0	0	0	-	-	0
Proposed-NPL-US	1	0	0	0	0	0	0
RCRA-CESQG-US	0.25	0	0	0	-	-	0
RCRA-COR-US	1	0	0	0	0	0	0
RCRA-LQG-US	0.25	0	0	0	-	-	0
RCRA-NON-US	0.25	0	3	6	-	-	9
RCRA-SQG-US	0.25	0	0	0	-	-	0
RCRA-TSDF-US	0.5	0	0	0	0	-	0
SAA-Agreements-US	1	0	0	0	0	0	0
SWLF-US	0.5	0	0	0	0	-	0
Tribal-LUST-Closed-Reg9	0.5	0	0	0	0	-	0
Tribal-LUST-Open-Reg9	0.5	0	0	0	0	-	0
Tribal-ODI-US	0.5	0	0	0	0	-	0
Tribal-UST-Reg9	0.25	0	0	0	-	-	0
Tribal-VCP-US	0.5	0	0	0	0	-	0

STATE ASTM/AAI DATABASES

DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
AST-CA	0.25	0	0	0	-	-	0
AST-CRSP-CA	0.25	0	0	0	-	-	0
BF-MOA-CA	0.5	0	0	1	0	-	1
BZ-HazWaste-CA	0.5	0	0	0	0	-	0
CERS-CA	0.25	0	0	0	-	-	0
CHMIRS-CA	0.0625	0	1	-	-	-	1
City-AST-CA	0.25	0	0	0	-	-	0

STATE ASTM/AAI DATABASES							
DATABASE SEARCHED	**DISTANCE SEARCHED**	**SUBJECT SITE**	**0.125 MILES**	**0.25 MILES**	**0.5 MILES**	**1.0 MILES**	**TOTAL**
City-CUPA-CA	0.25	0	0	0	-	-	0
City-Others-CA	0.25	0	0	0	-	-	0
City-UST-CA	0.25	0	0	0	-	-	0
Controls-CA	0.5	0	0	0	0	-	0
CorAct-Closed-CA	0.5	0	0	0	0	-	0
CorAct-Open-CA	0.5	0	0	0	0	-	0
CorAct-Other-CA	0.5	0	0	0	0	-	0
CORTESE-CA	0.25	0	0	0	-	-	0
County-AST-CA	0.25	0	0	0	-	-	0
County-Hist-CA	0.25	0	0	0	-	-	0
County-LUST-CA	0.5	0	0	0	1	-	1
County-LUST-Closed-CA	0.5	0	3	1	13	-	17
County-LUST-Open-CA	0.5	0	5	2	10	-	17
County-Others-CA	0.25	0	0	0	-	-	0
County-SLIC-Closed-CA	0.25	0	0	0	-	-	0
County-SLIC-Open-CA	0.5	0	0	0	0	-	0
County-SML-CA	0.5	0	0	0	0	-	0
County-SWF-CA	0.5	0	0	0	0	-	0
County-UST-CA	0.25	0	1	0	-	-	1
CRSP-CA	0.25	0	11	15	-	-	26
CUPA-CA	0.25	0	0	0	-	-	0
Deed-CA	0.5	0	0	0	0	-	0
ENF-CA	0.25	0	4	3	-	-	7
ENF-SMARTS-CA	0.25	0	0	0	-	-	0
ENF-Wastewater-CA	0.25	0	0	0	-	-	0
Eval-Hist-Active-CA	0.5	0	0	0	0	-	0
Eval-Hist-NFA-CA	0.5	0	0	0	0	-	0
Eval-Hist-Other-CA	0.5	0	1	0	0	-	1
HazWaste-CA	0.25	0	0	0	-	-	0
Hist-Controls-CA	0.5	0	0	0	0	-	0
Hist-Cort-CA	0.25	0	0	0	-	-	0
HIST-R4-CA	0.25	0	0	0	-	-	0
HIST-SLIC-CV-CLOSED-CA	0.5	0	0	0	0	-	0
HIST-SLIC-CV-OPEN-CA	0.5	0	0	0	0	-	0
Hist-UST-CA	0.25	0	1	1	-	-	2
Hist-UST-Cleanup-CA	0.5	0	0	0	3	-	3
Hist-WIP-Active-CA	0.5	0	0	0	0	-	0
Hist-WIP-Backlog-CA	0.5	0	0	0	0	-	0
Hist-WIP-Historical-CA	0.5	0	0	0	0	-	0
HWIS-CA	0.0625	0	2	-	-	-	2
HWMP-Controls-CA	0.5	0	0	0	0	-	0
ICE-CA	0.25	0	0	0	-	-	0
Land-Disposal-CA	0.5	0	0	0	0	-	0
Liens-CA	0.0625	0	0	-	-	-	0
LUST-Closed-CA	0.5	0	4	2	14	-	20
LUST-Open-CA	0.5	0	2	1	2	-	5
Manifest2-RI	0.0625	0	0	-	-	-	0
Military-Active-CA	1	0	0	0	0	0	0
Military-NFA-CA	0.5	0	0	0	0	-	0
Military-Other-CA	1	0	0	0	0	0	0
PR-MOA-CA	0.25	0	0	0	-	-	0
Response-CA	1	0	0	0	0	4	4
School-Active-CA	0.5	0	0	0	0	-	0
School-NFA-CA	0.5	0	0	0	0	-	0
School-Other-CA	0.5	0	0	0	0	-	0

STATE ASTM/AAI DATABASES

DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
SLIC-Closed-CA	0.5	0	0	0	1	-	1
SLIC-Open-CA	0.5	0	0	4	1	-	5
SML-CA	0.5	0	0	0	0	-	0
State-Response-Active-CA	1	0	0	0	0	3	3
State-Response-NFA-CA	0.5	0	0	0	0	-	0
State-Response-Other-CA	0.5	0	0	0	0	-	0
Superfund-Active-CA	1	0	0	0	0	0	0
Superfund-NFA-CA	1	0	0	0	0	0	0
Superfund-Other-CA	1	0	0	0	0	0	0
SWIS-CA	0.5	0	0	0	0	-	0
SWRCY-CA	0.5	0	0	0	0	-	0
UST-Abandoned-CA	0.25	0	0	0	-	-	0
UST-CA	0.25	0	1	0	-	-	1
UST-Closed-CA	0.25	0	0	0	-	-	0
USTComp-CA	0.25	0	0	0	-	-	0
UST-CRSP-CA	0.25	0	1	0	-	-	1
UST-Priority-CA	0.5	0	0	2	1	-	3
UST-Proposed-CA	0.25	0	1	0	-	-	1
VCP-Active-CA	0.5	0	0	0	0	-	0
VCP-NFA-CA	0.5	0	0	0	0	-	0
VCP-Other-CA	0.5	0	0	0	0	-	0

SUPPLEMENTAL DATABASES

DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
Air-CA	0.25	0	0	3	-	-	3
AIR-DIST-CA	0.25	0	0	0	-	-	0
BioFuel-US	0.25	0	0	0	-	-	0
CAF-CA	0.25	0	0	0	-	-	0
CDL-CA	0.0625	0	0	-	-	-	0
CDL-US	0.0625	0	0	-	-	-	0
CHWF-CA	0.5	0	0	0	0	-	0
Cleaners-CA	0.25	0	3	1	-	-	4
Coal-Ash-Dams-US	0.5	0	0	0	0	-	0
County-BI-CA	0.25	0	0	0	-	-	0
Dams-CA	0.25	0	0	0	-	-	0
DPR-CA	0.25	0	0	0	-	-	0
DryCleaners-CA	0.25	0	1	0	-	-	1
EGRID-US	0.5	0	0	0	0	-	0
EPA-Watch-List-US	0.25	0	0	0	-	-	0
FA-HW-CA	0.0625	0	0	-	-	-	0
FA-HW-US	0.0625	0	0	-	-	-	0
FA-SWF-CA	0.0625	0	0	-	-	-	0
FRS-US	0.0625	0	0	-	-	-	0
FTTS-INSP-US	0.0625	0	0	-	-	-	0
FUDS-US	1	0	0	0	0	0	0
FUSRAP-US	0.25	0	0	0	-	-	0
Haulers-CA	0.0625	0	0	-	-	-	0
Hist-AFS2-US	0.25	0	0	0	-	-	0
Hist-AFS-US	0.25	0	0	0	-	-	0
Hist-AST-CA	0.25	0	0	0	-	-	0
Hist-AWS-CA	0.25	0	0	0	-	-	0
Hist-CA	0.0625	0	5	-	-	-	5

SUPPLEMENTAL DATABASES

DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
Hist-CalFID-CA	0.25	0	6	11	-	-	17
Hist-CALSITES-CA	0.25	0	0	0	-	-	0
Hist-CERCLIS-NFRAP-US	0.25	0	0	0	-	-	0
Hist-CERCLIS-US	0.25	0	0	0	-	-	0
Hist-City-UST-CA	0.25	0	1	0	-	-	1
Hist-Deed-CA	0.25	0	0	0	-	-	0
Hist-DTG-CA	0.25	0	0	0	-	-	0
Hist-ERNS-US	0.0625	0	3	-	-	-	3
Hist-FIFRA-US	0.25	0	0	0	-	-	0
Hist-FINDS-US	0.0625	0	0	-	-	-	0
Hist-HWS-CA	0.25	0	3	0	-	-	3
Hist-LUSTIS-CA	0.25	0	5	0	-	-	5
HIST-MLTS-US	0.25	0	0	0	-	-	0
HIST-MTBE-CA	0.25	0	2	0	-	-	2
Hist-NPL-US	0.25	0	0	0	-	-	0
Hist-Orange-County-LF-CA	0.25	0	0	0	-	-	0
Historical-CA	0.5	0	0	0	0	-	0
Hist-Prop65-CA	0.25	0	0	0	-	-	0
Hist-RCRIS-US	0.25	0	0	0	-	-	0
Hist-Regional-LUST-CA	0.25	0	0	0	-	-	0
Hist-Regional-Other-CA	0.25	0	0	0	-	-	0
Hist-Regional-SLIC-CA	0.25	0	5	0	-	-	5
Hist-Regional-Spills-CA	0.25	0	0	0	-	-	0
Hist-Regional-SWLF-CA	0.25	0	0	0	-	-	0
Hist-Regional-UST-CA	0.25	0	5	3	-	-	8
Hist-SCL-CA	0.25	0	0	0	-	-	0
Hist-SWIS-CA	0.25	0	0	0	-	-	0
Hist-ToxicPits-CA	0.25	0	0	0	-	-	0
Hist-TRIS-US	0.25	0	0	0	-	-	0
Hist-US	0.0625	0	0	-	-	-	0
Hist-USGS-WaterWells-CA	0.0625	0	0	-	-	-	0
Hist-USTReg-CA	0.25	0	0	0	-	-	0
Hist-WaterWells-US	0.0625	0	0	-	-	-	0
Hist-WMUDS-CA	0.25	0	0	0	-	-	0
HWT-CA	0.25	0	0	0	-	-	0
ICIS-Air-US	0.0625	0	0	-	-	-	0
ICIS-FEC-US	0.0625	0	0	-	-	-	0
ICIS-NPDES-US	0.0625	0	0	-	-	-	0
LA-Waste-Haulers-CA	0.0625	0	0	-	-	-	0
Lead-Smelter-2-US	0.25	0	0	0	-	-	0
Lead-US	0.25	0	0	0	-	-	0
LMOP-US	0.5	0	0	0	0	-	0
Mines2-CA	0.0625	0	0	-	-	-	0
Mines-CA	0.0625	0	0	-	-	-	0
Mines-CDMG-CA	0.0625	0	0	-	-	-	0
MINES-US	0.0625	0	0	-	-	-	0
MLTS-US	0.0625	0	0	-	-	-	0
Mortgage-CA	0.25	0	0	0	-	-	0
MRDS-US	0.25	0	0	0	-	-	0
MWMP-CA	0.25	0	0	0	-	-	0
NCI-CA	0.25	0	0	1	-	-	1
NEI-LF-CA	0.25	0	0	0	-	-	0
NPDES-CA	0.0625	0	0	-	-	-	0
NPDES-SW-CA	0.0625	0	0	-	-	-	0
OGM-CA	0.0625	0	0	-	-	-	0

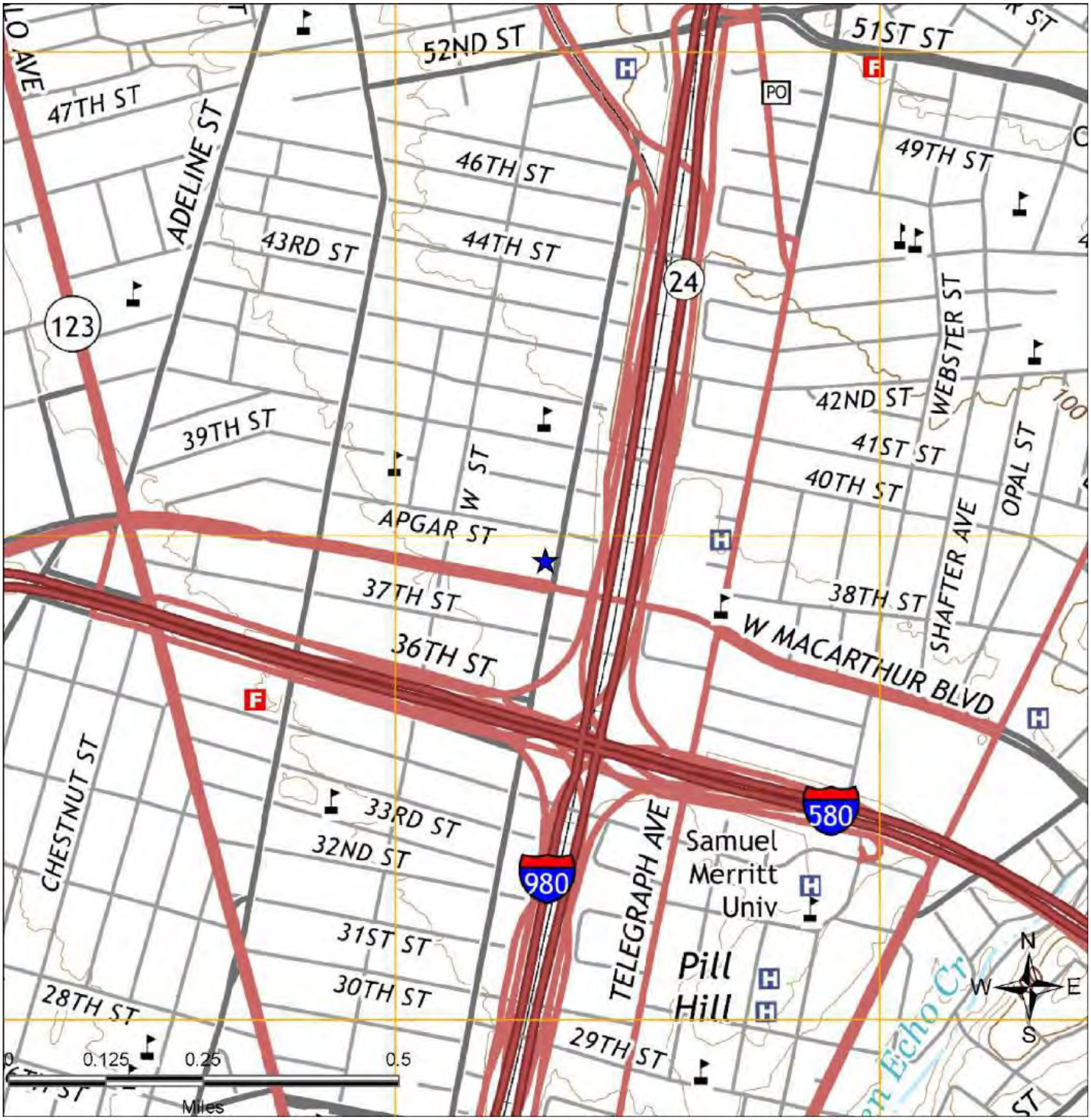
SUPPLEMENTAL DATABASES

DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
OGW-CA	0.0625	0	0	-	-	-	0
OSCF-CA	0.5	0	0	0	0	-	0
PCS-US	0.25	0	0	0	-	-	0
Perch1-CA	0.25	0	0	0	-	-	0
Perch2-CA	0.25	0	0	0	-	-	0
Project-CA	0.25	0	0	0	-	-	0
RADINFO-US	0.0625	0	0	-	-	-	0
RFG-Lab-US	0.25	0	0	0	-	-	0
RMP-US	0.0625	0	0	-	-	-	0
ROD-US	0.5	0	0	0	0	-	0
SDWIS-US	0.25	0	0	0	-	-	0
SP-CA	0.25	0	0	0	-	-	0
Spills-SSO-CA	0.25	0	2	4	-	-	6
SSTS-US	0.0625	0	0	-	-	-	0
TierPer-CA	0.25	0	0	0	-	-	0
TOMS-CA	0.0625	0	0	-	-	-	0
Tribal-Air-US	0.25	0	0	0	-	-	0
TRIS2000-US	0.0625	0	0	-	-	-	0
TRIS2010-US	0.0625	0	0	-	-	-	0
TRIS80-US	0.0625	0	0	-	-	-	0
TRIS90-US	0.0625	0	0	-	-	-	0
TSCA-US	0.0625	0	0	-	-	-	0
UIC2-CA	0.0625	0	0	-	-	-	0
UIC-CA	0.0625	0	0	-	-	-	0
UMTRA-US	0.0625	0	0	-	-	-	0
USGS-Waterwells-US	0.0625	0	0	-	-	-	0
Vapor-Intrusions-US	0.5	0	0	0	0	-	0
WDR-CA	0.25	0	0	0	-	-	0

PROPRIETARY HISTORIC DATABASES

DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
Hist-Agriculture	0.0625	0	0	-	-	-	0
Hist-Auto Dealers	0.0625	0	0	-	-	-	0
Hist-Auto Repair	0.25	0	5	1	-	-	6
Hist-Chemical Manufacturing	0.0625	0	0	-	-	-	0
Hist-Chemical-Storage	0.0625	0	0	-	-	-	0
Hist-Cleaners	0.25	0	1	1	-	-	2
Hist-Convenience	0.0625	0	0	-	-	-	0
Hist-Disposal-Recycle	0.0625	0	0	-	-	-	0
Hist-Food-Processors	0.0625	0	0	-	-	-	0
Hist-Gun-Ranges	0.0625	0	0	-	-	-	0
Hist-Machine Shop	0.0625	0	0	-	-	-	0
Hist-Manufacturing	0.0625	0	0	-	-	-	0
Hist-Metal Plating	0.0625	0	0	-	-	-	0
Hist-Mining	0.0625	0	0	-	-	-	0
Hist-Mortuaries	0.0625	0	0	-	-	-	0
Hist-Oil-Gas	0.0625	0	0	-	-	-	0
Hist-OilGas-Refiners	0.0625	0	0	-	-	-	0
Hist-Other	0.0625	0	0	-	-	-	0
Hist-Paint-Stores	0.0625	0	0	-	-	-	0
Hist-Petroleum	0.0625	0	0	-	-	-	0
Hist-Post-Offices	0.0625	0	0	-	-	-	0

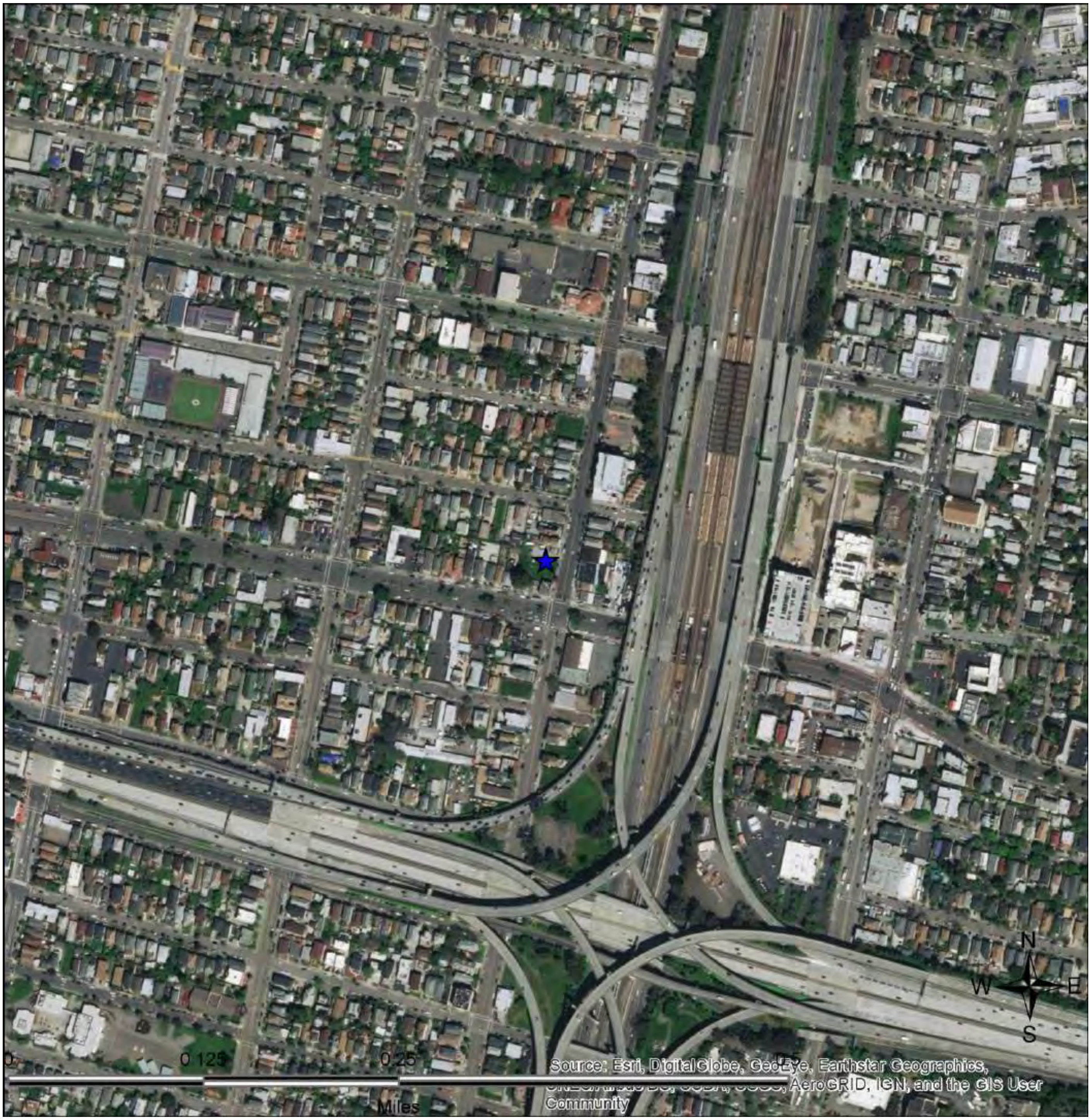
PROPRIETARY HISTORIC DATABASES							
DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
Hist-Printers	0.0625	0	1	-	-	-	1
Hist-Rental	0.0625	0	0	-	-	-	0
Hist-RV-Dealers	0.0625	0	0	-	-	-	0
Hist-Salvage	0.0625	0	0	-	-	-	0
Hist-Service Stations	0.25	0	5	0	-	-	5
Hist-Steel-Metals	0.0625	0	0	-	-	-	0
Hist-Textile	0.0625	0	0	-	-	-	0
Hist-Transportation	0.0625	0	0	-	-	-	0
Hist-Trucking	0.0625	0	0	-	-	-	0
Hist-Vehicle-Parts	0.0625	0	0	-	-	-	0
Hist-Vehicle-Washing	0.0625	0	1	-	-	-	1



SITE LOCATION TOPOGRAPHIC MAP

U.S. Geological Survey. Oakland West (2015-03-11) Quadrangle, 7.5 Minute Series

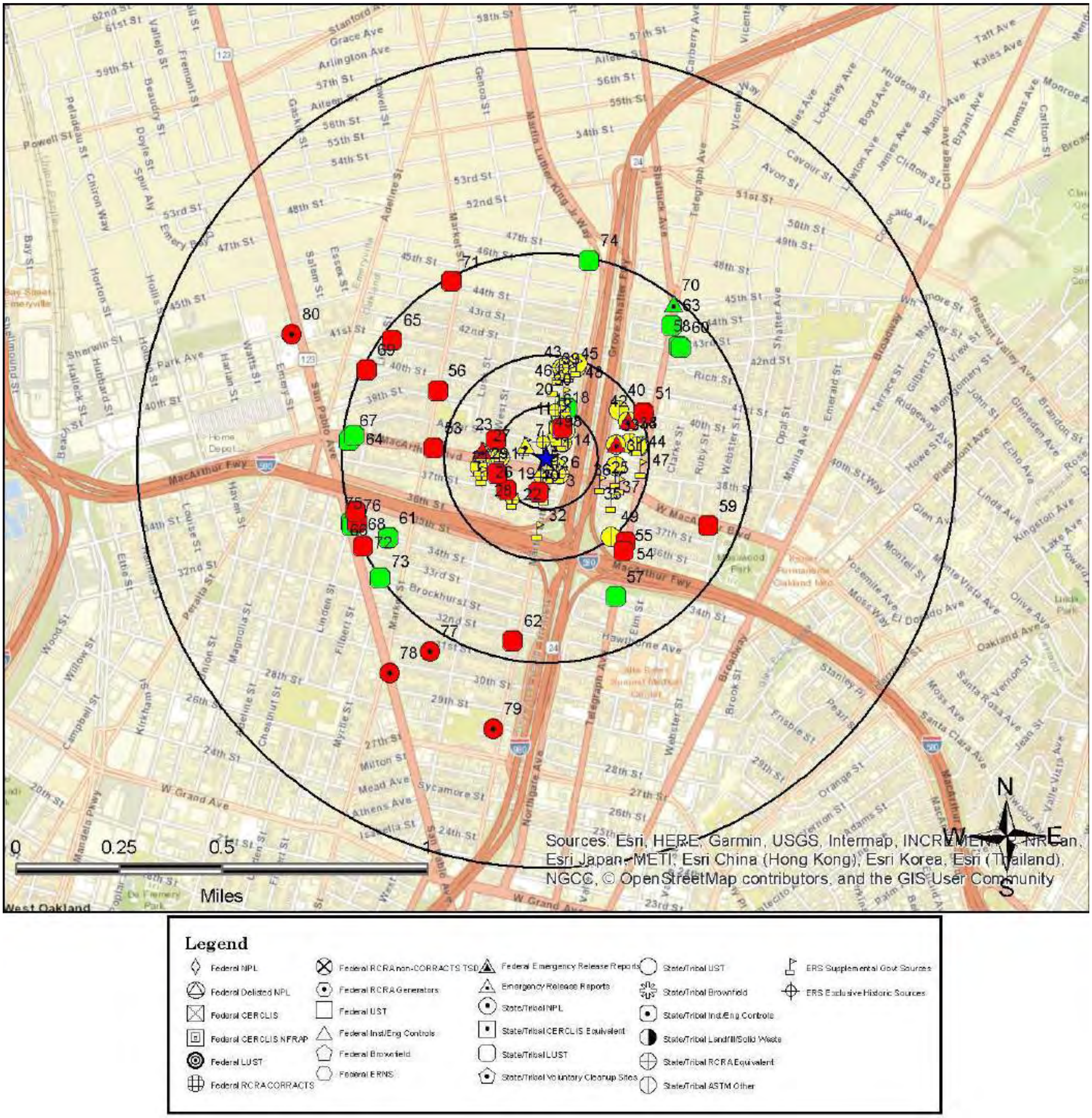
environmental service	3801-3807-3823-3829 Martin Luther King Jr. Way Oakland, CA 94609	FIGURE: JOB: DATE:	1 2019-017 8/1/2019



SITE LOCATION MAP

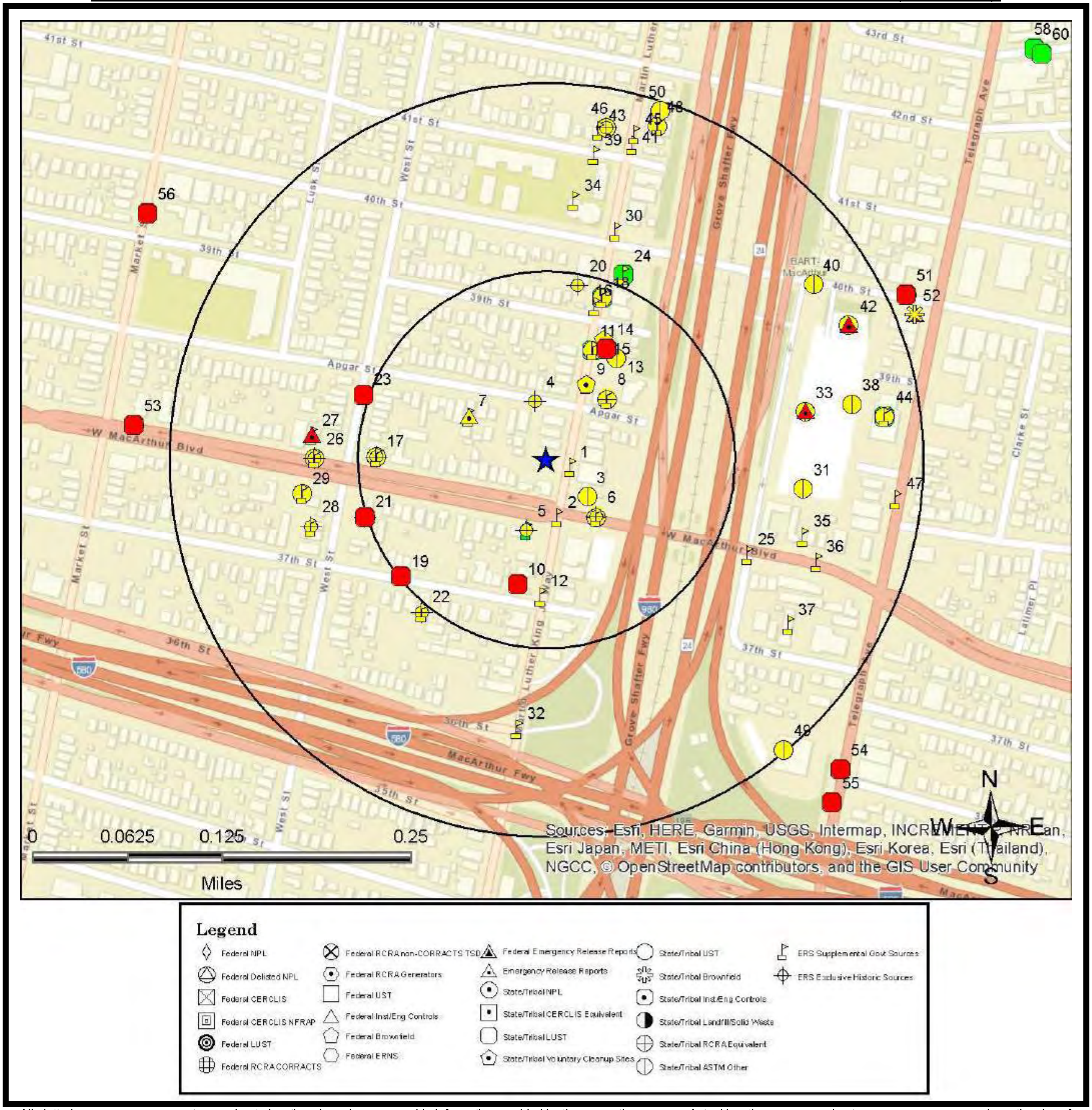
environmental service	3801-3807-3823-3829 Martin Luther King Jr. Way Oakland, CA 94609	FIGURE: JOB: DATE:	2 2019-017 8/1/2019

1-MILE RADIUS STREET MAP W/OCCURRENCES (MAP1)



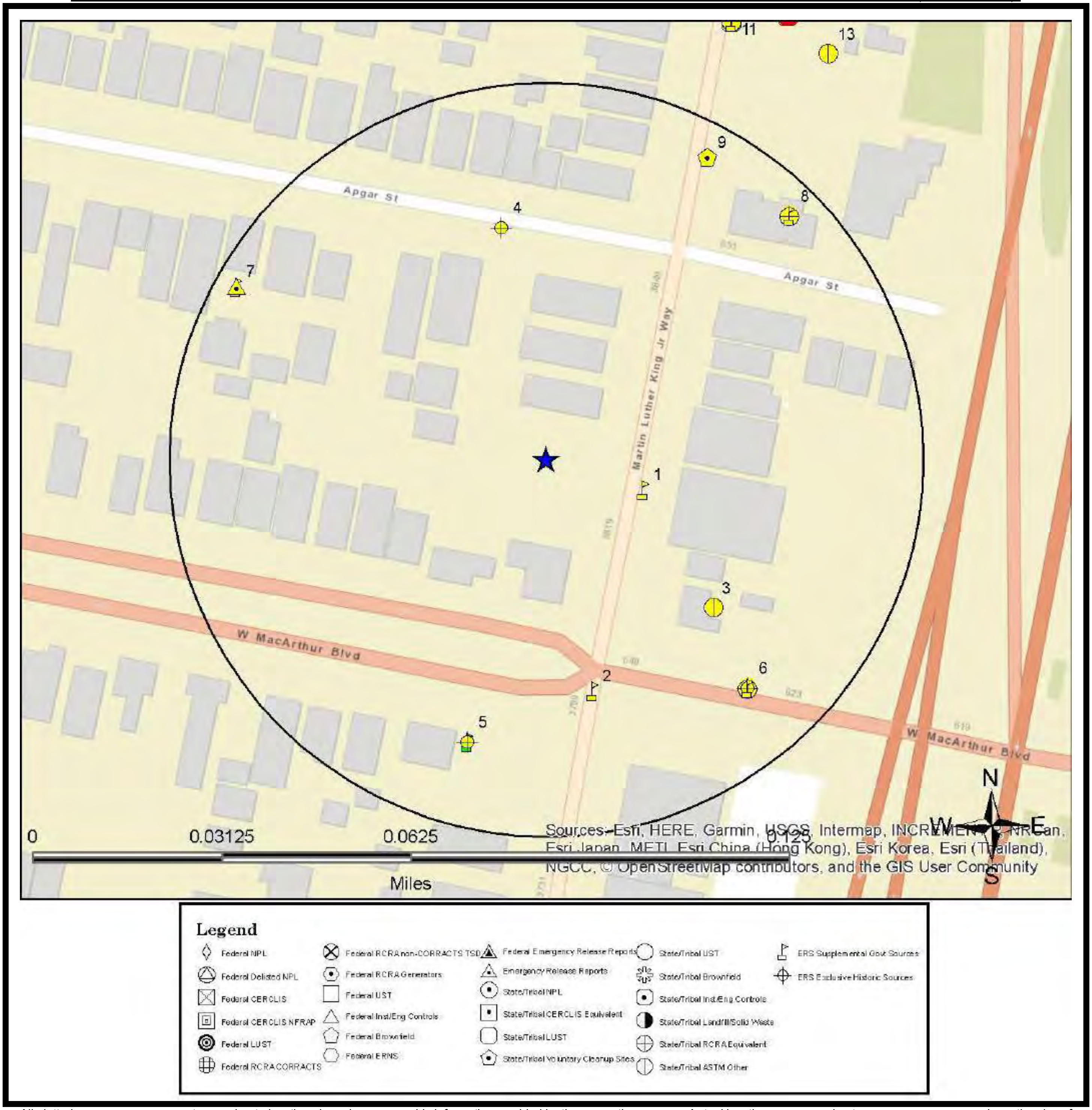
All plotted occurrences represent approximate locations based on geographic information provided by the respective agency. Actual locations may vary due to numerous reasons such as: the size of the property, accuracy of the provided location, accuracy of the software used to determine the location, etc. **Occurrences are shown in three colors** to give a visual indication of the potential risk of the listed occurrence based on the type of list and the current status of the occurrence. Occurrences shown in **RED** are locations with known contamination that have not received a "case closed" or "no further action" status. Occurrences shown in **YELLOW** have been listed by the respective agency, but do not always represent an environmental risk. The detailed status information and description of the listing should be reviewed for further information. Occurrences shown in **GREEN** are occurrences that have active permits or have had contamination in the past but have received a "case closed" or "no further action" status and therefore, do not likely present an environmental risk.

0.25-MILE RADIUS STREET MAP W/OCCURRENCES (MAP2)



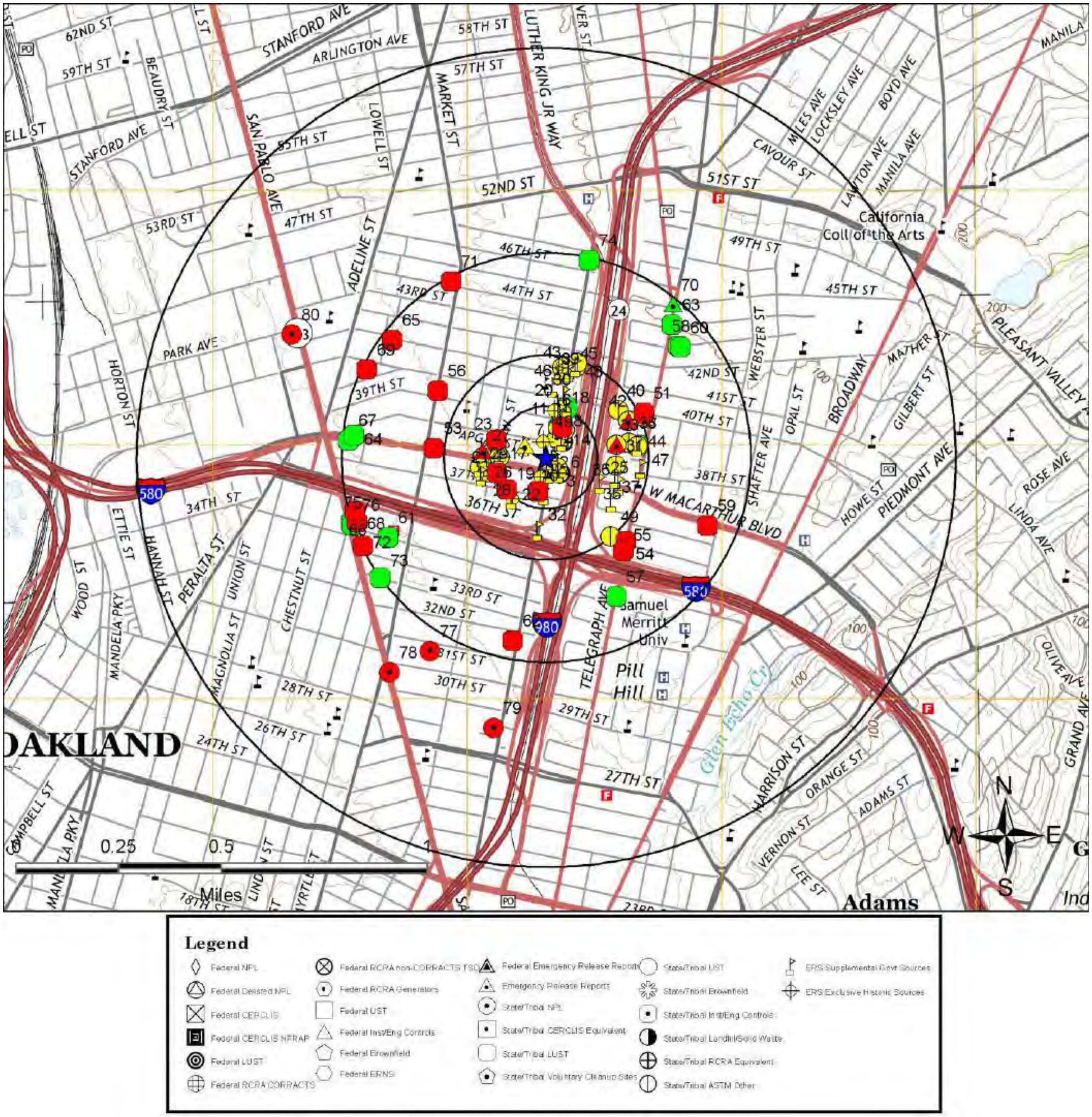
All plotted occurrences represent approximate locations based on geographic information provided by the respective agency. Actual locations may vary due to numerous reasons such as: the size of the property, accuracy of the provided location, accuracy of the software used to determine the location, etc. **Occurrences are shown in three colors** to give a visual indication of the potential risk of the listed occurrence based on the type of list and the current status of the occurrence. Occurrences shown in **RED** are locations with known contamination that have not received a "case closed" or "no further action" status. Occurrences shown in YELLOW have been listed by the respective agency, but do not always represent an environmental risk. The detailed status information and description of the listing should be reviewed for further information. Occurrences shown in **GREEN** are occurrences that have active permits or have had contamination in the past but have received a "case closed" or "no further action" status and therefore, do not likely present an environmental risk.

0.0625-MILE RADIUS STREET MAP W/ OCCURRENCES (MAP3)



All plotted occurrences represent approximate locations based on geographic information provided by the respective agency. Actual locations may vary due to numerous reasons such as: the size of the property, accuracy of the provided location, accuracy of the software used to determine the location, etc. **Occurrences are shown in three colors** to give a visual indication of the potential risk of the listed occurrence based on the type of list and the current status of the occurrence. Occurrences shown in **RED** are locations with known contamination that have not received a "case closed" or "no further action" status. Occurrences shown in YELLOW have been listed by the respective agency, but do not always represent an environmental risk. The detailed status information and description of the listing should be reviewed for further information. Occurrences shown in **GREEN** are occurrences that have active permits or have had contamination in the past but have received a "case closed" or "no further action" status and therefore, do not likely present an environmental risk.

1-MILE TOPOGRAPHIC MAP W/OCCURRENCES (MAP4)



All plotted occurrences represent approximate locations based on geographic information provided by the respective agency. Actual locations may vary due to numerous reasons such as: the size of the property, accuracy of the provided location, accuracy of the software used to determine the location, etc. **Occurrences are shown in three colors** to give a visual indication of the potential risk of the listed occurrence based on the type of list and the current status of the occurrence. Occurrences shown in **RED** are locations with known contamination that have not received a "case closed" or "no further action" status. Occurrences shown in **YELLOW** have been listed by the respective agency, but do not always represent an environmental risk. The detailed status information and description of the listing should be reviewed for further information. Occurrences shown in **GREEN** are occurrences that have active permits or have had contamination in the past but have received a "case closed" or "no further action" status and therefore, do not likely present an environmental risk.

AGENCY DIFFERENCES IN MAPPED LOCATIONS (MAP5)

Note: Occurrences on this map have agency provided coordinates which differ significantly from geocoded locations.

SUMMARY OF AGENCY DIFFERENCES

MAP ID	ID / SITE NAME	ADDRESS / DATABASE	AGENCY COORDINATES	DISTANCE (MILES)	DIRECTION
88	CA0000080309 HARRIS DRY CLEANERS	2801 MARTIN LUTHER KING JR. WAY CERCLIS-Archived-US	-122.26889, 37.83444	0.47	N
64	RO0000985-ALA-C BLAZIC INDUSTRIAL BALANCING	1016 MACARTHUR BLVD County-LUST-Closed-CA	-122.27805, 37.82874	0.49	W
66	RO0000006-ALA-C SHELL #13-9619	3420 SAN PABLO AVE County-LUST-Closed-CA	-122.27788, 37.8254	0.5	W
66	RO0000006-ALA SHELL #13-9619	3420 SAN PABLO AVE County-LUST-Open-CA	-122.27788, 37.8254	0.5	W
18	192596 BART PROPERTY	3924 MARTIN LUTHER KING JR CRSP-CA	-122.26794, 37.82956	0.15	NE
19	253549 RD MINER COMPANY	750 37TH ST CRSP-CA	-122.2704, 37.82688	0.08	SW
31	478710 MacArthur Transit Village Parcel B	515 APGAR STREET CRSP-CA	-122.26614, 37.82795	0.17	E
33	432973 MacArthur BART Parcels B-1 and B-2	3883 TURQUOISE WAY CRSP-CA	-122.26608, 37.82814	0.18	E
40	11053 BART MacArthur Substation (KMA)	555 40TH ST CRSP-CA	-122.267, 37.8294	0.17	NE
84	478709 MacArthur Station Parcels A & C1	39TH STREET AND TELEGRAPH AVENUE CRSP-CA	-122.26603, 37.82881	0.19	NE
19	T0600101123 RD MINER COMPANY	750 37TH ST ENF-CA	-122.2704, 37.82688	0.08	SW
9	01990026 LUCKY'S AUTO BODY	3860/3884 MARTIN LUTHER KING JR. WAY Eval-Hist-Other-CA	-122.26852, 37.82885	0.09	NE
18	T0600101979 BART PROPERTY	3924 MARTIN LUTHER KING JR LUST-Closed-CA	-122.26794, 37.82956	0.15	NE
19	T0600101123 RD MINER COMPANY	750 37TH ST LUST-Closed-CA	-122.2704, 37.82688	0.08	SW
57	T0600100952 SUMMIT MEDICAL CENTER	3420 TELEGRAPH LUST-Closed-CA	-122.26556, 37.82317	0.37	SE

MAP ID	ID / SITE NAME	ADDRESS / DATABASE	AGENCY COORDINATES	DISTANCE (MILES)	DIRECTION
63	T0600100790 KELLY AUTO PARTS	4400 TELEGRAPH LUST-Closed-CA	-122.26307, 37.8327	0.49	NE
71	T0600100430 ARCO	4401 MARKET LUST-Closed-CA	-122.27258, 37.83411	0.48	N
75	T0600101253 SHELL #13-9619	3420 SAN PABLO LUST-Closed-CA	-122.27782, 37.82593	0.48	W
76	T0600101365 THRIFTY OIL #49	3400 SAN PABLO LUST-Closed-CA	-122.27747, 37.82579	0.47	W
85	T0600101702 CITY OF OAKLAND FIRE STATION #5	934 34TH LUST-Closed-CA	-122.27604, 37.8251	0.41	SW
87	T0600101031 PACIFIC GALVANIZING CORPORATION	715 46TH LUST-Closed-CA	-122.26906, 37.83434	0.46	N
33	T10000011256 MacArthur BART Parcels B-1 and B-2	3883 Turquoise Way SLIC-Open-CA	-122.26608, 37.82814	0.18	E
86	T06019782176 PACIFIC GALVANIZING	715 46TH SLIC-Open-CA	-122.26908, 37.83433	0.46	N
82	758446 544 West MacArthur Blvd	544 MacArthur Boulevard Spills-SSO-CA	-122.26642, 37.82711	0.16	E
83	725592 RESIDENCE BACKYARD	101 ST JAMES DRIVE Avenue Spills-SSO-CA	-122.27111, 37.82556	0.18	SW
81	T0600100110 ARCO #4931	731 MACARTHUR BOULEVARD & WEST UST-Priority-CA	-122.27149, 37.82714	0.13	W

LISTED OCCURRENCE DETAILS

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Air-CA	Listed	0.19 miles E	72 ft (5 ft higher than site)	36
SITE NAME			MAPS	ID
BAY AREA RAPID TRANSIT			1, 2, 4	BAY AQMD-BA-22703
ADDRESS			CITY	ZIP
550 W MACARTHUR BLVD			OAKLAND	94609

DETAILS

Toxic Facility Information
Agency ID Desc: The first portion is the Air Quality District, the second portion is the County, the last is the Facility ID
Facility ID: 22703
Database Year: 2015
Air Basin: SF
County Code: 1
District Code: BA
District: BAY AREA AQMD
Facility SIC Code: 6512
COID: ALA
Prioritization Thresholds: Not Reported
Health Risk Assessment (HRA): Not Reported
Non-Cancer Chronic Hazard Index: Not Reported
Non-Cancer Acute Hazard Index: Not Reported
CHAPIS: Not Reported
CERR Code: Not Reported

Pollutant Information
TOG - Total Organic Gases (Tons/Yr): 0.002938613
ROG - Reactive Organic Gases (Tons/Yr): 0.002861003
CO - Carbon Monoxide (Tons/Yr): 0.008874001
NOx - Oxides of Nitrogen (Tons/Yr): 0.04081853
SOx - Oxides of Sulfur (Tons/Yr): 0.000018922
PM - Particulate Matter (Tons/Yr): 0.003038601
PM - Particulate Matter - 10 Micrometers or Smaller (Tons/Yr): 0.002917057

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Air-CA	Listed	0.23 miles N	80 ft (13 ft higher than site)	**43**

SITE NAME	MAPS	ID
DAWIT AUTO BODY	1, 2, 4	BAY AQMD-BA-22272

ADDRESS	CITY	ZIP
4101 MARTIN LUTHR KNG WAY	OAKLAND	94609

DETAILS

Toxic Facility Information
Agency ID Desc: The first portion is the Air Quality District, the second portion is the County, the last is the Facility ID
Facility ID: 22272
Database Year: 2015
Air Basin: SF
County Code: 1
District Code: BA
District: BAY AREA AQMD
Facility SIC Code: 7532
COID: ALA
Prioritization Thresholds: Not Reported
Health Risk Assessment (HRA): Not Reported
Non-Cancer Chronic Hazard Index: Not Reported
Non-Cancer Acute Hazard Index: Not Reported
CHAPIS: Not Reported
CERR Code: Not Reported

Pollutant Information
TOG - Total Organic Gases (Tons/Yr): 0.041821354
ROG - Reactive Organic Gases (Tons/Yr): 0.041821355
CO - Carbon Monoxide (Tons/Yr): Not Reported
NOx - Oxides of Nitrogen (Tons/Yr): Not Reported
SOx - Oxides of Sulfur (Tons/Yr): Not Reported
PM - Particulate Matter (Tons/Yr): Not Reported
PM - Particulate Matter - 10 Micrometers or Smaller (Tons/Yr): Not Reported

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Air-CA	Listed	0.24 miles N	81 ft (14 ft higher than site)	48

SITE NAME	MAPS	ID
LITHOGRAPH REPRODUCTIONS INC	1, 2, 4	BAY AQMD-BA-12569

ADDRESS	CITY	ZIP
4120 MARTIN LUTHR KNG, JR WAY	OAKLAND	94609

DETAILS

Toxic Facility Information
Agency ID Desc: The first portion is the Air Quality District, the second portion is the County, the last is the Facility ID
Facility ID: 12569
Database Year: 2015
Air Basin: SF
County Code: 1
District Code: BA
District: BAY AREA AQMD
Facility SIC Code: 2752
COID: ALA
Prioritization Thresholds: Not Reported
Health Risk Assessment (HRA): Not Reported
Non-Cancer Chronic Hazard Index: Not Reported
Non-Cancer Acute Hazard Index: Not Reported
CHAPIS: Not Reported
CERR Code: Not Reported

Pollutant Information
TOG - Total Organic Gases (Tons/Yr): 0.191608725
ROG - Reactive Organic Gases (Tons/Yr): 0.191608725
CO - Carbon Monoxide (Tons/Yr): Not Reported
NOx - Oxides of Nitrogen (Tons/Yr): Not Reported
SOx - Oxides of Sulfur (Tons/Yr): Not Reported
PM - Particulate Matter (Tons/Yr): Not Reported
PM - Particulate Matter - 10 Micrometers or Smaller (Tons/Yr): Not Reported

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
BF-MOA-CA	Listed	0.27 miles E	84 ft (17 ft higher than site)	**52**

SITE NAME	MAPS	ID
MacArthur BART Transit Village	1, 4	T10000000406

ADDRESS	CITY	ZIP
NONE 40TH STREET AND TELEGRAPH AVENUE (APNS 012-0969-053-03, 012-0968-055-01, 012-0967-049-01)	Oakland	94612

DETAILS

CMS Report URL:
https://geotracker.waterboards.ca.gov/csm_report?global_id=T10000000406
Global ID: T10000000406
County: Alameda
Project Type: Cleanup Program Site
Status: Open - Inactive
Status Date: 6/27/2018
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Last Correspondence Date: 6/10/2016
Release Type: Non-Point Source, Oil and Gas Operation, Unknown
Contaminant(s) of Concern: Diesel, Total Petroleum Hydrocarbons (TPH), Waste Oil / Motor / Hydraulic / Lubricating
Media of Concern: Indoor Air, Other Groundwater (uses other than drinking water), Soil Vapor
Past Use(s) that Caused Contamination: UNKNOWN
Human Health Exposure Controlled: YES
Human Health Exposure Controlled Date: 1/28/2009
Groundwater Migration Controlled: YES
Groundwater Migration Controlled Date: 2/6/2012
Primary Caseworker Name: MARK JOHNSON
Primary Caseworker Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Primary Caseworker Phone Number: 510-622-2493
Primary Caseworker Address: 1515 CLAY STREET, SUITE 1400, OAKLAND, CA
Primary Caseworker Email: mjohnson@waterboards.ca.gov
Agency Provided Longitude: -122.264742851257
Agency Provided Latitude: 37.8290735382453

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
BF-US	Listed	0.09 miles NE	73 ft (6 ft higher than site)	**15**

SITE NAME	MAPS	ID
Lucky's Auto Body Shop	1, 2, 4	60701

ADDRESS	CITY	ZIP
3860/3884 Martin Lurther King, Jr. Way	Oakland	94609

DETAILS

ACRES Property ID: 60701
Type of Funding: N/A
Local Property Number(s): 012-0968-031, 012-0968-030-01
Ownership Entity: Government
Current Owner: Lilly and Hillary Luckett, Oakland RDA
Did Ownership Change: N
SFLLP fact into the ownership: Not Reported
Property Latitude: 37.828848
Property Longitude: -122.26852
Horizontal Collection Method: Address Matching-House Number
Source Map Scale: 1:2400
Reference Point: Center of a Facility or Station
Horizontal Reference Datum: World Geodetic System of 1984
Description/History: The property consists of auto repair and car wash buildings, a parking lot and a vacant lot. The vacant lot is owned by Oakland Redevelopment Authority (RDA).
Past Use: Greenspace (arces): Not Reported
Past Use: Residential (arces): Not Reported
Past Use: Commercial (arces): .6
Past Use: Industrial (arces): Not Reported
Past Use: Multistory (arces): Not Reported
Future Use: Multistory (arces): Not Reported
Cleanup Required: Y
Cntmnt Fnd-Ctrl Sbstncs: Not Reported
Cntmnt Fnd-Petroleum: Y
Cntmnt Fnd-Asbestos: Not Reported
Cntmnt Fnd-Lead: Not Reported
Cntmnt Fnd-PAHs: Y
Cntmnt Fnd-PCBs: Not Reported
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CHMIRS-CA	Listed	0.06 miles NW	68 ft (1 ft higher than site)	7

SITE NAME	MAPS	ID
OAKLAND F.D.	1, 2, 3, 4	853256

ADDRESS	CITY	ZIP
699 APGAR ST.	OAKLAND	

DETAILS
Control#: 27115 Notified Date: 3/17/1993 7:00:00 AM Agency: OAKLAND F.D. 1# Substance: ANHYDROUS ETHER 1# Quantity: Not Reported 1# Measure: Not Reported 1# Type: CHEMICAL 1# Other: Not Reported 1# Pipeline: Not Reported 1# Vessel >= 300 Tons: Not Reported 2# Substance: Not Reported 2# Quantity: Not Reported 2# Measure: Not Reported 2# Type: Not Reported 2# Other: Not Reported 2# Pipeline: Not Reported 2# Vessel >= 300 Tons: Not Reported 3# Substance: Not Reported 3# Quantity: Not Reported 3# Measure: Not Reported 3# Type: Not Reported 3# Other: Not Reported 3# Pipeline: Not Reported 3# Vessel >= 300 Tons: Not Reported Description: FOUND LAYING ON GROUND NEXT TO A DUMPSTER AT THAT LOCATION. Contained: NO Water?: Not Reported More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Cleaners-CA	Listed	0.13 miles SW	59 ft (8 ft lower than site)	22

SITE NAME	MAPS	ID
Uni Clean	1, 2, 4	22827
ADDRESS	**CITY**	**ZIP**
705 37th St	Oakland	94609

DETAILS
Facility and Program Information County: Alameda Executive First Name: Harvey Executive Last Name: Fang Professional Title: Not Reported Executive Title: Site Manager Executive Gender: Male ZIP Four: 2331 Carrier Route: C022 Delivery Point Barcode: 58 Metro Area: Sn Francisco, CA Neighborhood: Longfellow Phone Number Combined: (510) 420-1711 Fax Number Combined: 5104201711 Toll Free Number Combined: 0 Website: Uniclean.Com Company Description: Not Reported Primary SIC Code: 721805 Primary SIC Description: Clean Room Facilities Primary SIC Ad Size: Not Reported Primary SIC Year Appeared: 2001 SIC Code 1: 721101 SIC Code 1 Description: Laundries SIC Code 1 Ad Size: Not Reported SIC Code 1 Year Appeared: Not Reported SIC Code 2: 721805 SIC Code 2 Description: Clean Room Facilities More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Cleaners-CA	Listed	0.13 miles W	64 ft (3 ft lower than site)	23

SITE NAME	MAPS	ID
R & R Wash	1, 2, 4	19882
ADDRESS	**CITY**	**ZIP**
3838 West St	Emeryville	94608

DETAILS
Facility and Program Information County: Alameda Executive First Name: Not Reported Executive Last Name: Not Reported Professional Title: Not Reported Executive Title: Not Reported Executive Gender: Not Reported ZIP Four: 3830 Carrier Route: C024 Delivery Point Barcode: 388 Metro Area: Sn Francisco, CA Neighborhood: Longfellow Phone Number Combined: (510) 658-1111 Fax Number Combined: 0 Toll Free Number Combined: 0 Website: Not Reported Company Description: Not Reported Primary SIC Code: 721501 Primary SIC Description: Laundries-Self Service Primary SIC Ad Size: Regular Primary SIC Year Appeared: 2011 SIC Code 1: 721501 SIC Code 1 Description: Laundries-Self Service SIC Code 1 Ad Size: Not Reported SIC Code 1 Year Appeared: Not Reported SIC Code 2: Not Reported SIC Code 2 Description: Not Reported More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Cleaners-CA	Listed	0.13 miles W	64 ft (3 ft lower than site)	23

SITE NAME	MAPS	ID
G & J Whirl & Twirl Laundry Mt	1, 2, 4	13439

ADDRESS	CITY	ZIP
3838 West St	Emeryville	94608

DETAILS

Facility and Program Information
County: Alameda
Executive First Name: Not Reported
Executive Last Name: Not Reported
Professional Title: Not Reported
Executive Title: Not Reported
Executive Gender: Not Reported
ZIP Four: 3830
Carrier Route: C024
Delivery Point Barcode: 388
Metro Area: Sn Francisco, CA
Neighborhood: Longfellow
Phone Number Combined: (510) 594-2468
Fax Number Combined: 0
Toll Free Number Combined: 0
Website: Not Reported
Company Description: Not Reported
Primary SIC Code: 721201
Primary SIC Description: Cleaners
Primary SIC Ad Size: Not Reported
Primary SIC Year Appeared: 2011
SIC Code 1: 721201
SIC Code 1 Description: Cleaners
SIC Code 1 Ad Size: Not Reported
SIC Code 1 Year Appeared: Not Reported
SIC Code 2: Not Reported
SIC Code 2 Description: Not Reported
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Cleaners-CA	Listed	0.16 miles W	59 ft (8 ft lower than site)	28

SITE NAME	MAPS	ID
Yupi Building Svc	1, 2, 4	24027

ADDRESS	CITY	ZIP
3715 West St	Oakland	94608

DETAILS
Facility and Program Information County: Alameda Executive First Name: Not Reported Executive Last Name: Not Reported Professional Title: Not Reported Executive Title: Not Reported Executive Gender: Not Reported ZIP Four: 3922 Carrier Route: C024 Delivery Point Barcode: 151 Metro Area: Sn Francisco, CA Neighborhood: Longfellow Phone Number Combined: (510) 923-9658 Fax Number Combined: 0 Toll Free Number Combined: 0 Website: Not Reported Company Description: Not Reported Primary SIC Code: 721201 Primary SIC Description: Cleaners Primary SIC Ad Size: Regular Primary SIC Year Appeared: 2010 SIC Code 1: 721201 SIC Code 1 Description: Cleaners SIC Code 1 Ad Size: Not Reported SIC Code 1 Year Appeared: Not Reported SIC Code 2: Not Reported SIC Code 2 Description: Not Reported More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-CA	Listed	0.29 miles SE	63 ft (4 ft lower than site)	55

SITE NAME	MAPS	ID
Not Reported by Agency	1, 4	RO0003090-ALA

ADDRESS	CITY	ZIP
0 TELEGRAPH AVE	OAKLAND	94612

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health Status Code: 11 Status: Case Transferred Record ID: RO0003090 Site ID: SD0003083 Global ID: T10000003437 Assigned Name: MAINSITE Agency Provided Longitude: -122.265785001 Agency Provided Latitude: 37.8243813028

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.12 miles SW	59 ft (8 ft lower than site)	19

SITE NAME	MAPS	ID
RD MINER COMPANY	1, 2, 4	RO0003064-ALA-C

ADDRESS	CITY	ZIP
750 37th ST	OAKLAND	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0003064 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 8/10/1987 Affected Media Description: Undetermined affected Agency Provided Latitude: 37.826487011 Agency Provided Longitude: -122.271039526 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.13 miles W	64 ft (3 ft lower than site)	23

SITE NAME	MAPS	ID
NEIGHBORHOOD LAUNDROMAT	1, 2, 4	RO0000242-ALA-C

ADDRESS	CITY	ZIP
3838 WEST ST	Oakland	94608

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL:
http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000242
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 10/15/1992
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8283420346
Agency Provided Longitude: -122.2712918244
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Case Closed

Organization Name: NA
Organization Type: Unknown
Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.14 miles NE	75 ft (8 ft higher than site)	24

SITE NAME	MAPS	ID
BART PROPERTY	1, 2, 4	RO0000650-ALA-C

ADDRESS	CITY	ZIP
3924 MARTIN LUTHER KING JR WAY	Oakland	94609

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL:
http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000650
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 8/18/1994
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8291995001
Agency Provided Longitude: -122.2683915441
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Case Closed

Organization Name: BART
Organization Type: Property/Fee Title Owner
Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.27 miles NE	84 ft (17 ft higher than site)	**51**

SITE NAME	MAPS	ID
SHELL #12-9452	1, 4	RO0000264-ALA-C

ADDRESS	CITY	ZIP
500 40TH ST	Oakland	94609

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL:
http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000264
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 1/2/1992
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8292875948
Agency Provided Longitude: -122.2645408709
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Case Closed

Organization Name: J CHAN & I WONG TRUST ETAL
Organization Type: Former Fee Title Owner
Status: Case Closed

Organization Name: NA
Organization Type: Property/Fee Title Owner
Status: Case Closed
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.38 miles SE	57 ft (10 ft lower than site)	57

SITE NAME	MAPS	ID
SUMMIT MEDICAL CENTER	1, 4	RO0000991-ALA-C

ADDRESS	CITY	ZIP
3420 TELEGRAPH AVE	Oakland	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000991 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 4/27/1993 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8227074884 Agency Provided Longitude: -122.266012574 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Case Closed Organization Name: SUMMIT MEDICAL CENTER Organization Type: Property/Fee Title Owner Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.43 miles NE	96 ft (29 ft higher than site)	58

SITE NAME	MAPS	ID
WALTER BLUMERT COMPANY	1, 4	RO0000272-ALA-C

ADDRESS	CITY	ZIP
490 43RD ST	Oakland	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000272 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 7/17/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8317366652 Agency Provided Longitude: -122.2633038007 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.43 miles NE	95 ft (28 ft higher than site)	60
SITE NAME			**MAPS**	**ID**
SIMPSON, RONN			1, 4	RO0000270-ALA-C
ADDRESS			**CITY**	**ZIP**
489 43RD ST			Oakland	94609

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL:
http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000270
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 9/19/1995
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8314707992
Agency Provided Longitude: -122.2631703955
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Case Closed

Organization Name: RONN SIMPSON
Organization Type: Property/Fee Title Owner
Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.43 miles SW	36 ft (31 ft lower than site)	61

SITE NAME	MAPS	ID
CITY OF OAKLAND FIRE STATION #5	1, 4	RO0001041-ALA-C

ADDRESS	CITY	ZIP
934 34TH ST	Oakland	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0001041 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 8/4/1993 Affected Media Description: Soil only affected Agency Provided Latitude: 37.825020631 Agency Provided Longitude: -122.2762894819 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.45 miles NE	99 ft (32 ft higher than site)	63

SITE NAME	MAPS	ID
KELLY AUTO PARTS	1, 4	RO0000881-ALA-C

ADDRESS	CITY	ZIP
4400 TELEGRAPH AVE	Oakland	94609

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL:
http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000881
Substance Code: 8052413
Substance Description: Stoddard solvent (Type 1, petroleum spirits)
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 12/22/1995
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8322910312
Agency Provided Longitude: -122.2634221324
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Case Closed

Organization Name: NA
Organization Type: Property/Fee Title Owner
Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.47 miles W	40 ft (27 ft lower than site)	64

SITE NAME	MAPS	ID
BLAZIC INDUSTRIAL BALANCING	1, 4	RO0000985-ALA-C

ADDRESS	CITY	ZIP
1016 MACARTHUR BLVD	Oakland	94608

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL:
http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000985
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 2/28/1994
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8287414123
Agency Provided Longitude: -122.2780483792
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Case Closed

Organization Name: BLAZIC INDUSTRIAL BALANCING
Organization Type: Property/Fee Title Owner
Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.47 miles NW	55 ft (12 ft lower than site)	65

SITE NAME	MAPS	ID
CALIFORNIA LINEN SUPPLY CO	1, 4	RO0000337-ALA-C

ADDRESS	CITY	ZIP
989 41ST ST	Oakland	94609

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL:
http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000337
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 10/13/1992
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8317987014
Agency Provided Longitude: -122.2761041516
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.48 miles W	36 ft (31 ft lower than site)	66

SITE NAME	MAPS	ID
SHELL #13-9619	1, 4	RO0000006-ALA-C

ADDRESS	CITY	ZIP
3420 SAN PABLO AVE	Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000006 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 7/20/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8253969933 Agency Provided Longitude: -122.2778826 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Case Closed Organization Name: PORTOLA VALLEY SHELL Organization Type: Property/Fee Title Owner Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.48 miles W	39 ft (28 ft lower than site)	67

SITE NAME	MAPS	ID
SCOTT PROPERTY	1, 4	RO0002594-ALA-C

ADDRESS	CITY	ZIP
1043 MACARTHUR BLVD	EMERYVILLE	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0002594 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 10/28/2003 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.828266126 Agency Provided Longitude: -122.2786947279 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Case Closed Organization Name: RALPH SCOTT Organization Type: Property/Fee Title Owner Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.49 miles W	35 ft (32 ft lower than site)	68

SITE NAME	MAPS	ID
THRIFTY OIL #49	1, 4	RO0000004-ALA-C

ADDRESS	CITY	ZIP
3400 SAN PABLO AVE	Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000004 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 4/28/1994 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8252922125 Agency Provided Longitude: -122.2778500658 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.49 miles NW	50 ft (17 ft lower than site)	69
SITE NAME			**MAPS**	**ID**
FIDELITY ROOF COMPANY			1, 4	RO0000186-ALA-C
ADDRESS			**CITY**	**ZIP**
1075 40TH ST			Oakland	94608

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL:
http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000186
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 12/19/1995
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8311278238
Agency Provided Longitude: -122.2778659894
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.49 miles NW	75 ft (8 ft higher than site)	71

SITE NAME	MAPS	ID
ARCO	1, 4	RO0000132-ALA-C

ADDRESS	CITY	ZIP
4401 MARKET ST	Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000132 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 4/9/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8338013592 Agency Provided Longitude: -122.273305432 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.5 miles SW	34 ft (33 ft lower than site)	73

SITE NAME	MAPS	ID
LOOMIS ARMORED INC	1, 4	RO0001099-ALA-C

ADDRESS	CITY	ZIP
936 BROCKHURST ST	Oakland	94608

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL:
http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0001099
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 3/4/1992
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8235434604
Agency Provided Longitude: -122.2763812268
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Case Closed

Organization Name: LOOMIS ARMORED INC
Organization Type: Property/Fee Title Owner
Status: Case Closed

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.08 miles S	65 ft (2 ft lower than site)	10

SITE NAME	MAPS	ID
J&H AUTO REPAIR AND GAS STATION	1, 2, 4	RO0002910-ALA

ADDRESS	CITY	ZIP
3701 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL:
http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0002910
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 4/10/2006
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8263490206
Agency Provided Longitude: -122.2694669997
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Preliminary Site Assessment Underway

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Pollution Characterization

Organization Name: RWQCB
Organization Type: Not Applicable
Status: Pollution Characterization
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.09 miles NE	73 ft (6 ft higher than site)	14

SITE NAME	MAPS	ID
GROVE STREET WASH RACK	1, 2, 4	RO0000027-ALA

ADDRESS	CITY	ZIP
3884 MARTIN LUTHER KING JR WAY	Oakland	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000027 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 1/6/1995 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8287492148 Agency Provided Longitude: -122.2685048925 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.12 miles SW	59 ft (8 ft lower than site)	**19**
SITE NAME			**MAPS**	**ID**
RD MINER COMPANY			1, 2, 4	RO0003064-ALA
ADDRESS			**CITY**	**ZIP**
750 37th ST			OAKLAND	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0003064 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 8/10/1987 Affected Media Description: Undetermined affected Agency Provided Latitude: 37.826487011 Agency Provided Longitude: -122.271039526 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
ARCO #04931	1, 2, 4	RO0000076-ALA

ADDRESS	CITY	ZIP
731 MACARTHUR BLVD	Oakland	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000076 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 4/8/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8272547612 Agency Provided Longitude: -122.2705040618 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Verification Monitoring Underway Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.13 miles W	64 ft (3 ft lower than site)	**23**
SITE NAME			**MAPS**	**ID**
NEIGHBORHOOD LAUNDROMAT			1, 2, 4	RO0000242-ALA
ADDRESS			**CITY**	**ZIP**
3838 WEST ST			Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000242 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 10/15/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8283420346 Agency Provided Longitude: -122.2712918244 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Underway Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: NA Organization Type: Unknown Status: Preliminary Site Assessment Underway More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.27 miles NE	84 ft (17 ft higher than site)	51
SITE NAME			MAPS	ID
SHELL #12-9452			1, 4	RO0000264-ALA
ADDRESS			CITY	ZIP
500 40TH ST			Oakland	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000264 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 1/2/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8292875948 Agency Provided Longitude: -122.2645408709 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization Organization Name: J CHAN & I WONG TRUST ETAL Organization Type: Former Fee Title Owner Status: Pollution Characterization More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.27 miles W	52 ft (15 ft lower than site)	53
SITE NAME			MAPS	ID
CHEVRON #9-2029			1, 4	RO0002438-ALA
ADDRESS			CITY	ZIP
890 MACARTHUR BLVD			OAKLAND	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0002438 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 8/28/2001 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8281256157 Agency Provided Longitude: -122.2742325124 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Underway Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Workplan Submitted More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.29 miles SE	63 ft (4 ft lower than site)	55

SITE NAME	MAPS	ID
CALTRANS TELEGRAPH & HWY 24	1, 4	RO0003090-ALA

ADDRESS	CITY	ZIP
0 TELEGRAPH AVE	OAKLAND	94612

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0003090 Substance Code: 12034 Substance Description: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4 Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 9/8/2010 Affected Media Description: Undetermined affected Agency Provided Latitude: 37.8243813028 Agency Provided Longitude: -122.265785001 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: RWQCB Organization Type: Not Applicable Status: Leak Confirmation

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.31 miles NW	60 ft (7 ft lower than site)	56
SITE NAME			MAPS	ID
SAN FRANCISCO FRENCH BREAD			1, 4	RO0000490-ALA
ADDRESS			CITY	ZIP
3924 MARKET ST			Oakland	94607

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000490 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 10/15/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8300648333 Agency Provided Longitude: -122.273897809 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Remedial Action Underway More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.43 miles SE	74 ft (7 ft higher than site)	59

SITE NAME	MAPS	ID
UNOCAL #3538	1, 4	RO0000251-ALA

ADDRESS	CITY	ZIP
411 MACARTHUR BLVD	Oakland	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000251 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 3/9/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8251864229 Agency Provided Longitude: -122.2620133245 Organization Name: 411 W MACARTHUR LLC Organization Type: Property/Fee Title Owner Status: Preliminary Site Assessment Underway Organization Name: 411 W MACARTHUR LLC Organization Type: Property/Fee Title Owner Status: Leak Confirmation Organization Name: 411 W MACARTHUR LLC Organization Type: Property/Fee Title Owner Status: Pollution Characterization More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.45 miles S	47 ft (20 ft lower than site)	62

SITE NAME	MAPS	ID
TONG PROPERTY	1, 4	RO0003054-ALA

ADDRESS	CITY	ZIP
3133 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0003054 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 1/25/1996 Affected Media Description: Undetermined affected Agency Provided Latitude: 37.820929047 Agency Provided Longitude: -122.270824007 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization Organization Name: NA Organization Type: Unknown Status: Leak Confirmation More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.47 miles NW	55 ft (12 ft lower than site)	65

SITE NAME	MAPS	ID
CALIFORNIA LINEN SUPPLY CO	1, 4	RO0000337-ALA

ADDRESS	CITY	ZIP
989 41ST ST	Oakland	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000337 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 10/13/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8317987014 Agency Provided Longitude: -122.2761041516 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Workplan Submitted Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Remedial Action Underway Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Underway More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.48 miles W	36 ft (31 ft lower than site)	66

SITE NAME	MAPS	ID
SHELL #13-9619	1, 4	RO0000006-ALA

ADDRESS	CITY	ZIP
3420 SAN PABLO AVE	Oakland	94608

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL:
http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000006
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 7/20/1992
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8253969933
Agency Provided Longitude: -122.2778826
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Pollution Characterization

Organization Name: PORTOLA VALLEY SHELL
Organization Type: Property/Fee Title Owner
Status: Pollution Characterization

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.49 miles W	35 ft (32 ft lower than site)	68

SITE NAME	MAPS	ID
THRIFTY OIL #49	1, 4	RO0000004-ALA

ADDRESS	CITY	ZIP
3400 SAN PABLO AVE	Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000004 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 4/28/1994 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8252922125 Agency Provided Longitude: -122.2778500658 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Remediation Plan

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.49 miles NW	50 ft (17 ft lower than site)	69
SITE NAME			**MAPS**	**ID**
FIDELITY ROOF COMPANY			1, 4	RO0000186-ALA
ADDRESS			**CITY**	**ZIP**
1075 40TH ST			Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000186 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 12/19/1995 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8311278238 Agency Provided Longitude: -122.2778659894 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Underway Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Remediation Plan Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.49 miles NW	75 ft (8 ft higher than site)	71

SITE NAME	MAPS	ID
ARCO	1, 4	RO0000132-ALA

ADDRESS	CITY	ZIP
4401 MARKET ST	Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000132 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 4/9/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8338013592 Agency Provided Longitude: -122.273305432 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Underway Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.49 miles SW	34 ft (33 ft lower than site)	72

SITE NAME	MAPS	ID
FG GASOLINE	1, 4	RO0000131-ALA

ADDRESS	CITY	ZIP
3314 SAN PABLO AVE	Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000131 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 3/6/1996 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8246392542 Agency Provided Longitude: -122.2776329366 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Workplan Submitted Organization Name: FG GASOLINE Organization Type: Property/Fee Title Owner Status: Leak Confirmation More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-UST-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
MOBIL	1, 2, 4	FA0321486-ALA

ADDRESS	CITY	ZIP
731 W MacArthur Blvd	Oakland	

DETAILS
County: Alameda Responsible Agency: Alameda County Department of Environmental Health Facility ID: FA0321486 Description: UNDERGROUND STORAGE TANK 4 CONTAINERS Program Element Code: 4104 Stat: 01 Current Inspection Date: 11/28/2018 Last Inspection: 11/21/2017 Owner ID: OW0324594 Owner Name: Abdulrahim Alazani

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.03 miles SE	68 ft (1 ft higher than site)	3
SITE NAME			MAPS	ID
Hk auto care			1, 2, 3, 4	436330
ADDRESS			CITY	ZIP
3806 MARTIN LUTHER KING JR WAY			OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 436330 Site EI ID: 10760800 Agency Provided Latitude: 37.82734 Agency Provided Longitude: -122.26872 Program Description: Chemical Storage Facilities Program Description: Hazardous Waste Generator Program Description: Hazardous Waste Onsite Treatment Evaluation Information Evaluation Date: 10/11/2018 Violations Found? (Y/N): Yes Evaluation General Type: Compliance Evaluation Inspection Evaluation Type: Routine done by local agency Evaluation Note(s): ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH (ACDEH) ON SITE FOR HAZARDOUS WASTE GENERATOR (HWG) INSPECTION. ESCORTED BY HUI CHON SHIN, THE OWNER ALL VIOLATIONS NOTED IN THE INSPECTION REPORT SHALL BE CORRECTED BY NOVEMBER 10, 2018 AND ANY VERIFICATION DOCUMENTATION SUBMITTED WITHIN THE SAME TIME FRAME THE FACILITY HAS 1 EMPLOYEE THAT HANDLES HAZARDOUS WASTE AFTER REVIEWING THE GENERATOR'S DISPOSAL RECORDS AND BUSINESS OPERATIONS, IT WAS OBSERVED THE FACILITY IS A SMALL QUANTITY HAZARDOUS WASTE GENERATOR WHO GENERATES MORE THAN 100 KG, BUT LESS THAN 1000 KG OF HAZARDOUS WASTE PER MONTH Evaluation Division: Alameda County Environmental Health Evaluation Program: HW Evaluation Source: CERS Evaluation Date: 10/11/2018 Violations Found? (Y/N): No Evaluation General Type: Compliance Evaluation Inspection Evaluation Type: Routine done by local agency More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.08 miles S	65 ft (2 ft lower than site)	10

SITE NAME	MAPS	ID
J&H AUTO REPAIR AND GAS STATION	1, 2, 4	228758

ADDRESS	CITY	ZIP
3701 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 228758 Site EI ID: T06019709592 Agency Provided Latitude: 37.82648 Agency Provided Longitude: -122.269506 Program Description: Leaking Underground Storage Tank Cleanup Site   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.08 miles NE	72 ft (5 ft higher than site)	11

SITE NAME	MAPS	ID
GROVE STREET WASH RACK	1, 2, 4	197852

ADDRESS	CITY	ZIP
3884 MARTIN LUTHER KING JR	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 197852 Site EI ID: T0600102106 Agency Provided Latitude: 37.828802 Agency Provided Longitude: -122.268433 Program Description: Leaking Underground Storage Tank Cleanup Site   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.09 miles NE	72 ft (5 ft higher than site)	13
SITE NAME			MAPS	ID
Verizon Wireless Mosswood			1, 2, 4	435238
ADDRESS			CITY	ZIP
3860 MARTIN LUTHER KING JR WAY			OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 435238 Site EI ID: 10671082 Agency Provided Latitude: 37.828506 Agency Provided Longitude: -122.268394 Program Description: Chemical Storage Facilities   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information Program ID: 10671082 ENV INT Type Code: HMBP Coordinate Name: Not Reported Reference Point Type Description: Center of a facility or station. Agency Provided Latitude: 37.828680 Agency Provided Longitude: -122.268350   More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.11 miles W	61 ft (6 ft lower than site)	17

SITE NAME	MAPS	ID
INSTA LUBE	1, 2, 4	436566

ADDRESS	CITY	ZIP
736 W MACARTHUR BLVD	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 436566 Site EI ID: 10761115 Agency Provided Latitude: 37.82774 Agency Provided Longitude: -122.27128 Program Description: Chemical Storage Facilities Program Description: Hazardous Waste Generator   Evaluation Information Evaluation Date: 5/17/2018 Violations Found? (Y/N): Yes Evaluation General Type: Compliance Evaluation Inspection Evaluation Type: Routine done by local agency Evaluation Note(s): ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH (ACDEH) ON SITE FOR HAZARDOUS MATERIALS BUSINESS PLAN INSPECTION. ESCORTED BY JOHNNY TRUONG, THE OWNER. ALL VIOLATIONS NOTED IN THE INSPECTION REPORT SHALL BE CORRECTED BY JUNE 16, 2018 AND ANY VERIFICATION DOCUMENTATION SUBMITTED WITHIN THE SAME TIME FRAME. PLEASE VERIFY THE LARGEST CONTAINER QUANTITY FOR THE ATF AND THE MAX DAILY AMOUNT FOR THE MOTOR OIL. Evaluation Division: Alameda County Environmental Health Evaluation Program: HMRRP Evaluation Source: CERS Evaluation Date: 5/17/2018 Violations Found? (Y/N): Yes Evaluation General Type: Compliance Evaluation Inspection Evaluation Type: Routine done by local agency Evaluation Note(s): ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH (ACDEH) ON SITE FOR HAZARDOUS WASTE GENERATOR (HWG) INSPECTION. ESCORTED BY JOHNNY TRUONG, THE OWNER. ALL VIOLATIONS NOTED IN THE INSPECTION REPORT SHALL BE CORRECTED BY JUNE 16, 2018 AND ANY VERIFICATION DOCUMENTATION SUBMITTED WITHIN THE SAME TIME FRAME. THE FACILITY HAS 3 EMPLOYEES THAT HANDLE HAZARDOUS WASTE. THE FACILITY HAS A 500 GALLON SINGLE WALLED USED OIL TANK IN THE BASEMENT OF THE FACILITY. IF A RELEASE WERE TO OCCUR THE BASEMENT CAN PROVIDE SECONDARY CONTAINMENT. AFTER REVIEWING THE GENERATOR'S DISPOSAL RECORDS AND BUSINESS OPERATIONS, IT WAS OBSERVED THE FACILITY IS A LARGE QUANTITY HAZARDOUS WASTE GENERATOR WHO GENERATES MORE THAN 1000 KG OF HAZARDOUS WASTE PER MONTH. Evaluation Division: Alameda County Environmental Health More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.12 miles N	74 ft (7 ft higher than site)	18

SITE NAME	MAPS	ID
BART PROPERTY	1, 2, 4	192596

ADDRESS	CITY	ZIP
3924 MARTIN LUTHER KING JR	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 192596 Site EI ID: T0600101979 Agency Provided Latitude: 37.829561 Agency Provided Longitude: -122.267942 Program Description: Leaking Underground Storage Tank Cleanup Site   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.12 miles SW	59 ft (8 ft lower than site)	19

SITE NAME	MAPS	ID
RD MINER COMPANY	1, 2, 4	253549

ADDRESS	CITY	ZIP
750 37TH ST	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 253549 Site EI ID: T0600101123 Agency Provided Latitude: 37.826885 Agency Provided Longitude: -122.270401 Program Description: Leaking Underground Storage Tank Cleanup Site   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
Mobil	1, 2, 4	85423

ADDRESS	CITY	ZIP
731 W MACARTHUR BLVD	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 85423 Site EI ID: 10510504 Agency Provided Latitude: 37.827168 Agency Provided Longitude: -122.271423 Program Description: Chemical Storage Facilities Program Description: Hazardous Waste Generator Program Description: Underground Storage Tank Evaluation Information Evaluation Date: 11/28/2018 Violations Found? (Y/N): Yes Evaluation General Type: Compliance Evaluation Inspection Evaluation Type: Routine done by local agency Evaluation Note(s): ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH (ACDEH) ON SITE FOR HAZARDOUS MATERIALS BUSINESS PLAN (HMBP) INSPECTION. ESCORTED BY SALAM ALAZANI, THE MANAGER. ALL VIOLATIONS NOTED IN THE INSPECTION REPORT SHALL BE CORRECTED BY DECEMBER 28, 2018 AND ANY VERIFICATION DOCUMENTATION SUBMITTED WITHIN THE SAME TIME FRAME. Evaluation Division: Alameda County Environmental Health Evaluation Program: HMRRP Evaluation Source: CERS Evaluation Date: 11/28/2018 Violations Found? (Y/N): Yes Evaluation General Type: Compliance Evaluation Inspection Evaluation Type: Routine done by local agency More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	21
SITE NAME			**MAPS**	**ID**
ARCO #04931			1, 2, 4	209625
ADDRESS			**CITY**	**ZIP**
731 W MACARTHUR BLVD			OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 209625 Site EI ID: T0600100110 Agency Provided Latitude: 37.82714 Agency Provided Longitude: -122.271487 Program Description: Leaking Underground Storage Tank Cleanup Site   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.13 miles W	64 ft (3 ft lower than site)	23
SITE NAME			**MAPS**	**ID**
NEIGHBORHOOD LAUNDROMAT			1, 2, 4	221809
ADDRESS			**CITY**	**ZIP**
3838 WEST			OAKLAND	94608

DETAILS
Site Regulated Program Information Site ID: 221809 Site EI ID: T0600101597 Agency Provided Latitude: 37.828405 Agency Provided Longitude: -122.271435 Program Description: Leaking Underground Storage Tank Cleanup Site Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.15 miles W	59 ft (8 ft lower than site)	26
SITE NAME			MAPS	ID
Big O Tire #83			1, 2, 4	366725
ADDRESS			CITY	ZIP
810 W MACARTHUR BLVD			OAKLAND	94608

DETAILS
Site Regulated Program Information Site ID: 366725 Site EI ID: 10666153 Agency Provided Latitude: 37.827748 Agency Provided Longitude: -122.272073 Program Description: Chemical Storage Facilities Program Description: Hazardous Waste Generator Evaluation Information Evaluation Date: 6/2/2017 Violations Found? (Y/N): Yes Evaluation General Type: Compliance Evaluation Inspection Evaluation Type: Routine done by local agency Evaluation Note(s): Routine Hazardous Materials Business Plan (HMBP) inspection of Big O Tires #83 located at 810 W Macarthur Blvd, Oakland, CA 94608 on June 2, 2017. Facility walk-through conducted with Bill Hughes, Manager; and Ed Ferrell, Manager/Sales/Service. Email inspection reports to Bill Hughes (bill.hughes@bigo.com); Ed Ferrell (ed.ferrell@bigo.com). This facility is a tire dealer (repair and replace tires on passenger cars and trucks) with auto repair (e.g. oil / coolant changes, batteries). Hazardous substances handled at this facility include: new and used oil, new and used coolant / antifreeze, used oily absorbents, used metal and cartridge-type oil / gas filters, universal waste (fluorescent tubes, aerosol cans). All violations noted in this Hazardous Materials Business Plan (HMBP) inspection report are to be corrected within THIRTY (30) days and proof of those corrections submitted to this office in the same time frame. Evaluation Division: Alameda County Environmental Health Evaluation Program: HMRRP Evaluation Source: CERS Evaluation Date: 6/2/2017 Violations Found? (Y/N): Yes Evaluation General Type: Compliance Evaluation Inspection Evaluation Type: Routine done by local agency Evaluation Note(s): Routine Hazardous Waste Generator (HWG) inspection of Big O Tires #83 located at 810 W Macarthur Blvd, Oakland, CA 94608 on June 2, 2017. Facility walk-through conducted with Bill Hughes, Manager; and Ed Ferrell, Manager/Sales/Service. Email inspection reports to Bill Hughes (bill.hughes@bigo.com); Ed Ferrell (ed.ferrell@bigo.com). This facility is a tire dealer (repair and replace tires on passenger cars and trucks) with auto repair (e.g. oil / coolant changes, batteries). Hazardous waste produced at this facility include: used oil, used coolant / antifreeze, used oily absorbents, used metal and cartridge-type oil / gas filters, universal waste (fluorescent tubes, aerosol cans). Facility has approximately eight (8) hazardous-waste handling employees. All violations noted in this Hazardous Waste Generator (HWG) inspection report are to be corrected within THIRTY (30) days and proof of those corrections submitted to this office in the same time [Truncated] Evaluation Division: Alameda County Environmental Health More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.16 miles W	60 ft (7 ft lower than site)	29

SITE NAME	MAPS	ID
automechs	1, 2, 4	441008

ADDRESS	CITY	ZIP
801 W MACARTHUR BLVD	OAKLAND	94608

DETAILS
Site Regulated Program Information Site ID: 441008 Site EI ID: 10768441 Agency Provided Latitude: 37.82739 Agency Provided Longitude: -122.27218 Program Description: Chemical Storage Facilities Program Description: Hazardous Waste Generator Evaluation Information Evaluation Date: 9/7/2018 Violations Found? (Y/N): Yes Evaluation General Type: Other/Unknown Evaluation Type: Other, not routine, done by local agency Evaluation Note(s): GENERATE NOV LTR/ADDING VIOLATION IN EC Evaluation Division: Alameda County Environmental Health Evaluation Program: HMRRP Evaluation Source: CERS Violation Information Violation Date: 9/7/2018 Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2 Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date. Violation Note(s): Returned to compliance on 09/25/2018. More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.17 miles E	70 ft (3 ft higher than site)	31

SITE NAME	MAPS	ID
MacArthur Transit Village Parcel B	1, 2, 4	478710

ADDRESS	CITY	ZIP
515 APGAR STREET	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 478710 Site EI ID: 854143 Agency Provided Latitude: 37.82795 Agency Provided Longitude: -122.26614 Program Description: Construction Storm Water   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.18 miles E	70 ft (3 ft higher than site)	33

SITE NAME	MAPS	ID
MacArthur BART Parcels B-1 and B-2	1, 2, 4	432973

ADDRESS	CITY	ZIP
3883 TURQUOISE WAY	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 432973 Site EI ID: T10000011256 Agency Provided Latitude: 37.82814 Agency Provided Longitude: -122.26608 Program Description: Cleanup Program Site   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.21 miles E	70 ft (3 ft higher than site)	38

SITE NAME	MAPS	ID
MacArthur Transit Village Parcel B	1, 2, 4	509952

ADDRESS	CITY	ZIP
MACARTUR TRANSIT VILLAGE	OAKLAND	94588

DETAILS
Site Regulated Program Information Site ID: 509952 Site EI ID: 863514 Agency Provided Latitude: 37.82821 Agency Provided Longitude: -122.26551 Program Description: Construction Storm Water   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.22 miles NE	81 ft (14 ft higher than site)	40
SITE NAME			MAPS	ID
BART MacArthur Substation (KMA)			1, 2, 4	11053
ADDRESS			CITY	ZIP
555 40TH ST			OAKLAND	94609

DETAILS

Site Regulated Program Information
Site ID: 11053
Site EI ID: 10343473
Agency Provided Latitude: 37.8294
Agency Provided Longitude: -122.267

Program Description: Chemical Storage Facilities

Evaluation Information
Evaluation Date: 5/1/2017
Violations Found? (Y/N): Yes
Evaluation General Type: Compliance Evaluation Inspection
Evaluation Type: Routine done by local agency
Evaluation Note(s): Routine hazardous materials business plan (HMBP) inspection of BART MacArthur Substation (KMA) located at 550 40th Street, Oakland CA 94609. ACDEH Inspectors Kevin Hom and Antoinette Stetzenmeyer conducted the inspection. Facility walk through conducted with Aaron Meeks, Safety Specialist, and Jonathan Rossen, Manager of Employee/Patron Safety. Email inspection reports to: ameeks@bart.gov; jrossen@bart.gov. Facility inventory confirmed on site. CERTIFICATION OF RETURN TO COMPLIANCE I certify that the violation(s) noted in this HMBP inspection report have been corrected for BART MacArthur Substation (KMA) located at 550 40th Street, Oakland CA 94609 . I have personally examined any documentation attached to the certification to establish that the violations have been corrected. PRINT:____________________________________ SIGN:____________________________________ TITLE:____________________________________ DATE:____________________________________
Evaluation Division: Alameda County Environmental Health
Evaluation Program: HMRRP
Evaluation Source: CERS

Violation Information
Violation Date: 5/1/2017
Citation: HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description: Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.

Violation Note(s): Returned to compliance on 08/11/2017. OBSERVATION: 1. Ruptured 5 gallon container of floor sealer spilling to ground observed in Room 102B where transformers are stored. All containers must be kept in good condition and stored in a manner to prevent rupture, leaking or structural deterioration. All spills must be promptly addressed to prevent discharge to air, soil, or surface water. 2. Fire extinguisher with expired certification date of April 2017 observed in equipment room located next to battery room. Emergency equipment (such as fire extinguishers) shall be tested as necessary (fire extinguishers assessed annually). 3. Open container (5 gallons) of elevator oil was observed in elevator reservoir room. All containers must be kept closed unless in use. CORRECTIVE ACTION: 1. Clean up spill of floor sealer immediately and dispose of waste properly. Ensure 5 gallon container is properly disposed of. Provide written and/or photo documentation when this is corrected within 30 days. 2. [Truncated]
Violation Division: Alameda County Environmental Health
Violation Program: HMRRP
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.22 miles NE	70 ft (3 ft higher than site)	**42**

SITE NAME	MAPS	ID
MacArthur BART Parcels A and C-1 (aka MacArthur Commons)	1, 2, 4	420696

ADDRESS	CITY	ZIP
0 40TH STREET AND TELEGRAPH	OAKLAND	94609

DETAILS

Site Regulated Program Information
Site ID: 420696
Site EI ID: T10000010286
Agency Provided Latitude: 37.82897
Agency Provided Longitude: -122.26554

Program Description: Cleanup Program Site

Evaluation Information
: Not Reported
:Violation Information
: Not Reported
:Enforcement Information
: Not Reported
:Chemical Information
: Not Reported
:Coordinate Information
: Not Reported
:

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.23 miles E	80 ft (13 ft higher than site)	**44**

SITE NAME	MAPS	ID
REGAL #120 / EAST BAY SURGERY CENTER	1, 2, 4	192532

ADDRESS	CITY	ZIP
3875 TELEGRAPH	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 192532 Site EI ID: T06019716388 Agency Provided Latitude: 37.827811 Agency Provided Longitude: -122.265215 Program Description: Leaking Underground Storage Tank Cleanup Site   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.23 miles E	80 ft (13 ft higher than site)	44

SITE NAME	MAPS	ID
The Surgery Center of Alta Bates Summit Medical Center	1, 2, 4	425791

ADDRESS	CITY	ZIP
3875 TELEGRAPH AVE	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 425791 Site EI ID: 10743103 Agency Provided Latitude: 37.828011 Agency Provided Longitude: -122.265114 Program Description: Chemical Storage Facilities Program Description: Hazardous Waste Generator Evaluation Information Evaluation Date: 11/5/2018 Violations Found? (Y/N): Yes Evaluation General Type: Other/Unknown Evaluation Type: Other, not routine, done by local agency Evaluation Note(s): GENERATE NOV LTR/ADDING VIOLATION IN EC Evaluation Division: Alameda County Environmental Health Evaluation Program: HMRRP Evaluation Source: CERS Violation Information Violation Date: 11/5/2018 Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2 Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date. Violation Note(s): Returned to compliance on 11/08/2018. More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.23 miles N	81 ft (14 ft higher than site)	46

SITE NAME	MAPS	ID
1st choice auto repair	1, 2, 4	373650

ADDRESS	CITY	ZIP
4101 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

Site Regulated Program Information
Site ID: 373650
Site EI ID: 10588240
Agency Provided Latitude: 37.830734
Agency Provided Longitude: -122.26824

Program Description: Chemical Storage Facilities

Program Description: Hazardous Waste Generator

Evaluation Information
Evaluation Date: 12/14/2017
Violations Found? (Y/N): Yes
Evaluation General Type: Other/Unknown
Evaluation Type: Other, not routine, done by local agency
Evaluation Note(s): GENERATE NOV/ADDING VIOLATION
Evaluation Division: Alameda County Environmental Health
Evaluation Program: HMRRP
Evaluation Source: CERS

Evaluation Date: 8/4/2017
Violations Found? (Y/N): No
Evaluation General Type: Other/Unknown
Evaluation Type: Other, not routine, done by local agency
Evaluation Note(s): On site with Matt Soby, ACDEH inspector, at 1st Choice Auto Repair at 4101 Martin Luther King Jr. W ay Oakland, CA 94609 in response to a complaint made by an anonymous source for the neighboring business. ACDEH met with Jeet who is the owner of the business. ACDEH observed there was an obvious run off from the property onto the sidewalk and into the street. At the location of the run off there was an A/C compressor, radiator and other parts on the ground, a tire testing trough with water inside of it and the waste tires for the facility are stored next to the fence on the property line. The run off had a greenish color and was still wet after rain stopped and dried up. The building has no down spout only the opening from the roof for water to drain. ACDEH explained the observations that were made and gave him suggestions to fix the problem. 1) Do not work on vehicles outside of the shop. 2) Clean up all of the parts on the ground and store those in a manner to prevent [Truncated]
Evaluation Division: Alameda County Environmental Health

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.23 miles N	81 ft (14 ft higher than site)	46
SITE NAME			**MAPS**	**ID**
MANNINGS BODY SHOP			1, 2, 4	479069
ADDRESS			**CITY**	**ZIP**
4101 MARTIN LUTHER KING JR WAY			OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 479069 Site EI ID: 110012443784 Agency Provided Latitude: 37.83059 Agency Provided Longitude: -122.26822 Program Description: US EPA Air Emission Inventory System (EIS)   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.23 miles N	81 ft (14 ft higher than site)	46

SITE NAME	MAPS	ID
dawit auto body	1, 2, 4	444500

ADDRESS	CITY	ZIP
4101 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 444500 Site EI ID: 10774915 Agency Provided Latitude: 37.830734 Agency Provided Longitude: -122.26824 Program Description: Chemical Storage Facilities Program Description: Hazardous Waste Generator Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information Program ID: 10774915 ENV INT Type Code: HMBP Coordinate Name: Not Reported Reference Point Type Description: Center of a facility or station. Agency Provided Latitude: 37.830890 Agency Provided Longitude: -122.268460 More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.24 miles N	81 ft (14 ft higher than site)	48

SITE NAME	MAPS	ID
LITHOGRAPH REPRODUCTIONS INC	1, 2, 4	477696

ADDRESS	CITY	ZIP
4120 MARTIN LUTHR KNG, JR WAY	OAKLAND	94609-2320

DETAILS
Site Regulated Program Information Site ID: 477696 Site EI ID: 110021335866 Agency Provided Latitude: 37.83095 Agency Provided Longitude: -122.26812 Program Description: US EPA Air Emission Inventory System (EIS)   Evaluation Information : Not Reported :Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information : Not Reported :

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.24 miles N	81 ft (14 ft higher than site)	48
SITE NAME			MAPS	ID
Lithograph			1, 2, 4	44638
ADDRESS			CITY	ZIP
4120 MARTIN LUTHER KING JR WAY			OAKLAND	94609

DETAILS

Site Regulated Program Information
Site ID: 44638
Site EI ID: 10418953
Agency Provided Latitude: 37.830844
Agency Provided Longitude: -122.268094

Program Description: Hazardous Waste Generator

Evaluation Information
Evaluation Date: 9/27/2017
Violations Found? (Y/N): Yes
Evaluation General Type: Compliance Evaluation Inspection
Evaluation Type: Routine done by local agency
Evaluation Note(s): HAZARDOUS WASTE GENERATOR INSPECTION Lithograph 4120 Martin Luther King Jr Way Oakland, 94609 EPA ID Number: CAL000098709 Hazardous Waste Generator (HWG) inspection conducted by Alameda County Department of Environmental Health (ACDEH) on September 19, 2017. Consent to inspect was given by and the completed inspection report was reviewed with Lance Green, owner. The generator is a printing shop. The generator is a very small quantity generator. Waste ink has not been shipped off since 2014. The waste is accumulated in a 35-gallon container. Approximately 27-gallons was attained August 2017. According to the Department of Toxic Substances Control the EPA ID Number: CAL000098709 reported to CERS is inactive as of 6/30/14. Typical hazardous waste generated: waste ink The last CERS reporting was dated May 16, 2013. OBSERVATION: According to the Department of Toxic Substances Control the EPA ID Number: CAL000098709 reported to CERS is inactive as of [Truncated]
Evaluation Division: Alameda County Environmental Health
Evaluation Program: HW
Evaluation Source: CERS

Violation Information
Violation Date: 9/27/2017
Citation: 40 CFR 1 262.34(d)(5)(iii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(iii)
Violation Description: Failure to ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.
Violation Note(s): Returned to compliance on 03/01/2018. OBSERVATION: Generator states that no formal hazardous waste training provided to hazardous waste handlers. CORRECTIVE ACTION: Generator must ensure that employees are familiar with proper waste handling and emergency response procedures relevant to their responsibilities
Violation Division: Alameda County Environmental Health
Violation Program: HW
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.25 miles SE	66 ft (1 ft lower than site)	49

SITE NAME	MAPS	ID
Caltrans-Telegraph	1, 2, 4	102524

ADDRESS	CITY	ZIP
3605 TELEGRAPH AVE	OAKLAND	94609

DETAILS
Site Regulated Program Information Site ID: 102524 Site EI ID: 10000921 Agency Provided Latitude: 37.824898 Agency Provided Longitude: -122.26638 Program Description: Chemical Storage Facilities   Evaluation Information Evaluation Date: 11/2/2017 Violations Found? (Y/N): No Evaluation General Type: Compliance Evaluation Inspection Evaluation Type: Routine done by local agency Evaluation Note(s): Onsite to conduct the Hazardous Materials Business Plan inspection at Caltrans - Seminary - 6220 Seminary Ave., Oakland, CA. Met with Haz Mat Coordinator, Brad Mustard, Russell Frazier, Area Superintendent, Russell Frazier, and Maintenance Supervisor, Kevin Costa. Last HMBP submitted on 1/13/2017. Evaluation Division: Alameda County Environmental Health Evaluation Program: HMRRP Evaluation Source: CERS   Violation Information : Not Reported :Enforcement Information : Not Reported :Chemical Information : Not Reported :Coordinate Information More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CRSP-CA	Listed	0.25 miles N	83 ft (16 ft higher than site)	50

SITE NAME	MAPS	ID
Svartvik Metalworks	1, 2, 4	158605

ADDRESS	CITY	ZIP
4126 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

Site Regulated Program Information
Site ID: 158605
Site EI ID: 10412017
Agency Provided Latitude: 37.831055
Agency Provided Longitude: -122.267799

Program Description: Chemical Storage Facilities

Program Description: Hazardous Waste Generator

Evaluation Information
Evaluation Date: 8/16/2018
Violations Found? (Y/N): Yes
Evaluation General Type: Other/Unknown
Evaluation Type: Other, not routine, done by local agency
Evaluation Note(s): GENERATE NOV LTR/ADDING VIOLATION
Evaluation Division: Alameda County Environmental Health
Evaluation Program: HMRRP
Evaluation Source: CERS

Evaluation Date: 12/13/2016
Violations Found? (Y/N): Yes
Evaluation General Type: Compliance Evaluation Inspection
Evaluation Type: Routine done by local agency
Evaluation Note(s): Routine hazardous materials business plan (HMBP) inspection of Svartvik Metalworks at 4126 MLK Jr. Way, Oakland, CA 94609. Facility walk through conducted with owner David Cole. Email inspection report to: David Cole at: (biz@run-stop.com). Facility is an artist studio that creates custom metal objects from jewelry to large installation pieces. Contact Klayton Tang (567-6752) or Myle Huynh (567-6762) for CERS HMBP submittal assistance. All violations noted in this Hazardous Materials Business Plan (HMBP) inspection report are to be corrected within THIRTY (30) days and proof of those corrections submitted to this office in the same time frame.
Evaluation Division: Alameda County Environmental Health
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
DryCleaners-CA	Listed	0.13 miles W	64 ft (3 ft lower than site)	23

SITE NAME	MAPS	ID
1X NEIGHBORHOOD LAUNDRYMAT	1, 2, 4	CAC000701240

ADDRESS	CITY	ZIP
3838 WEST STREET	OAKLAND	946080000

DETAILS
EPA ID: CAC000701240 Create Date: 12/10/1991 Facility Act Ind: N Inact Date: 10/25/2000 Facility Street2: Not Reported County: Alameda Latitude: 37.82835 Longitude: -122.271477 Mailing Name: Not Reported Facility Mailing Address: 4218 WEST STREET Facility Mailing Address 2: Not Reported Facility Mailing City: OAKLAND Facility Mailing State: CA Facility Mailing Zip Code: 946080000 Region Code: 2 Owner Name: BARBARA FISHER Owner Address: -- Owner Address2: Not Reported Owner City: -- Owner State: 99 Owner Zip Code: -- Owner Phone Number: 0000000000 Owner Fax Number: Not Reported Contact Name: BARBARA FISHER/OWNER Contact Address: -- Contact Address2: Not Reported Contact City: -- More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.08 miles S	65 ft (2 ft lower than site)	10

SITE NAME	MAPS	ID
J&H AUTO REPAIR AND GAS STATION	1, 2, 4	T06019709592

ADDRESS	CITY	ZIP
3701 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

Global ID: T06019709592

County: Alameda

Site History: A Phase I report was prepared for the site in 2002 which identified the site as having been a retail service station from the 1940s to the 1990s. The underground storage tanks were left in place and the site is currently a vacant lot. A preliminary site assessment was performed on March 31, 2003. 160 mg/kg TPHg, 200 mg/kg TOG and 1 mg/kg benzene were detected in soil samples and 1,500 µg/L TPHg and 18 µg/l benzene were detected in groundwater samples. No MTBE was detected. Four additional borings were advanced at the request of the City of Oakland Environmental Service Division for approval of Community Development Corporation of Oakland loan. 0.072 mg/kg benzene was detected in soil. No other significant contaminants were detected. However, it is unclear where the samples were located since no map was present in the report. It appears that the groundwater samples may have been collected from upgradient. The case was transferred to ACEH on February 23, 2006 but the RP has been unresponsive to requests to claim the site in Geotracker. Unknown to ACEH, the USTs were removed and work was performed under the Orphan Fund perhaps under the CIty of Oakland's direction. To date ACEH has not recieved any reports nor have they been uploaded to Geotracker.

Case Type: LUST Cleanup Site

Status: Open - Site Assessment

Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)

Case Worker: JMJ

Local Agency: Not Reported

RB Case Number: 623106

Loc Case Number: RO0002910

File Location: All Files are on GeoTracker or in the Local Agency Database

Potential Contaminants of Concern: Gasoline

Potential Media Affected: Other Groundwater (uses other than drinking water)

How Discovered: * SA

How Discovered Description: Not Reported

Stop Method: Other Means

Stop Method Description: Not Reported

Action Date: 2014-10-08

Action Type: ENFORCEMENT

Action: Site Visit / Inspection / Sampling

Action Date: 2013-02-15

Action Type: ENFORCEMENT

Action: File Review - Closure

Action Date: 2012-06-18

Action Type: ENFORCEMENT

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.08 miles NE	72 ft (5 ft higher than site)	11

SITE NAME	MAPS	ID
GROVE STREET WASH RACK	1, 2, 4	T0600102106

ADDRESS	CITY	ZIP
3884 MARTIN LUTHER KING JR	Oakland	94609

DETAILS
Global ID: T0600102106 County: Alameda Site History: Not all historic documents for the fuel leak case may be available on Geotracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at: http://www.acgov.org/aceh/lop/ust.htm The subject site was formerly in commercial use as an auto body shop, is cur rently a vacant lot, and is comprised of APN 12-968-31, located in Oakland, California. The site is located approximately 4,100 feet northeast and up gradient of a culvertized section of Glen Echo Creek. Lake Merritt is located approximately 1.30 miles south southeast of the property. The direction of site groundwater flow is towards the southwest. A 500 gallon gasoline underground storage tank (UST) and two 650 gallon gasoline USTs were removed on January 5, 1995. Confirmation soil samples taken from 7.5 feet or 9 below ground surface (bgs) beneath each UST detected up to 140 milligrams per kilogram (mg/kg) Total Petroleum Hydrocarbon as gasoline (TPHg), 610 mg/kg benzene 960 mg/kg toluene, 1,300 mg/kg ethylbenzene, and 9,700 xylenes (BTEX). In 2004 and 2006, soil and groundwater investigations were conducted at the site, which detected elevated TPHg and BTEX in soil and groundwater. In November 2006, a CAP was submitted and approved but not implemented. Eight groundwater monitoring wells were installed both on- and off-site in 2013–2014. A Feasibility Study/Corrective Action Plan (FS/CAP) was approved in December 2013 but not implemented. A Final Remedial Design Implementation Plan (RDIP) was approved in December 2014 but not implemented. A draft FS/CAP Addendum was submitted in June 2016. Case Type: LUST Cleanup Site Status: Open - Eligible for Closure Lead Agency: ALAMEDA COUNTY LOP Case Worker: KLD Local Agency: ALAMEDA COUNTY LOP RB Case Number: 142447 Loc Case Number: RO0000027 File Location: All Files are on GeoTracker or in the Local Agency Database Potential Contaminants of Concern: Gasoline Potential Media Affected: Other Groundwater (uses other than drinking water) How Discovered: Tank Closure How Discovered Description: Not Reported Stop Method: Close and Remove Tank Stop Method Description: Not Reported Action Date: 2018-04-05 Action Type: ENFORCEMENT Action: Staff Letter - #20180405 Action Date: 2018-01-30 Action Type: ENFORCEMENT Action: Notification - Public Participation Document - #20180130 Action Date: 2018-01-26 More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.12 miles SW	59 ft (8 ft lower than site)	19

SITE NAME	MAPS	ID
RD MINER COMPANY	1, 2, 4	T0600101123

ADDRESS	CITY	ZIP
750 37TH ST	OAKLAND	94609

DETAILS
Global ID: T0600101123 County: Alameda Site History: Suspect case was opened mistakenly as the result of neighborhood complaints regarding excessive fumes and dying vegetation from ARCO station (RO76)that had a release in 1982. RO76 is a free product site with up to 4 feet of product observed in several site monitoring wells. The tanks located adjacent to the reported address of this site, were not removed until 1992. Soil excavated from the tank pit showed significant evidence of free product and thus likely were the source of the fumes. RO76 files contain a letter dated April 19, 1992 from another resident in the area complaining of impacts from the station. Case Type: LUST Cleanup Site Status: Completed - Case Closed Lead Agency: ALAMEDA COUNTY LOP Case Worker: TW Local Agency: ALAMEDA COUNTY LOP RB Case Number: 01-1221 Loc Case Number: RO0003064 File Location: All Files are on GeoTracker or in the Local Agency Database Potential Contaminants of Concern: Gasoline Potential Media Affected: Under Investigation How Discovered: Tank Closure How Discovered Description: Not Reported Stop Method: Other Means Stop Method Description: Not Reported Action Date: 2013-05-13 Action Type: ENFORCEMENT Action: File review Action Date: 2012-03-08 Action Type: ENFORCEMENT Action: File review

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	21
SITE NAME			MAPS	ID
ARCO #04931			1, 2, 4	T0600100110
ADDRESS			CITY	ZIP
731 W MACARTHUR BLVD			Oakland	94609

DETAILS
Global ID: T0600100110 County: Alameda Site History: The site is an active Beacon-branded gasoline station. In December 1987, Pacific Environmental Group (PEG) installed four monitoring wells (A-9 through A-12) at the site. Monitoring wells A-1 through A-8 appear to have been installed previously by another consultant. Monitoring well construction details and reports for those wells were not found in our case file. Between November 1991 and April 1992, four single-walled underground storage tanks consisting of one 12,000-gallon fiberglass UST, two 8,000-gallon steel USTs and one 6,000-gallon steel UST) and associated product piping were removed from the site. TPH-g and benzene were detected at concentrations up to 430 mg/kg and 24 mg/kg, respectively, in soil sample SW12 collected at 12 feet bgs. Following UST pit over-excavation, ROUX stated that maximum residual TPH-g and benzene concentrations remaining in the UST cavity were detected at 250 mg/kg and 2.7 mg/kg, respectively. Following over-excavation of the product piping, maximum residual TPH-g and benzene concentrations remaining in the piping trenches were detected 400 mg/kg and 2.6 mg/kg, respectively, detected in sample L12 collected at 7.5 ft bgs. In January 1992, GeoStrategies, Inc. (GSI) installed one vapor extraction well to conduct a vapor extraction test. GSI concluded that vapor extraction did not create significant pressure influence at the closest vapor monitoring point location four feet from the vapor extraction point and subsequently vapor extraction was not considered a viable or feasible remediation option for the site. In November 1992, three recovery wells (AR-1 through AR-3) were installed at the site to facilitate groundwater extraction and abate free product detected in monitoring wells A-4 and A-8. The groundwater extraction system operated from 1992 to 1996. Case Type: LUST Cleanup Site Status: Open - Eligible for Closure Lead Agency: ALAMEDA COUNTY LOP Case Worker: MD Local Agency: ALAMEDA COUNTY LOP RB Case Number: 01-0118 Loc Case Number: RO0000076 File Location: All Files are on GeoTracker or in the Local Agency Database Potential Contaminants of Concern: Gasoline Potential Media Affected: Other Groundwater (uses other than drinking water) How Discovered: Other Means How Discovered Description: Not Reported Stop Method: Other Means Stop Method Description: Not Reported Action Date: 2018-10-11 Action Type: ENFORCEMENT Action: Staff Letter Action Date: 2018-07-31 Action Type: ENFORCEMENT Action: Notification - Public Participation Document Action Date: 2018-07-31 Action Type: ENFORCEMENT More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.18 miles E	70 ft (3 ft higher than site)	33

SITE NAME	MAPS	ID
MacArthur BART Parcels B-1 and B-2	1, 2, 4	T10000011256

ADDRESS	CITY	ZIP
3883 Turquoise Way	Oakland	94609

DETAILS
Global ID: T10000011256 County: Alameda Site History: This project is Parcels B-1 and B-2 of the MacArthur BART Transit Village site. Case Type: Cleanup Program Site Status: Open - Remediation Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2) Case Worker: MEJ Local Agency: Not Reported RB Case Number: 01S0696 Loc Case Number: Not Reported File Location: Not Reported Potential Contaminants of Concern: Gasoline, Total Petroleum Hydrocarbons (TPH) Potential Media Affected: Not Reported How Discovered: Not Reported How Discovered Description: Not Reported Stop Method: Not Reported Stop Method Description: Not Reported Action Date: 2018-07-03 Action Type: ENFORCEMENT Action: Staff Letter Action Date: 2018-03-02 Action Type: ENFORCEMENT Action: Cost Recovery Agreement / N. of Reimbursement

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.22 miles NE	70 ft (3 ft higher than site)	**42**

SITE NAME	MAPS	ID
MacArthur BART Parcels A and C-1 (aka MacArthur Commons)	1, 2, 4	T10000010286

ADDRESS	CITY	ZIP
0 40th Street and Telegraph	Oakland	94609

DETAILS
Global ID: T10000010286 County: Alameda Site History: Not Reported Case Type: Cleanup Program Site Status: Open - Remediation Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2) Case Worker: MEJ Local Agency: Not Reported RB Case Number: 01S0696 Loc Case Number: Not Reported File Location: Not Reported Potential Contaminants of Concern: Gasoline Potential Media Affected: Other Groundwater (uses other than drinking water), Soil, Soil Vapor How Discovered: Not Reported How Discovered Description: Not Reported Stop Method: Not Reported Stop Method Description: Not Reported Action Date: 2018-05-09 Action Type: ENFORCEMENT Action: Staff Letter Action Date: 2017-06-08 Action Type: ENFORCEMENT Action: Staff Letter Action Date: 2017-05-05 Action Type: ENFORCEMENT More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.23 miles E	80 ft (13 ft higher than site)	44

SITE NAME	MAPS	ID
REGAL #120 / EAST BAY SURGERY CENTER	1, 2, 4	T06019716388

ADDRESS	CITY	ZIP
3875 TELEGRAPH	OAKLAND	94609

DETAILS

Global ID: T06019716388

County: Alameda

Site History: The approximately 0.9-acre Site is located at 3875 Telegraph Avenue in Oakland, California. Much of the site is covered by a 10,000-square foot building that is surrounded largely by paved parking areas. The Site is bounded by: 39th Street to the north; Telegraph Avenue to the east; Apgar Street to the south and a parking lot for the Bay Area Rapid Transit District (BART) MacArthur Station to the west. The surrounding area is a mixed residential and commercial neighborhood. In the 1930s, the Site was used for two gasoline stations, one in the southwest corner (3855 Telegraph Avenue) and one in the northern portion (3881 Telegraph Avenue) of the Site. By the 1940s, the two gasoline stations had been removed. In the 1950s, the southern portion of the Site was occupied by a tamale factory and restaurant; and the northern portion was occupied by another gasoline service station. In June 1984, as part of pre-construction evaluations, Harding Lawson Associates (HLA) drilled four borings for collection of soil samples for geotechnical testing. HLA noted the soil cores collected from approximately 15 feet below ground surface contained “gasoline odor.” In December 1984, the four USTs, associated service station buildings, and pump islands were removed (HLA, 1992). Following removal of the USTs, the excavation was backfilled with imported material. In 1984, the Site was purchased by East Bay Outpatient Surgery for development as a surgery center. In May 1985, as part of the surgery center construction, the UST excavation backfill material was removed. The former UST excavation was subsequently over-excavated to a depth of approximately 15 feet below ground surface with approximately 1,070 cubic yards of soil being disposed off-site. In 2001, Terracon advancing six borings, B-1 to B-6, to a depth of approximately 25-feet below ground surface for the collection of soil and groundwater samples. In January 2005, Gribi Associates (Gribi) collected 18 soil and 5 groundwater samples from borings advanced offsite within the BART parking lot to the west; and onsite within the southern parking lot. Subsequently, between February 2005 and June 2005, Ninyo & Moore, on behalf of BART, conducted investigations near the Site as part of the MacArthur BART Transit Village redevelopment project (N&M, 2005). The investigations included the collection of soil and groundwater samples from 27 borings (February 2005) and soil gas samples from 15 borings (June 2005) advanced within: 39th Street; 40th Street; Apgar Street; and the BART parking lot. The soil and groundwater investigations detected petroleum hydrocarbons both on-site and off-site. Elevated concentrations of TPH as gasoline (TPHg) have been detected in groundwater samples from temporary boring advanced both on-site and off-site. A plume of fuel hydrocarbons extends southwest from the Surgery Center to the BART parking lot. The most recent investigation activities have been conducted in the BART parking lot to define the off-site extent of contamination.

Case Type: LUST Cleanup Site

Status: Completed - Case Closed

Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)

Case Worker: MEJ

Local Agency: Not Reported

RB Case Number: 612514

Loc Case Number: Not Reported

File Location: All Files are on GeoTracker or in the Local Agency Database

Potential Contaminants of Concern: Diesel, Gasoline

Potential Media Affected: Other Groundwater (uses other than drinking water)

How Discovered: * SA

How Discovered Description: Not Reported

Stop Method: Other Means

Stop Method Description: Not Reported

Action Date: 2016-01-05

Action Type: ENFORCEMENT

Action: Closure/No Further Action Letter

Action Date: 2015-06-26

Action Type: ENFORCEMENT

Action: Notification - Public Notice of Case Closure

Action Date: 2012-06-29

Action Type: ENFORCEMENT

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Eval-Hist-Other-CA	Refer: Other Agency	0.06 miles NE	71 ft (4 ft higher than site)	9

SITE NAME	MAPS	ID
LUCKY'S AUTO BODY	1, 2, 3, 4	01990026

ADDRESS	CITY	ZIP
3860/3884 MARTIN LUTHER KING JR. WAY	OAKLAND	94609

DETAILS

URL:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=01990026
Envirostor ID: 01990026
County: ALAMEDA
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 0.6
APN: 012-0968-30-1, 012-0968-31
National Priorities List: NO
Lead Agency: CITY OF OAKLAND
Project Manager: Not Reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Berkeley
Site Code: 201538
Assembly: 15
Senate: 9
Congressional District: 13
Special Program: EPA - Target Site Investigation
Status: Refer: Other Agency
Status Date: 10/1/2004
Past Uses: RETAIL - SERVICE STATION, VEHICLE MAINTENANCE
Restricted Use: NO
Funding: Not Reported
Regulatory Agencies Involved: SMBRP, RWQCB 2 - San Francisco Bay, ALAMEDA COUNTY, CITY OF OAKLAND
Potential Contamination of Concern: 10009, 10199, 30003, 30013, 30025, 30272, 30550, 30593
Confirmed Contamination of Concern: 300,033,001,330,025,000,000,000,000,000
Potential Media Affected: OTH, SOIL

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.05 miles SE	67 ft (0 ft higher than site)	6

SITE NAME	MAPS	ID
QUALITY TUNE-UP	1, 2, 3, 4	546965-PD

ADDRESS	CITY	ZIP
640 W MACARTHUR BLVD	OAKLAND	94609-2324

DETAILS

Listing Year: 1997
SIC Category: AUTOMOBILE REPAIRING & SERVICE
SIC Code: 753801

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.11 miles W	61 ft (6 ft lower than site)	17

SITE NAME	MAPS	ID
INSTA LUBE	1, 2, 4	464852-PD

ADDRESS	CITY	ZIP
736 W MACARTHUR BLVD	OAKLAND	94609-2326

DETAILS

Listing Year: 1997
SIC Category: AUTOMOBILE LUBRICATION SERVICE
SIC Code: 754903

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.12 miles N	75 ft (8 ft higher than site)	20

SITE NAME	MAPS	ID
YEM HONDA HYUNDAI AUTO SVC	1, 2, 4	611986-PD

ADDRESS	CITY	ZIP
3909 MARTIN LUTHER KING JR WAY	OAKLAND	94609-2315

DETAILS

Listing Year: 1997
SIC Category: AUTOMOBILE REPAIRING & SERVICE
SIC Code: 753801

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.15 miles W	59 ft (8 ft lower than site)	26

SITE NAME	MAPS	ID
Big O Tires	1, 2, 4	39310

ADDRESS	CITY	ZIP
810 W Macarthur Blvd	Oakland	94608

DETAILS

Sic Code: 5531
Desc: Auto, Truck & Tire Service
Site Added: 2/2010

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.15 miles W	59 ft (8 ft lower than site)	26

SITE NAME	MAPS	ID
BIG O TIRES	1, 2, 4	10156

ADDRESS	CITY	ZIP
810 W MACARTHUR BLVD	Emeryville	94608

DETAILS
Sic Code: 5531 Desc: Auto, Truck & Tire Service Site Added: 2/2010

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.23 miles N	81 ft (14 ft higher than site)	46

SITE NAME	MAPS	ID
AL MANNING BODY SHOP	1, 2, 4	373049-PD

ADDRESS	CITY	ZIP
4101 MARTIN LUTHER KING JR WAY	OAKLAND	94609-2319

DETAILS
Listing Year: 1997 SIC Category: AUTOMOBILE BODY-REPAIRING & PAINTING SIC Code: 753201

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CA	No Longer Listed	0.04 miles S	67 ft (0 ft higher than site)	5

SITE NAME	MAPS	ID
Alex and Angel's Tires	1, 2, 3, 4	1650025

ADDRESS	CITY	ZIP
657 W MacArthur Blvd	Oakland	94609-2341

DETAILS
Original Database: Haulers-CA Last Agency Status: Listed Archive Date: 07/05/17 No Longer Listed-URL: http://www.calrecycle.ca.gov/tires/data/organization/search.aspx URL Instructions: Go to URL, Select Hauler for Type of Business, Search by TPID. TPID: 1650025 County: Alameda Organization Name: Alex and Angel's Tires Agency Provided Latitude: 37.827022 Agency Provided Longitude: -122.269477 Contact Name: Angel Castillejos Phone Number: Not Reported

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CA	No Longer Listed	0.06 miles NE	71 ft (4 ft higher than site)	9
SITE NAME			MAPS	ID
LUCKY'S AUTO BODY			1, 2, 3, 4	ECC71C3A-1990026
ADDRESS			CITY	ZIP
3860/3884 MARTIN LUTHER KING JR. WAY			OAKLAND	94609
DETAILS				
No Additional Details Found				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CA	No Longer Listed	0.06 miles NE	71 ft (4 ft higher than site)	9
SITE NAME			MAPS	ID
LUCKY'S AUTO BODY			1, 2, 3, 4	01990026
ADDRESS			CITY	ZIP
3860/3884 MARTIN LUTHER KING JR. WAY			OAKLAND	94609

DETAILS

Original Database: Cal-Eval-Hist
Last Agency Status: Listed
Archive Date: 06/20/16
No Longer Listed-URL:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=01990026
Envirostor ID: 01990026
County: ALAMEDA
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 0.6
APN: 012-0968-30-1, 012-0968-31
National Priorities List: NO
Lead Agency: CITY OF OAKLAND
Project Manager: Not Reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Berkeley
Site Code: 201538
Assembly: 15
Senate: 09
Congressional District: 13
Special Program: EPA - Target Site Investigation
Status: Refer: Other Agency
Status Date: Not Reported
Past Uses: RETAIL - SERVICE STATION, VEHICLE MAINTENANCE
Restricted Use: NO
Funding: Not Reported
Regulatory Agencies Involved: SMBRP, RWQCB 2 - San Francisco Bay, ALAMEDA COUNTY, CITY OF OAKLAND
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CA	No Longer Listed	0.06 miles NE	71 ft (4 ft higher than site)	9

SITE NAME	MAPS	ID
LUCKY'S AUTO BODY	1, 2, 3, 4	01990026

ADDRESS	CITY	ZIP
3860/3884 MARTIN LUTHER KING JR. WAY	OAKLAND	94609

DETAILS

Original Database: Eval-Hist-Other-CA
Last Agency Status: Refer: Other Agency
Archive Date: 06/28/19
No Longer Listed-URL:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=01990026
Envirostor ID: 01990026
County: ALAMEDA
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 0.6
APN: 012-0968-30-1, 012-0968-31
National Priorities List: NO
Lead Agency: CITY OF OAKLAND
Project Manager: Not Reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Berkeley
Site Code: 201538
Assembly: 15
Senate: 09
Congressional District: 13
Special Program: EPA - Target Site Investigation
Status: Refer: Other Agency
Status Date: 2004-10-01 00:00:00
Past Uses: RETAIL - SERVICE STATION, VEHICLE MAINTENANCE
Restricted Use: NO
Funding: Not Reported
Regulatory Agencies Involved: SMBRP, RWQCB 2 - San Francisco Bay, ALAMEDA COUNTY, CITY OF OAKLAND
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CA	No Longer Listed	0.06 miles NE	71 ft (4 ft higher than site)	9

SITE NAME	MAPS	ID
LUCKY'S AUTO BODY	1, 2, 3, 4	1990026

ADDRESS	CITY	ZIP
3860/3884 MARTIN LUTHER KING JR. WAY	OAKLAND	94609

DETAILS
Original Database: Cal-Eval-Hist Last Agency Status: Listed Archive Date: 08/11/16 No Longer Listed-URL: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=1990026 Envirostor ID: 1990026 County: ALAMEDA Site Type: Evaluation Site Type Detailed: Evaluation Acres: 0.6 APN: 012-0968-30-1, 012-0968-31 National Priorities List: NO Lead Agency: CITY OF OAKLAND Project Manager: Not Reported Supervisor: Referred - Not Assigned Division Branch: Cleanup Berkeley Site Code: 201538 Assembly: 15 Senate: 9 Congressional District: 13 Special Program: EPA - Target Site Investigation Status: Refer: Other Agency Status Date: 10/1/2004 0:00 Past Uses: RETAIL - SERVICE STATION, VEHICLE MAINTENANCE Restricted Use: NO Funding: Not Reported Regulatory Agencies Involved: SMBRP, RWQCB 2 - San Francisco Bay, ALAMEDA COUNTY, CITY OF OAKLAND More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.05 miles SE	67 ft (0 ft higher than site)	6

SITE NAME	MAPS	ID
QUALITY TUNE UP #35	1, 2, 3, 4	7816513

ADDRESS	CITY	ZIP
640 W. MACARTHUR BLVD	OAKLAND	946090000

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.06 miles NE	71 ft (4 ft higher than site)	8
SITE NAME			MAPS	ID
HAZARDOUS FIBRE REMOVAL CORP			1, 2, 3, 4	7814672
ADDRESS			CITY	ZIP
3852 M L KING JR WAY			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.09 miles S	65 ft (2 ft lower than site)	12
SITE NAME			MAPS	ID
HAMMOND SERVICE			1, 2, 4	4034840
ADDRESS			CITY	ZIP
3701 MARTIN LUTHER KING			OAKLAND	94609
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.11 miles W	61 ft (6 ft lower than site)	17
SITE NAME			MAPS	ID
INSTA LUBE			1, 2, 4	7815213
ADDRESS			CITY	ZIP
736 W. MACARTHUR BLVD			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.13 miles W	64 ft (3 ft lower than site)	23

SITE NAME	MAPS	ID
1X NEIGHBORHOOD LAUNDRYMAT	1, 2, 4	7434979

ADDRESS	CITY	ZIP
3838 WEST ST	OAKLAND	946080000

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.15 miles W	59 ft (8 ft lower than site)	26

SITE NAME	MAPS	ID
BIG O TIRE	1, 2, 4	7732863

ADDRESS	CITY	ZIP
810 W. MACARTHUR BLVD	OAKLAND	946080000

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.16 miles W	60 ft (7 ft lower than site)	29

SITE NAME	MAPS	ID
BEST AUTO REPAIR	1, 2, 4	7814157

ADDRESS	CITY	ZIP
801 W. MAC ARTHUR BLVD	OAKLAND	946080000

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.16 miles W	60 ft (7 ft lower than site)	29
SITE NAME			MAPS	ID
TUNE DYNAMICS			1, 2, 4	7817872
ADDRESS			CITY	ZIP
801 W. MACARTHUR BLVD			OAKLAND	946080000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.18 miles N	78 ft (11 ft higher than site)	34
SITE NAME			MAPS	ID
1X SACRED HEART CHURCH			1, 2, 4	7730439
ADDRESS			CITY	ZIP
4025 MARTIN LUTHER KING WAY			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.18 miles N	78 ft (11 ft higher than site)	34
SITE NAME			MAPS	ID
1X SACARED HEART CHURCH			1, 2, 4	7811224
ADDRESS			CITY	ZIP
4025 MARTIN LUTHER KING WAY			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.19 miles SE	68 ft (1 ft higher than site)	37
SITE NAME			MAPS	ID
1X 544 37TH ST.			1, 2, 4	7812368
ADDRESS			CITY	ZIP
544 37TH ST			OAKLAND	
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.21 miles N	78 ft (11 ft higher than site)	39
SITE NAME			MAPS	ID
1X SACRED HEART			1, 2, 4	7808433
ADDRESS			CITY	ZIP
675 41ST ST			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.23 miles E	80 ft (13 ft higher than site)	44
SITE NAME			MAPS	ID
EAST BAY SURGERY CENTER LP			1, 2, 4	7817042
ADDRESS			CITY	ZIP
3875 TELEGRAPH AVE			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.23 miles E	80 ft (13 ft higher than site)	**44**
SITE NAME			**MAPS**	**ID**
1X JOSEPH DI GIORGIO & SONS INC			1, 2, 4	7817041
ADDRESS			**CITY**	**ZIP**
3875 TELEGRAPH AVE			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.23 miles E	80 ft (13 ft higher than site)	**44**
SITE NAME			**MAPS**	**ID**
REGAL STATION #102			1, 2, 4	3203829
ADDRESS			**CITY**	**ZIP**
3875 TELEGRAPH AVE			OAKLAND	95607
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.23 miles N	80 ft (13 ft higher than site)	**45**
SITE NAME			**MAPS**	**ID**
LITHOGRAPH REPRODUCTION INC			1, 2, 4	7817253
ADDRESS			**CITY**	**ZIP**
4120 MARTIN LUTHER KING JR. WA			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.23 miles E	77 ft (10 ft higher than site)	47

SITE NAME	MAPS	ID
1X OAKLAND TELEGRAPH AVE LTD PARTNERSHIP	1, 2, 4	7808270

ADDRESS	CITY	ZIP
3833 TELEGRAPH AVE	OAKLAND	946120000

DETAILS

Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-City-UST-CA	Listed	0.08 miles S	65 ft (2 ft lower than site)	10

SITE NAME	MAPS	ID
HAMMOND SERVICE	1, 2, 4	7851803

ADDRESS	CITY	ZIP
3701 MARTIN L KING WAY	OAKLAND	94609

DETAILS

Reported Date: 1998
List: City of Oakland Underground Storage Tank List
Agency: City of Oakland Fire Department, Office of Emergency Services

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Cleaners	Listed	0.13 miles SW	59 ft (8 ft lower than site)	22

SITE NAME	MAPS	ID
Uniclean	1, 2, 4	43

ADDRESS	CITY	ZIP
705 37th St	Oakland	94609

DETAILS
Sic Code: 7211 Desc: Laundry/Cleaner Services Site Added: 2/2010

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Cleaners	Listed	0.16 miles W	59 ft (8 ft lower than site)	28
SITE NAME			MAPS	ID
Yupi Building Services			1, 2, 4	75671
ADDRESS			CITY	ZIP
3715 West St			Emeryville	
DETAILS				
Site Added: 1/1/2013				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-ERNS-US	Listed	0.02 miles E	69 ft (2 ft higher than site)	1
SITE NAME			MAPS	ID
UNK			1, 2, 3, 4	200109052
ADDRESS			CITY	ZIP
3820 MARTIN LUTHER KING JR BLVD			OAKLAND	

DETAILS
Reported Date: 1998 Spill Date (yy/mm/dd): 891129 Spill Time: 102500 Case Number: Not Reported Material Spilled #1: TRANSFORMER OIL Material Spilled #2: Not Reported Material Spilled #3: Not Reported Quantty #1: 1 Quantty #2: 0 Quantty #3: 0 Unts#1: GAL Unts#2: Not Reported Unts#3: Not Reported Waterway Affected: NONE

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-ERNS-US	Listed	0.06 miles NW	68 ft (1 ft higher than site)	7

SITE NAME	MAPS	ID
UNKNOWN	1, 2, 3, 4	200249125

ADDRESS	CITY	ZIP
699 APGAR ST	OAKLAND	94607

DETAILS
Reported Date: 1998 Spill Date (yy/mm/dd): 930317 Spill Time: 154900 Case Number: 93-2887 Material Spilled #1: ANHYDROUS ETHER Material Spilled #2: Not Reported Material Spilled #3: Not Reported Quantty #1: 2 Quantty #2: 0 Quantty #3: 0 Unts#1: UNK Unts#2: Not Reported Unts#3: Not Reported Waterway Affected: Not Reported

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-ERNS-US	Listed	0.06 miles NW	68 ft (1 ft higher than site)	7

SITE NAME	MAPS	ID
UNKNOWN	1, 2, 3, 4	200221353

ADDRESS	CITY	ZIP
699 APGAR ST	OAKLAND	94607

DETAILS

Reported Date: 1998 Spill Date (yy/mm/dd): 930317
Spill Time: 154900
Case Number: 93-2887
Material Spilled #1: ANHYDROUS ETHER
Material Spilled #2: Not Reported
Material Spilled #3: Not Reported
Quantty #1: 2
Quantty #2: 0
Quantty #3: 0
Unts#1: UNK
Unts#2: Not Reported
Unts#3: Not Reported
Waterway Affected: Not Reported

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-HWS-CA	Listed	0.12 miles SW	59 ft (8 ft lower than site)	19

SITE NAME	MAPS	ID
RD MINER COMPANY	1, 2, 4	1607771

ADDRESS	CITY	ZIP
750 37TH	OAKLAND	

DETAILS

Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-HWS-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
ARCO	1, 2, 4	930246

ADDRESS	CITY	ZIP
731 MACARTHUR	OAKLAND	94609

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-HWS-CA	Listed	0.13 miles W	64 ft (3 ft lower than site)	23

SITE NAME	MAPS	ID
NEIGHBORHOOD LAUNDROMAT	1, 2, 4	7434979

ADDRESS	CITY	ZIP
3838 WEST	OAKLAND	94608

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-LUSTIS-CA	Listed	0.08 miles NE	72 ft (5 ft higher than site)	11

SITE NAME	MAPS	ID
GROVE STREET WASH RACK	1, 2, 4	7433498

ADDRESS	CITY	ZIP
3884 MARTIN LUTHER KING	OAKLAND	94609

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-LUSTIS-CA	Listed	0.12 miles N	74 ft (7 ft higher than site)	**18**
SITE NAME			**MAPS**	**ID**
BART			1, 2, 4	5356196
ADDRESS			**CITY**	**ZIP**
3924 MARTIN LUTHER KING			OAKLAND	94609
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-LUSTIS-CA	Listed	0.12 miles SW	59 ft (8 ft lower than site)	**19**
SITE NAME			**MAPS**	**ID**
RD MINER COMPANY			1, 2, 4	930122
ADDRESS			**CITY**	**ZIP**
750 37TH ST			OAKLAND	94609
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-LUSTIS-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	**21**
SITE NAME			**MAPS**	**ID**
ARCO			1, 2, 4	930246
ADDRESS			**CITY**	**ZIP**
731 MACARTHUR BLVD W			OAKLAND	94609
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-LUSTIS-CA	Listed	0.13 miles W	64 ft (3 ft lower than site)	23

SITE NAME	MAPS	ID
NEIGHBORHOOD LAUNDROMAT	1, 2, 4	4223133

ADDRESS	CITY	ZIP
3838 WEST ST	OAKLAND	94608

DETAILS

Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
HIST-MTBE-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
ARCO # 04931	1, 2, 4	8049-R2

ADDRESS	CITY	ZIP
731 MACARTHUR BLVD W	OAKLAND	94609

DETAILS

Region: 2 - San Francisco
County: Alameda
Ground Water Detection Limit: 880
Soil Detection Limit: Not Reported
MTBE Cnts: 4
MTBE Fuel: 1
Status: 7
MTBE Tested: YES

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
HIST-MTBE-CA	Listed	0.13 miles W	64 ft (3 ft lower than site)	23

SITE NAME	MAPS	ID
NEIGHBORHOOD LAUNDROMAT	1, 2, 4	8461-R2

ADDRESS	CITY	ZIP
3838 WEST ST	OAKLAND	94608

DETAILS

Region: 2 - San Francisco
County: Alameda
Ground Water Detection Limit: 0
Soil Detection Limit: Not Reported
MTBE Cnts: 1
MTBE Fuel: 1
Status: 3B
MTBE Tested: YES

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Printers	Listed	0.04 miles N	68 ft (1 ft higher than site)	4

SITE NAME	MAPS	ID
LEONG GRAPHICS	1, 2, 3, 4	1171282-PD

ADDRESS	CITY	ZIP
679 APGAR ST	OAKLAND	94609-2345

DETAILS

Listing Year: 1997
SIC Category: COMMERCIAL PRINTING NEC
SIC Code: 275998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-SLIC-CA	Listed	0.08 miles NE	72 ft (5 ft higher than site)	11

SITE NAME	MAPS	ID
GROVE STREET WASH RACK	1, 2, 4	7433498

ADDRESS	CITY	ZIP
3884 MARTIN LUTHER KING	OAKLAND	94609

DETAILS

Reported Date: 1998
List: Region #2-San Francisco Bay Fuel Leaks List
Agency: Regional Water Quality Control Board, Region #2

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-SLIC-CA	Listed	0.12 miles N	74 ft (7 ft higher than site)	18

SITE NAME	MAPS	ID
BART	1, 2, 4	5356196

ADDRESS	CITY	ZIP
3924 MARTIN LUTHER KING	OAKLAND	94609

DETAILS

Reported Date: 1998
List: Region #2-San Francisco Bay Fuel Leaks List
Agency: Regional Water Quality Control Board, Region #2

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-SLIC-CA	Listed	0.12 miles SW	59 ft (8 ft lower than site)	19

SITE NAME	MAPS	ID
RD MINER COMPANY	1, 2, 4	930122

ADDRESS	CITY	ZIP
750 37TH ST	OAKLAND	94609

DETAILS
Reported Date: 1998 List: Region #2-San Francisco Bay Fuel Leaks List Agency: Regional Water Quality Control Board, Region #2

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-SLIC-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	**21**
SITE NAME			**MAPS**	**ID**
ARCO			1, 2, 4	930246
ADDRESS			**CITY**	**ZIP**
731 MACARTHUR BLVD W			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Region #2-San Francisco Bay Fuel Leaks List Agency: Regional Water Quality Control Board, Region #2				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-SLIC-CA	Listed	0.13 miles W	64 ft (3 ft lower than site)	**23**
SITE NAME			**MAPS**	**ID**
NEIGHBORHOOD LAUNDROMAT			1, 2, 4	4223133
ADDRESS			**CITY**	**ZIP**
3838 WEST ST			OAKLAND	94608
DETAILS				
Reported Date: 1998 List: Region #2-San Francisco Bay Fuel Leaks List Agency: Regional Water Quality Control Board, Region #2				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.08 miles S	65 ft (2 ft lower than site)	10
SITE NAME			MAPS	ID
HAMMOND SERVICE			1, 2, 4	4034840
ADDRESS			CITY	ZIP
3701 MARTIN L KING WAY			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.09 miles NE	73 ft (6 ft higher than site)	14
SITE NAME			MAPS	ID
GROVE STREET WASH RACK			1, 2, 4	7433498
ADDRESS			CITY	ZIP
3884 MARTIN L KING WAY			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.11 miles N	73 ft (6 ft higher than site)	16
SITE NAME			MAPS	ID
JOHNNY'S AUTOMOTIVE			1, 2, 4	8586301
ADDRESS			CITY	ZIP
3909 MARTIN L KING WAY			OAKLAND	94608

DETAILS
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	21
SITE NAME			MAPS	ID
ARCO STATION #04931			1, 2, 4	930246
ADDRESS			CITY	ZIP
731W MACARTHUR BLVD			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.14 miles NE	75 ft (8 ft higher than site)	24
SITE NAME			MAPS	ID
FRANK'S AUTO REPAIR			1, 2, 4	8586302
ADDRESS			CITY	ZIP
3924 MARTIN L KING WAY			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.16 miles N	77 ft (10 ft higher than site)	30

SITE NAME	MAPS	ID
APOSTOLIC CHURCH OF DELIVERY	1, 2, 4	7006093

ADDRESS	CITY	ZIP
4006 MARTIN L KING WAY	OAKLAND	94608

DETAILS

Reported Date: 1998
List: Alameda County UST
Agency: Department of Environmental Health

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.19 miles SE	68 ft (1 ft higher than site)	37

SITE NAME	MAPS	ID
APARTMENT BUILDING	1, 2, 4	8568735

ADDRESS	CITY	ZIP
544 37TH ST	OAKLAND	94609

DETAILS

Reported Date: 1998
List: Alameda County UST
Agency: Department of Environmental Health

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.23 miles E	80 ft (13 ft higher than site)	44

SITE NAME	MAPS	ID
REGAL STATION #102	1, 2, 4	3203829

ADDRESS	CITY	ZIP
3875 TELEGRAPH AVE	OAKLAND	94609

DETAILS
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Service Stations	Listed	0.12 miles W	60 ft (7 ft lower than site)	21
SITE NAME			MAPS	ID
K&H City Gas Beacon			1, 2, 4	154399
ADDRESS			CITY	ZIP
731 W Macarthur Blvd			Oakland	94609
DETAILS				
Site Added: 1/1/2013				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Service Stations	Listed	0.12 miles W	60 ft (7 ft lower than site)	21
SITE NAME			MAPS	ID
Manu's Arco			1, 2, 4	45869
ADDRESS			CITY	ZIP
731 W Macarthur Blvd			Oakland	94609
DETAILS				
Sic Code: 5541 Desc: Service Stations/Vehicle Fueling Site Added: 2/2010				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Service Stations	Listed	0.12 miles W	60 ft (7 ft lower than site)	21
SITE NAME			MAPS	ID
GAS CITY			1, 2, 4	131851
ADDRESS			CITY	ZIP
731 W MACARTHUR BLVD			Oakland	94609
DETAILS				
Sic Code: 5541 Desc: Service Stations/Vehicle Fueling Site Added: 2/2010				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Service Stations	Listed	0.12 miles W	60 ft (7 ft lower than site)	21
SITE NAME			MAPS	ID
ARCO STATION #04931			1, 2, 4	200860
ADDRESS			CITY	ZIP
731 WEST MACARTHUR BOULEVARD			OAKLAND	94609
DETAILS				
AS OF DATE: 11/13/2001 SITE TYPE: RETAIL TANK TYPE: UST COUNTY: ALAMEDA				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Service Stations	Listed	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
MANUS ARCO	1, 2, 4	34126-PD

ADDRESS	CITY	ZIP
731 W MACARTHUR BLVD	OAKLAND	94609-2325

DETAILS

Listing Year: 1997
SIC Category: SERVICE STATIONS-GASOLINE & OIL
SIC Code: 554101

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
RAJINDER K GOYAL	1, 2, 4	258353

ADDRESS	CITY	ZIP
731 W MACARTHUR BLVD	OAKLAND	94611

DETAILS

Note: ID has been assigned by ERS
Tank Details:
http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00035D36.pdf
County: Alameda

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-CA	Listed	0.23 miles E	80 ft (13 ft higher than site)	**44**

SITE NAME	MAPS	ID
REGAL STATION 102	1, 2, 4	259478

ADDRESS	CITY	ZIP
3875 TELEGRAPH AVE	OAKLAND	95607

DETAILS
Note: ID has been assigned by ERS Tank Details: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000364E7.pdf

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-Cleanup-CA	Listed	0.47 miles NW	55 ft (12 ft lower than site)	**65**

SITE NAME	MAPS	ID
Not Reported by Agency	1, 4	T0600100249

ADDRESS	CITY	ZIP
989 41ST ST	OAKLAND	

DETAILS
UST FUND PRIORITY CLASS: C UST FUND CLAIM NO#: 3000 GEOGRAPHIC AREA (BY REGIONAL BOARD NO#): 2 UST FUND CLAIM_CLOSURE DATE: Not Reported NO# OF FUND RECOMMEDED CLOSURE: 1 SITE LEAD AGENCY: ALAMEDA COUNTY LOP YEARS CASE HAS BEEN OPENED: 24 YEARS CLAIM HAS RECEIVED FUNDING: 15

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-Cleanup-CA	Listed	0.49 miles W	35 ft (32 ft lower than site)	68

SITE NAME	MAPS	ID
Not Reported by Agency	1, 4	T0600101365

ADDRESS	CITY	ZIP
3400 SAN PABLO AVE	OAKLAND	

DETAILS

UST FUND PRIORITY CLASS: D
UST FUND CLAIM NO#: 2115
GEOGRAPHIC AREA (BY REGIONAL BOARD NO#): 2
UST FUND CLAIM_CLOSURE DATE: Not Reported
NO# OF FUND RECOMMEDED CLOSURE: 2
SITE LEAD AGENCY: ALAMEDA COUNTY LOP
YEARS CASE HAS BEEN OPENED: 26
YEARS CLAIM HAS RECEIVED FUNDING: 15

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-Cleanup-CA	Listed	0.49 miles NW	50 ft (17 ft lower than site)	69

SITE NAME	MAPS	ID
Not Reported by Agency	1, 4	T0600102117

ADDRESS	CITY	ZIP
1075 40TH ST	OAKLAND	

DETAILS

UST FUND PRIORITY CLASS: B
UST FUND CLAIM NO#: 13833
GEOGRAPHIC AREA (BY REGIONAL BOARD NO#): 2
UST FUND CLAIM_CLOSURE DATE: Not Reported
NO# OF FUND RECOMMEDED CLOSURE: 2
SITE LEAD AGENCY: ALAMEDA COUNTY LOP
YEARS CASE HAS BEEN OPENED: 17
YEARS CLAIM HAS RECEIVED FUNDING: 9

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Vehicle-Washing	Listed	0.04 miles S	67 ft (0 ft higher than site)	5

SITE NAME	MAPS	ID
BURLEYS DETAIL	1, 2, 3, 4	342311-PD

ADDRESS	CITY	ZIP
657 W MACARTHUR BLVD	OAKLAND	94609-2341

DETAILS

Listing Year: 1997
SIC Category: AUTOMOBILE DETAIL & CLEAN-UP SERVICE
SIC Code: 754203

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
HWIS-CA	Listed	0.05 miles SE	67 ft (0 ft higher than site)	6

SITE NAME	MAPS	ID
QUALITY TUNE UP #35	1, 2, 3, 4	CAL000074673

ADDRESS	CITY	ZIP
640 W MACARTHUR BLVD	OAKLAND	946090000

DETAILS
EPA ID: CAL000074673 Facility County: 1 Mailing Street: 286 E HAMILTON AVE #A Mailing City: CAMPBELL Mailing State: CA Mailing Zip: 950080000 Contact Name: SIDE B CORPORATION Contact Phone: 4083742001 Year: 2000 TONS: 0.72 TSD EPA ID: CAD982446874 Category Code: 134 Category Description: Aqueous solution with total organic residues less than 10 percent Method Description: RECYCLER Year: 1999 TONS: 1.4177 TSD EPA ID: CAD982446874 Category Code: 134 Category Description: Aqueous solution with total organic residues less than 10 percent Method Description: RECYCLER Year: 1999 TONS: 4.4618 TSD EPA ID: CAD982446874 Category Code: 134 More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
HWIS-CA	Listed	0.06 miles NE	71 ft (4 ft higher than site)	8
SITE NAME			**MAPS**	**ID**
PALMERS HAULING AND CLEANING			1, 2, 3, 4	CAL000135916
ADDRESS			**CITY**	**ZIP**
3856 MARTIN LUTHER KING JR WAY			OAKLAND	946090000

DETAILS
EPA ID: CAL000135916 Facility County: 1 Mailing Street: 3856 MARTIN LUTHER KING JR WAY Mailing City: OAKLAND Mailing State: CA Mailing Zip: 946090000 Contact Name: GEORGE PALMER Contact Phone: 5104280334 Year: 1999 TONS: 0.2085 TSD EPA ID: CAT080013352 Category Code: 241 Category Description: Tank bottom waste Method Description: RECYCLER Year: 1997 TONS: 0.2085 TSD EPA ID: CAD981402522 Category Code: 541 Category Description: Photochemicals/photoprocessing waste Method Description: Not Reported

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.08 miles NE	72 ft (5 ft higher than site)	11

SITE NAME	MAPS	ID
GROVE STREET WASH RACK	1, 2, 4	T0600102106

ADDRESS	CITY	ZIP
3884 MARTIN LUTHER KING JR	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600102106
Global ID: T0600102106
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 10/24/2018
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: KLD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: Jan-90
Loc Case Number: RO0000027
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not all historic documents for the fuel leak case may be available on Geotracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at:
http://www.acgov.org/aceh/lop/ust.htm Site investigation activities were conducted in 1995, 2004, 2006, 2013, 2014
, and 2017 to evaluate the extent of subsurface impacts to soil, soil gas and groundwater from the leaking USTs. Site investigation activities conducted on site included: Stockpile Sampling SS-1 to SS-3 (1995); advancement of 19 direct push borings S-1 through S-19 (2004); advancement of eight soil borings GP1 through GP8 (2006); installation of SB-1 through SB-11 and installation of groundwater monitoring wells MW-1 to MW-5 (2013); installation of groundwater monitoring wells MW-6 to MW-8 (2014); installation of temporary soil vapor sampling points SV-1 to SV-5 (February 2017); installation and monitoring of permanent soil vapor monitoring points SV-1A, SV-2A, SV-4A (July 2017). Semi-annual groundwater monitor and sampling was conducted 2013 through 2017. Analytical data from soil, groundwater and soil vapor samples indicated that the subsurface beneath the site had been impacted by petroleum hydrocarbons and fuel-related constituents including, but not limited TPHg, TPHd, BTEX, and naphthalene. Analyses of halogenated VOCs, SVOCs, and metals were additionally conducted on soil and groundwater samples during the investigations. This LUST case was evaluated for closure consistent with the State Water Resource Control Board's Low-Threat Underground Storage Tank Closure Policy (LTCP) for petroleum related contaminants. ACDEH determined that the site met all the LTCP General Criteria and Media Specific Criteria. Therefore, case closure is granted for the current commercial land use as a vacant lot with no structures or buildings. If a change in land use to any residential, commercial other than as a vacant lot with no structures or buildings, or conservative land use, or if any site redevelopment is planned, Alameda County Department of Environmental Health (ACDEH) must be notified as required by Government Code Section 65850.2.2. Any below grade work require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.
Begin Date: 1/5/1995
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Close and Remove Tank
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8288023663628
Agency Provided Longitude: -122.268433570862

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.12 miles N	74 ft (7 ft higher than site)	18

SITE NAME	MAPS	ID
BART PROPERTY	1, 2, 4	T0600101979

ADDRESS	CITY	ZIP
3924 MARTIN LUTHER KING JR	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101979
Global ID: T0600101979
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1/17/1997
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: Jan-53
Loc Case Number: RO0000650
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 5/17/1994
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.829561
Agency Provided Longitude: -122.267942

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.12 miles SW	59 ft (8 ft lower than site)	19

SITE NAME	MAPS	ID
RD MINER COMPANY	1, 2, 4	T0600101123

ADDRESS	CITY	ZIP
750 37TH ST	OAKLAND	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101123
Global ID: T0600101123
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 6/30/2014
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: TW
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-1221
Loc Case Number: RO0003064
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Under Investigation
Site History: Suspect case was opened mistakenly as the result of neighborhood complaints regarding excessive fumes and dying vegetation from ARCO station (RO76)that had a release in 1982. RO76 is a free product site with up to 4 feet of product observed in several site monitoring wells. The tanks located adjacent to the reported address of this site, were not removed until 1992. Soil excavated from the tank pit showed significant evidence of free product and thus likely were the source of the fumes. RO76 files contain a letter dated April 19, 1992 from another resident in the area complaining of impacts from the station.
Begin Date: 8/10/1987
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.826885
Agency Provided Longitude: -122.270401

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.13 miles W	64 ft (3 ft lower than site)	23

SITE NAME	MAPS	ID
NEIGHBORHOOD LAUNDROMAT	1, 2, 4	T0600101597

ADDRESS	CITY	ZIP
3838 WEST	Oakland	94608

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101597
Global ID: T0600101597
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 3/31/2004
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-1726
Loc Case Number: RO0000242
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 1/8/1992
How Discovered: Tank Closure
How Discovered Description: TANK CLOSURE
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8284048
Agency Provided Longitude: -122.2714352

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.23 miles E	80 ft (13 ft higher than site)	44

SITE NAME	MAPS	ID
REGAL #120 / EAST BAY SURGERY CENTER	1, 2, 4	T06019716388

ADDRESS	CITY	ZIP
3875 TELEGRAPH	OAKLAND	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T06019716388
Global ID: T06019716388
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1/5/2016
CUF Case: NO
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: MEJ
Local Agency: Not Reported
RB Case Number: Jan-77
Loc Case Number: Not Reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Diesel, Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: The approximately 0.9-acre Site is located at 3875 Telegraph Avenue in Oakland, California. Much of the site is covered by a 10,000-square foot building that is surrounded largely by paved parking areas. The Site is bounded by: 39th Street to the north; Telegraph Avenue to the east; Apgar Street to the south and a parking lot for the Bay Area Rapid Transit District (BART) MacArthur Station to the west. The surrounding area is a mixed residential and commercial neighborhood. In the 1930s, the Site was used for two gasoline stations, one in the southwest corner (3855 Telegraph Avenue) and one in the northern portion (3881 Telegraph Avenue) of the Site. By the 1940s, the two gasoline stations had been removed. In the 1950s, the southern portion of the Site was occupied by a tamale factory and restaurant; and the northern portion was occupied by another gasoline service station. In June 1984, as part of pre-construction evaluations, Harding Lawson Associates (HLA) drilled four borings for collection of soil samples for geotechnical testing. HLA noted the soil cores collected from approximately 15 feet below ground surface contained “gasoline odor.” In December 1984, the four USTs, associated service station buildings, and pump islands were removed (HLA, 1992). Following removal of the USTs, the excavation was backfilled with imported material. In 1984, the Site was purchased by East Bay Outpatient Surgery for development as a surgery center. In May 1985, as part of the surgery center construction, the UST excavation backfill material was removed. The former UST excavation was subsequently over-excavated to a depth of approximately 15 feet below ground surface with approximately 1,070 cubic yards of soil being disposed off-site. In 2001, Terracon advancing six borings, B-1 to B-6, to a depth of approximately 25-feet below ground surface for the collection of soil and groundwater samples. In January 2005, Gribi Associates (Gribi) collected 18 soil and 5 groundwater samples from borings advanced offsite within the BART parking lot to the west; and onsite within the southern parking lot. Subsequently, between February 2005 and June 2005, Ninyo & Moore, on behalf of BART, conducted investigations near the Site as part of the MacArthur BART Transit Village redevelopment project (N&M, 2005). The investigations included the collection of soil and groundwater samples from 27 borings (February 2005) and soil gas samples from 15 borings (June 2005) advanced within: 39th Street; 40th Street; Apgar Street; and the BART parking lot. The soil and groundwater investigations detected petroleum hydrocarbons both on-site and off-site. Elevated concentrations of TPH as gasoline (TPHg) have been detected in groundwater samples from temporary boring advanced both on-site and off-site. A plume of fuel hydrocarbons extends southwest from the Surgery Center to the BART parking lot. The most recent investigation activities have been conducted in the BART parking lot to define the off-site extent of contamination.
Begin Date: 1/8/2005
How Discovered: * SA
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.827811
Agency Provided Longitude: -122.265215

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.27 miles NE	84 ft (17 ft higher than site)	51

SITE NAME	MAPS	ID
SHELL #12-9452	1, 4	T0600101265

ADDRESS	CITY	ZIP
500 40TH	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101265
Global ID: T0600101265
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 3/24/2014
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-1370
Loc Case Number: RO0000264
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)

Site History: The site is currently a retail shopping center consisting of commercial buildings and a parking area. Surrounding land use is mixed residential and commercial. Prior to development of the site as a retail shopping center in 1986, the site was a gasoline service station. The MacArthur BART station is located approximately 500 feet west of the site. Construction of a transit village is planned for the BART parking lot, which is approximately 130 feet southwest (downgradient) of the site. In July 1982, Shell reported a fuel leak at the site. Eight groundwater monitoring wells (B-1 through B-8) were installed on the site in July 1982 to define the potential extent of contamination. From 1982 to 1987, free product was observed in on-site groundwater monitoring wells B-3, B-4, B-6, and B-8, with an increasing thickness trend occurring in the summer when water tables were lower. Up to six feet of free product was observed in well B-4 during the period between 1982 and 1987. Between September 1982 and July 1983, approximately 4.19 gallons of free product was removed by manual bailing and periodic batch extraction using a vacuum truck. Additional monitoring wells B-9 through B-11 and recovery wells R-1 and R-2 were installed between June and October 1983. No reports document the operation of recovery wells R-1 and R-2, which were subsequently removed in November 1983 during tank removal. The first-generation tanks were reportedly removed in November 1983, with no reports documenting the excavation. Following the 1983 tank removal, three 10,000-gallon gasoline USTs were installed in 1984 and subsequently removed on September 25, 1986. Shell Oil Company owned the site until 1986. The commercial shopping center which currently occupies the site was constructed in January 1987 and covered previous wells. Soil lithology consists of silty clay with trace to slight amounts of sand and gravel. The groundwater gradient at the site has varied between the west, south, and southeast. Depth to water has historically varied between 8.42 feet below ground surface (fbgs) and 19.35 fbgs. Residual contamination appears to be typically encountered at a depth of approximately 10 fbgs. Four soil borings were advanced east of the former USTs in May and September 1989 and completed as groundwater monitoring wells MW-2 through MW-5. Soil samples were collected from the borings between 4 and 16 feet below ground surface (fbgs). The soil sample collected from boring MW-3 at 10 fbgs contained the only reported concentrations of TPHg, benzene, and xylenes at concentrations of 28 ppm, 0.054 ppm, and 0.099 ppm, respectively. Between October and December 1989, four soil borings were advanced (CSB-1, OMW-6, OMW-9, and OMW-10). The maximum concentration of TPHg in soil was detected off-site in boring OMW-9 at a concentration of 210 ppm. The maximum on-site concentration of TPHg in soil was 18 ppm, collected from boring OMW-6 at a depth of 10 fbgs. Monitoring well MW-8 and extraction well EW-1 were installed on June 27 and 28, 1990. Soil samples were collected from the borings between 6 and 20 fbgs. Soil collected from boring EW-1 at 10 fbgs contained the only detections of TPHg and TPHd at concentrations of 110 ppm and 4.4 ppm, respectively. The soil from boring EW-1 also contained the only detections of BTEX. Off-site monitoring wells OMW-11 through OMW-13 were installed on November 20 and 22, 1991. Soil samples were collected from the borings between 5 and 15 fbgs. The only soil contamination detected was 56 ppm TPHmo, collected from boring OMW-12 at a depth of 4.5 fbgs. No activities other than groundwater monitoring appear to have take place between 1991 and November 2004. On November 18, 2004, wells EW-1, MW-4, MW-5, OMW-10, OMW-11, and OMW-12 were decommissioned. Two nested soil vapor probes (SVP-1 and SVP-2) and two sub-slab vapor probes (SVP-3 and SVP-4) were installed on October 25, 2011. The probes were sampled on November 30, 2011 and January 18, 2012. Sub-slab probes SVP-3 and SVP-4 did not contain TPHg or benzene at concentrations above reporting limits of 3,800 and 16 micrograms per cubic meter (µg/m3), respectively. Toluene, ethylbenzene, and xylenes were detected in sub-slab probes SVP-3 and SVP-4 at maximum concentrations of 20, 82, and 110 µg/m3, respectively. These concentrations are below residential and commercial Environmental Screening Levels. Off-site groundwater was most recently sampled on March 26, 2012. Groundwater samples from wells on the south side of 40th Street contained up to 2,900 ppb TPHg, 1,200 ppb TPHd, and 2.9 ppb benzene. Well OMW-6, the closest off-site boring to the property, was last sampled on November 26, 2011. During the November 26, 2011 sampling event, groundwater from well OMW-6 contained 7,000 ppb TPHg, 2,000 ppb TPHd, and 2.3 ppb benzene. Groundwater monitoring has been conducted at the site since 1982. The monitoring data indicate that the plume generally appears to be stable with slowly decreasing trends in concentrations. Based on the evidence in provided reports, the residual contamination on-site and off-site of soil, groundwater, and soil vapor is not suspected to pose a threat to human or environmental health.

Begin Date: 7/1/1982
How Discovered: * SA
How Discovered Description: Not Reported
Stop Method: Close and Remove Tank
Stop Method Description: Not Reported
Agency Provided Latitude: 37.829319002
Agency Provided Longitude: -122.264549312

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.38 miles SE	57 ft (10 ft lower than site)	57

SITE NAME	MAPS	ID
SUMMIT MEDICAL CENTER	1, 4	T0600100952

ADDRESS	CITY	ZIP
3420 TELEGRAPH	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100952
Global ID: T0600100952
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 6/28/1996
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-1031
Loc Case Number: RO0000991
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 4/26/1993
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.823165
Agency Provided Longitude: -122.265557

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.43 miles NE	96 ft (29 ft higher than site)	58

SITE NAME	MAPS	ID
WALTER BLUMERT COMPANY	1, 4	T0600100822

ADDRESS	CITY	ZIP
490 43RD	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100822
Global ID: T0600100822
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 8/28/2001
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-0891
Loc Case Number: RO0000272
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 12/20/1991
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8318299
Agency Provided Longitude: -122.263101

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.43 miles SE	74 ft (7 ft higher than site)	59

SITE NAME	MAPS	ID
UNOCAL #3538	1, 4	T0600101472

ADDRESS	CITY	ZIP
411 WEST MACARTHUR BOULEVARD	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101472
Global ID: T0600101472
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 8/19/2015
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: KEN
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-1597
Loc Case Number: RO0000251
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: The site is a former service station property. The property has perimeter fencing and the vacant service station building remains. Due to residual contamination, the site is closed with Site Management Requirements that limit future land use to the current commercial land use. In July 1989 one 10,000-gallon and one 12,000-gallon gasoline USTs removed and replaced. One 550-gallon waste-oil UST was also removed. Soil samples were collected from 450 yd3 of stockpiled soil that were present at the site. September 6 and 7, 1989 four monitoring wells were installed on-site. In September 1998, two 12,000-gallon gasoline USTs and associated dispensers and product piping were removed from the site. Soil samples collected indicated petroleum hydrocarbon impact. Groundwater was not encountered during the tank removal. Groundwater samples collected from the March 2006 borings had maximum detected concentrations of 13,000 ppb TPHg, 510 ppb benzene and 340 ppb MTBE. Grab groundwater samples reported up to 9,500 ug/L TPHg and 430 ug/L benzene in a 2011 investigation. Based on the bioattentuation zone thickness and the distance to nearby receptors, a determination has been made the site meets the LTCP closure criteria.
Begin Date: 7/12/1989
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8250058553705
Agency Provided Longitude: -122.261888980865

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.43 miles NE	95 ft (28 ft higher than site)	60

SITE NAME	MAPS	ID
SIMPSON, RONN	1, 4	T0600102120

ADDRESS	CITY	ZIP
489 43RD	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600102120
Global ID: T0600102120
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 9/27/2001
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: Jan-05
Loc Case Number: RO0000270
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 9/18/1995
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8315803
Agency Provided Longitude: -122.2630707

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.45 miles NE	99 ft (32 ft higher than site)	63

SITE NAME	MAPS	ID
KELLY AUTO PARTS	1, 4	T0600100790

ADDRESS	CITY	ZIP
4400 TELEGRAPH	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100790
Global ID: T0600100790
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 9/2/1998
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-0856
Loc Case Number: RO0000881
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Stoddard solvent / Mineral Spriits / Distillates
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 10/24/1988
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.832696
Agency Provided Longitude: -122.263073

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.47 miles W	40 ft (27 ft lower than site)	64

SITE NAME	MAPS	ID
BLAZIC INDUSTRIAL BALANCING	1, 4	T0600101618

ADDRESS	CITY	ZIP
1016 MACARTHUR	Oakland	94608

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101618
Global ID: T0600101618
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 8/28/1997
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-1747
Loc Case Number: RO0000985
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 2/8/1994
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.805546
Agency Provided Longitude: -122.236916

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.47 miles NW	55 ft (12 ft lower than site)	65

SITE NAME	MAPS	ID
CALIFORNIA LINEN SUPPLY CO	1, 4	T0600100249

ADDRESS	CITY	ZIP
989 41ST	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100249
Global ID: T0600100249
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 9/20/2013
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: MD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-0267
Loc Case Number: RO0000337
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: In February 1989 three USTs were removed and confirmation soil sampling in the tank pits confirmed that an unauthorized release to the subsurface had occurred. In October 1989 groundwater monitoring wells were installed to evaluate the dissolved phase plume; high concentrations of dissolved phase petroleum hydrocarbons were detected beneath the site. In December 2006 one UST was removed and confirmation soil sampling detected elevated levels of hydrocarbon contamination in soil. Several phases of investigation were completed between 2006 and 2009, and interim remedial action performed between October 2006 and July 2008 removed 620 cubic yards of contaminated soil and 15,000 gallons of contaminated water. In March 2009 verification soil vapor sampling detected high concentrations of 15,000,000 µg/m3 TPHg and 33,000 µg/m3 benzene in soil vapor samples. This site is situated at the eastern end of the currently known extent of paleochannels that extends beneath Oakland and Emeryville for a distance of over 1,500 feet (see attached mapped paleochannel network). This has allowed the migration of free-phase concentrations of petroleum hydrocarbons (mineral spirits and gasoline) over that distance (not the 250 feet per the often cited LLNL study). There are 7 known sites that have comingled plumes, and innocent property owners are involved. Continuing work at this site appears to extend the paleochannel network to the northeast of this site. This recent work (2009 and continuing as of this date, and thus not fully reported yet) is based on geophysical conductivity profiles (fine vs. granular sediments) upgradient and downgradient of the site, as well as soil vapor sampling beneath the site and upgradient of the site. Onsite soil vapor sampling appears to map out two principal paleochannels beneath the site. Soil vapor concentrations within those paleochannels for TPHg are up to 15,000,000 ug/m3 (29,000 ug/m3 ESL) and for benzene 53,000 ug/m3 (280 ug/m3 ESL); these are one to two orders of magnitude above their respective commercial ESLs (see attached map data submittal). The recent, on-going, and currently unreported work appears to have located one and perhaps two unreported UST locations north of 41st Street (currently unlisted as the data has not been fully reported). These may be the source of soil vapor concentrations beneath the subject site; however, this is not fully understood due to the current and on-going nature of the data at present. The elevated soil vapor concentrations are mapped to extend to the south of the subject site (via the paleochannel network) to older residential properties and low income housing that border the subject site on the south (over 300 feet from their potential source). These have been unevaluated for vapor intrusion, but the work is already approved, but is pending the resolution of offsite access difficulties. Due to offsite access difficulties, ACEH letters requesting / requiring offsite access of several parcels are likely to be issued shortly. Two of the homes are reported to have basements. Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at:
http://ehgis.acgov.org/dehpublic/dehpublic.jsp.
Begin Date: 2/8/1989
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8317640177705
Agency Provided Longitude: -122.276265621185

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.49 miles NW	50 ft (17 ft lower than site)	69

SITE NAME	MAPS	ID
FIDELITY ROOF COMPANY	1, 4	T0600102117

ADDRESS	CITY	ZIP
1075 40TH STREET	Oakland	94608

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600102117
Global ID: T0600102117
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 5/14/2013
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: MD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: Jan-01
Loc Case Number: RO0000186
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at:
http://ehgis.acgov.org/dehpublic/dehpublic.jsp. The site is currently used as a company yard and offices for Fidel
ity Roof Company. The property is located in a mixed commercial and residential area of Oakland and is bordered to the south by Yerba Buena Avenue, residential properties to the east, commercial and residential properties to the west, and 40th Street to the north. Soil on the site generally consists of clays, with occasional interbedded silts, sands, and gravel. Stabilized groundwater is generally at depths between 5 and 10 feet below ground surface (fbgs). Groundwater appears to have been encountered initially at depths ranging from 12 to 16 fbgs, but this is not specifically reported. Groundwater monitoring has been conducted at the site from March 19, 1997 to December 29, 2011. Contamination on the site is highest in the southeast portion of the site in areas west, northwest, and around the former underground storage tanks (USTs). On December 19, 1995, one 1,000-gallon diesel UST and one 500- or 800-gallon gasoline UST were removed from the southeastern area of the property. Three discrete soil samples and one soil stockpile sample were collected. Soil samples collected beneath the 1,000-gallon diesel UST contained up to 8.7 milligrams per kilogram (mg/kg) Total Petroleum Hydrocarbons as gasoline (TPHg), 29 mg/kg Total Petroleum Hydrocarbons as diesel (TPHd), and 29 mg/kg Methyl Tertiary Butyl Ether (MTBE), and 0.77 mg/kg benzene. Soil samples collected from beneath the 500-gallon UST gasoline contained 100 mg/kg TPHg, 96 mg/kg TPHd, 2.3 mg/kg benzene, and 1.4 mg/kg MTBE (benzene is not reported). The soil stockpile sample contained 580 mg/kg TPHg, 120 mg/kg TPHd, and 42 mg/kg lead. Groundwater was not encountered in the excavation. Holes and corrosion were noted on all portions of the USTs, but the locations were not specifically defined. On September 12, 1996, four soil borings (SB-1 through SB-4) were advanced near the former UST excavation. Soil samples were collected every five feet; only the samples collected at ten fbgs were analyzed. The soil sample collected from boring SB-1 at ten fbgs contained the highest concentrations including up to 290 mg/kg TPHg, 45 mg/kg TPHd, 3.9 mg/kg benzene, and 1.5 mg/kg MTBE. Groundwater was encountered at approxi mately 13-15 fbgs and grab groundwater samples were collected from bores SB-2 and SB-4. Concentrations in the grab groundwater samples contained up to 5,500 micrograms per liter (µg/l) TPHg, 2,100 µg/l TPHd, 340 µg/l benzene, and 230 µg/l MTBE. The tank removal excavation pit remained open and a four-point composite soil sample was collected from the stockpiled soil generated during this event. Two soil samples were additionally collected from the southern wall of the open excavation. On October 25, 1996, the tank removal excavation was overexcavated laterally seven feet to the south and 12 feet to the west. Three sidewall and three four-point composite stockpile soil samples were collected during the excavation activities. The sidewall sample collected from the west wall of the excavation contained the greatest concentration; with 150 mg/kg TPHg, 300 mg/kg TPHd, and 16 mg/kg benzene (MTBE was not analyzed in these samples). The greatest contaminant concentrations in the four-point stockpile samples were 850 mg/kg TPHg, 720 mg/kg TPHd, and 1.3 mg/kg benzene. In November 1996, 235 tons of contaminated soil was disposed of at the BFI Vasco Road Sanitary Landfill in Livermore, CA. On March 6, 1997 three borings (BH-1 through BH-3) were advanced and converted to monitoring wells (MW-1 to MW-3). Soil samples collected from 10 fbgs were analyzed for contamination. Groundwater samples were collected from the wells on March 13, 1997. The soil sample collected from BH-3 (MW-3) contained the greatest TPHg and benzene concentrations of 110 mg/kg and 1.1 mg/kg, respectively. The soil samples collected from BH-2 (MW-2) contained the greatest TPHd concentration of 18 mg/kg. No MTBE was detected in the soil samples. The groundwater sample collected from MW-3 was the only sample with detectable concentrations of constituents other than MTBE. Groundwater from MW-3 contained 26,000 µg/l TPHg, 5,000 µg/l TPHd and 3,000 µg/l benzene. MTBE was detected in MW-1, MW-2, and MW-3 groundwater samples at concentrations of 23, 65, and 230 µg/l, respectively. The static groundwater depth was measured between 7.59 and 8.25 fbgs. To assess lateral extent of impacted groundwater, six soil borings (SB-1 through SB-6) were drilled south and west of existing well locations on November 4, 1998. The borings were advanced to depths between 15 and 20 fbgs and groundwater was encountered between 12 and 15 fbgs. Soil samples were collected; however, all samples were placed on hold at the laboratory and were not analyzed. In groundwater, TPHd was only detected in upgradient bore SB-1 at a concentration of 2,400 µg/l. Toluene was the only other detected constituent and was found in SB-6 at a concentration of 0.6 µg/l. Based on the November 4, 1998 boring results monitoring well MW-4 was requested to be installed upgradient (south) of the former tank locations on July 15, 1999. Two soil samples were collected at 10 and 14 fbgs from the boring. No detectable concentrations of petroleum hydrocarbons were found in the soil samples. Well MW-4 was sampled during the next groundwater monitoring event on August 5, 1999. MTBE was the only detectable constituent in well MW-4 in that sampling event; at a concentration of 37 µg/l. Groundwater sampled from well MW-3 during the same event contained the highest groundwater concentrations; with 5,100 µg/l TPHd, 31,000 µg/l TPHg and 5,400 µg/l benzene detected. The MW-2 groundwater sample contained 600 µg/l MTBE. A Corrective Action Plan (CAP) was submitted on July 31, 2001 which evaluated a number of remedial technologies, recommended vapor extraction / air sparging, and proposed that a pilot test of the technology be conducted. The need for the pilot test was accepted in a December 2001 directive letter; however, the proposed remedial cleanup goals were not. On May 6, 2004, soil borings AS-1, AS-2, and SVE-1 were completed as two 30 fbgs air sparge wells and one ten fbgs soil vapor extraction well, respectively. Additionally, six shallow vapor points (DP-1 through DP-6) were installed to a depth of 15.5 fbgs on May 12 and 13, 2004. The purpose of the May 6, 2004 well

installation was to determine the potential for air sparge/soil vapor extraction (AS/SVE) remediation. Soil samples were collected at approximately five foot intervals from the soil borings. Grab groundwater samples were collected on May 24, 2004 from bores DP-1, DP-2, and DP-3, and groundwater was collected from well MW-3. All contaminant concentrations, with the exception of MTBE, were greatest in shallow vapor point DP-5, located at the edge, but within the area of overexcavation, 15 feet southwest of the former UST area. Soil concentrations, at a depth of 11.5 fbgs, in DP-5 were 2,900 mg/kg TPHg, 830 mg/kg TPHd, 0.012 mg/kg benzene, and <10 mg/kg MTBE. The highest MTBE soil concentration was 0.049 mg/kg, detected in well AS-1 which was located approximately 15 feet west of the former overexcavated UST area. Groundwater samples collected during the event contained up to 90,000 µg/l TPHg, 26,000 µg/l TPHd, 6,700 µg/l benzene, and <1,200 µg/l MTBE in MW-3. Preliminary tests of the AS/SVE pilot test were conducted during May and June, 2004. Air samples collected during AS/SVE operation contained up to 150,000 micrograms per liter (µg/L) TPHg (150,000,000 micrograms per cubic meter [µg/m3]), 1,800 µg/L (1,800,000 µg/m3) benzene, and 1,400 µg/L (1,400,000 µg/m3) MTBE. Based on the results a combined bio-sparge and SVE remediation system was recommended. After the AS/SVE pilot test light non-aqueous phase liquid (LNAPL) was observed in MW-3 from September 2004 to March 2006. The LNAPL was requested to be removed prior to any corrective action measures. Three mobile LNAPL extraction events were conducted between September and November 2004; 245 gallons of LNAPL and groundwater were extracted and LNAPL thickness was reduced from 0.66 to 0.05 feet. Due to the low permeability of soils, AS/SVE remediation was deemed to be less effective than high vacuum dual phase extraction (HVDPE). Consequently a 5-day HVDPE extraction event was conducted after receipt of permits from EBMUD and the BAAQMD by Cal-Clean between March 8 and March 13, 2006. Approximately 4,900 gallons of groundwater was extracted and discharged to the sanitary sewer collection system. The estimated hydrocarbon recovery from this event was 58.4 lbs., with calculated 1,763 lbs. remaining in the smear zone soils. On December 14, 2006 wells MW-5 and MW-6 were installed to delineate the lateral and downgradient extent of the MTBE plume. Soil samples were collected at approximately 10 and 16 fbgs in each soil bore; groundwater stabilized at 16 and 8 fbgs, respectively. All concentrations in soil (TPHg, TPHd, BTEX, and MTBE) were non-detectable at standard reporting limits. Subsequently a LNAPL recovery system was proposed in March 2007 work plan, and consisted of a passive Keck skimmer device. After a change in consultants a change in the remedial approach was proposed in an April 2007 work plan. The work plan proposed excavation in the vicinity of the former fuel dispenser and LNAPL containing well MW-3 and the implementation of an ozone injection pilot test. A work plan addendum was requested and an addendum included the installation of four soil bores to characterize residual hydrocarbon concentrations associated with the excavation backfill, and beneath the depth of the excavation. On November 23, 2007, wells DP-3, DP-4, DP-5, DP-6, AS-1, AS-2, and MW-3 were decommissioned by pressure grouting. On November 27, 2007, soil borings B-1 to B-4 were installed to vertically characterize residual concentrations associated with the backfilled UST excavation. Existing reports indicated the excavations were backfilled with uncharacterized cleaner tank excavation spoils below clean fill, while the vertical extent previously had not been determined. The bores were installed to depths ranging from approximately 16 to 30 fbgs in the source zone. Soil and grab groundwater samples were collected from each boring. The highest concentration of TPHd in soil and groundwater was detected in boring B-3 at eight fbgs at 410 mg/kg and 750 µg/l, respectively. The highest concentration of TPHg in soil and groundwater was detected in boring B-2 at eight fbgs at a concentration of 170 mg/kg and 320 µg/l, respectively. Boring B-2 also contained the highest concentration of MTBE in soil (at 12 fbgs) and groundwater, at concentrations of 6.5 mg/kg and with 180 µg/l, respectively. Remedial excavation activities were conducted between March 10 and 12, 2008 immediately north of the Yerba Buena Avenue entrance to the site. The excavation measured approximately 25 by 55 feet and extended to an approximate depth of 12 fbgs. Of the total volume of soil excavated, a total of 282 tons of soil was segregated and disposed of offsite. After completion of excavation activities on March 12, 2007, groundwater was periodically removed from the excavation cavity after allowing it to recharge. A total of 2,500 gallons of hydrocarbon impacted groundwater was extracted over approximately a one week period. One grab groundwater sample (VH-2) was collected from the holding tank containing the extracted recharge water. Nine sidewall soil samples (SW-1 through SW-9) and six pit bottom soil samples (EB-1 through EB-6) were collected from the excavation pit on March 18, 2008. The highest sidewall soil concentrations were collected from the southern wall of the excavation at with 73 mg/kg TPHg, 63 mg/kg TPHd, and 0.003 mg/kg benzene; no MTBE was detected at standard reporting limits. The highest excavation bottom sample concentrations were 170 mg/kg TPHg, 7.4 mg/kg TPHd, 0.012 mg/kg benzene; no MTBE was detected at standard limits of reporting. Additionally, sixteen discrete soil samples (SP-1 through SP-16) were collected from soil stockpiles generated during the excavation that were designated as clean backfill for the excavation pit. Only one soil stockpile sample contained detectable amounts of contaminants, with concentrations of 1.5 mg/kg TPHg and 0.043 mg/kg xylenes. The grab groundwater sample collected from the holding tank contained 100 µg/l TPHg, 440 µg/l TPHd, and 8.0 µg/l xylenes. The interim remedial action report recommended case closure exclusively based on the residual concentrations in soil in the vicinity of the excavation. As a result of the interim remedial excavation ACEH requested that post-excavation groundwater monitoring occur prior to implementation of the ozone injection pilot test, requested soil vapor sampling due to documented benzene concentrations in soil and groundwater, and requested that the extent of the MTBE plume be delineated. Between April 7 and 11, 2011, groundwater monitoring well MW-7 and borings GA-1 through GA-8 were drilled and installed. Soil and grab groundwater samples were collected from each boring. Three soil gas samples (SG/VS-1 through SG/VS-3) were collected from vapor wells adjacent to the building in the eastern portion of the site. Well MW-7 was installed in a submerged condition with the top of the screen approximately six feet below first encountered groundwater; consequently the well does not monitor the groundwater surface but a position below the groundwater surface. The soil sample collected from boring GA-4, advanced in the location of the former USTs, at 19.5 fbgs was the only sample to contain constituents other than MTBE. Soil sample GA-4 contained 7.9 mg/kg TPHg, 0.13 mg/kg benzene, and 2.5 mg/kg tert-butyl alcohol (TBA). MTBE was detected in soil from borings GA-1 through GA-4, with the highest concentration detected of 0.89 mg/kg, collected from GA-4. Grab groundwater samples collected from borings GA-2 and GA-4, located closest but downgradient of, the former UST location and the March 2008 excavation area, contained the highest contaminant concentrations. The highest detected concentrations in grab groundwater were 250 µg/l TPHg, 100 µg/l benzene, and 1,600 µg/l MTBE. MTBE was detected in all groundwater samples except those from downgradient borings GA-7 and GA-8. Soil vapor samples collected May 5, June 10, and September 28, 2011 contained concentrations of leak check compounds of up to 28,000 µg/m3 1,1-Diflouroethane (1,1-DFA), 34,000 µg/m3 1,1-DFA, and 1,800 µg/m3 Isopropyl Alcohol (IP), respectively. Because the shroud concentrations of 1,1-DFA were not collected, an estimate of the leak rate cannot be made. While the IP tracer was present in the September 2011 sampling results, shroud concentrations were significantly higher (57,000 µg/m3 IP). This represents a concentration of 3.16% of the shroud concentration, and is not expected to significantly affect the results. Soil vapor samples collected using the IP tracer documented vapor concentrations of up to <160 µg/m3 benzene, 26 µg/m3 toluene, 6.3 µg/m3 ethylbenzene, and 37.7 µg/m3 xylenes; each is less than their respective soil gas vapor intrusion ESL. Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.

Begin Date: 12/19/1995

How Discovered: Tank Closure

How Discovered Description: TANK CLOSURE

Stop Method: Close and Remove Tank

Stop Method Description: Not Reported

Agency Provided Latitude: 37.8307270296044

Agency Provided Longitude: -122.276953607798

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.49 miles NW	75 ft (8 ft higher than site)	71

SITE NAME	MAPS	ID
ARCO	1, 4	T0600100430

ADDRESS	CITY	ZIP
4401 MARKET	Oakland	94608

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100430
Global ID: T0600100430
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 3/29/2012
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: PK
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-0474
Loc Case Number: RO0000132
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Four USTs were removed from the site in June 1990. Soil borings were installed in 1994 and in 1995. Monitoring well installations followed in 2001.
Begin Date: 6/20/1990
How Discovered: Tank Closure
How Discovered Description: TANK REMOVAL
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.834106
Agency Provided Longitude: -122.272583

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.49 miles SW	34 ft (33 ft lower than site)	72

SITE NAME	MAPS	ID
FORMER FG GASOLINE	1, 4	T0600102132

ADDRESS	CITY	ZIP
3314 SAN PABLO AVE.	Oakland	94608

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600102132
Global ID: T0600102132
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 4/10/2017
CUF Case: YES
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: REL
Local Agency: Not Reported
RB Case Number: Jan-18
Loc Case Number: Not Reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Benzene, Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: February 29, through March 1, 1996 four gasoline USTs (one 8,000 gallon, one 6,000 gallon and Two 4,000 gallon) were removed from the site. The maximum concentrations in soil were 8,000 mg/kg TPHg and 4 mg/kg benzene. Grab groundwater was 46,000 µg/L TPHg and 440µg/L benzene. Soil removed from the tank pit was placed back in the excavation with no treatment. A work plan was subsequently submitted and approved but was not implemented. On the Project Information screen, add this phrase to the Staff Notes and Site History: Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historical case file for this site is located on the Alameda County Environmental Health website at:
http://ehgis.acgov.org/dehpublic/dehpublic.jsp.
Begin Date: 2/29/1996
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8245821255098
Agency Provided Longitude: -122.277510166168

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.5 miles SW	34 ft (33 ft lower than site)	73

SITE NAME	MAPS	ID
LOOMIS ARMORED INC	1, 4	T0600100849

ADDRESS	CITY	ZIP
936 BROCKHURST	Oakland	94608

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100849
Global ID: T0600100849
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 7/7/1997
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-0924
Loc Case Number: RO0001099
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 3/9/1990
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.823704
Agency Provided Longitude: -122.276621

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.5 miles N	97 ft (30 ft higher than site)	74

SITE NAME	MAPS	ID
NIGHTINGALE PROPERTY	1, 4	T0600101297

ADDRESS	CITY	ZIP
4629 MARTIN LUTHER KING JR	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101297
Global ID: T0600101297
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 3/26/2003
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-1403
Loc Case Number: RO0000424
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Heating Oil / Fuel Oil
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 7/15/1992
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Close and Remove Tank
Stop Method Description: Not Reported
Agency Provided Latitude: 37.834853
Agency Provided Longitude: -122.267425

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.5 miles W	33 ft (34 ft lower than site)	75

SITE NAME	MAPS	ID
SHELL #13-9619	1, 4	T0600101253

ADDRESS	CITY	ZIP
3420 SAN PABLO	Oakland	94608

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101253
Global ID: T0600101253
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 5/13/2014
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-1358
Loc Case Number: RO0000006
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil Vapor
Site History: In December 1984, gasoline-saturated soil was discovered beneath the pump island area. The steel USTs were replaced in January 1985. Monitoring well installation and other site characterization activities were conducted at various times from 1988 to 2006. A soil vapor extraction test was conducted in 1993. In 1997, the station was station was renovated and a new larger station building constructed. Free product was bailed from monitoring wells MW-1 through MW-7 at various times during groundwater monitoring. Groundwater monitoring has been conducted at the site since 1991. The site was evaluated for case closure under the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy and was closed on May 13, 2014. Based upon the information available in our files to date, no further investigation or cleanup for the fuel leak case is necessary at this time. Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at:
http://ehgis.acgov.org/dehpublic/dehpublic.jsp.
Begin Date: 8/8/1988
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Close and Remove Tank
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8259295780339
Agency Provided Longitude: -122.277815937996

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.5 miles W	33 ft (34 ft lower than site)	76

SITE NAME	MAPS	ID
THRIFTY OIL #49	1, 4	T0600101365

ADDRESS	CITY	ZIP
3400 SAN PABLO	Oakland	94608

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101365
Global ID: T0600101365
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 4/15/2014
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-1478
Loc Case Number: RO0000004
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: The site is an active service station at the northeast corner of the intersection of San Pablo Avenue and 34th Street in Oakland, CA. Site assessment, cleanup, and groundwater monitoring were conducted at the site between 1986 and 2013. The site was evaluated for case closure under the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy and was closed on April 15, 2014. Based upon the information available in our files to date, no further investigation or cleanup for the fuel leak case is necessary at this time. Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at:
http://ehgis.acgov.org/dehpublic/dehpublic.jsp.
Begin Date: 10/2/1986
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.825787
Agency Provided Longitude: -122.277468

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Site Assessment	0.08 miles S	65 ft (2 ft lower than site)	10

SITE NAME	MAPS	ID
J&H AUTO REPAIR AND GAS STATION	1, 2, 4	T06019709592

ADDRESS	CITY	ZIP
3701 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T06019709592
Global ID: T06019709592
Case Type: LUST Cleanup Site
Status: Open - Site Assessment
Status Date: 4/21/2003
CUF Case: YES
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: CCM
Local Agency: Not Reported
RB Case Number: Jan-06
Loc Case Number: RO0002910
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: A Phase I report was prepared for the site in 2002 which identified the site as having been a retail service station from the 1940s to the 1990s. The underground storage tanks were left in place and the site is currently a vacant lot. A preliminary site assessment was performed on March 31, 2003. 160 mg/kg TPHg, 200 mg/kg TOG and 1 mg/kg benzene were detected in soil samples and 1,500 µg/L TPHg and 18 µg/l benzene were detected in groundwater samples. No MTBE was detected. Four additional borings were advanced at the request of the City of Oakland Environmental Service Division for approval of Community Development Corporation of Oakland loan. 0.072 mg/kg benzene was detected in soil. No other significant contaminants were detected. However, it is unclear where the samples were located since no map was present in the report. It appears that the groundwater samples may have been collected from upgradient. The case was transferred to ACEH on February 23, 2006 but the RP has been unresponsive to requests to claim the site in Geotracker. Unknown to ACEH, the USTs were removed and work was performed under the Orphan Fund perhaps under the CIty of Oakland's direction. To date ACEH has not recieved any reports nor have they been uploaded to Geotracker.
Begin Date: 9/27/2002
How Discovered: * SA
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8264804163206
Agency Provided Longitude: -122.269506454468

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Eligible for Closure	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
ARCO #04931	1, 2, 4	T0600100110

ADDRESS	CITY	ZIP
731 W MACARTHUR BLVD	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100110
Global ID: T0600100110
Case Type: LUST Cleanup Site
Status: Open - Eligible for Closure
Status Date: 6/15/2018
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: MD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-0118
Loc Case Number: RO0000076
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Benzene, Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Monitoring wells A-1 through A-8 were installed in two phases in December 1982 and March 1983 (A-5 to A-8 were installed by Groundwater Technology, Inc). Documentation of the installations has not been found; however, an undocumented tank replacement is reported to have occurred in August 1983. In October 1987, Pacific Environmental Group (PEG) installed four monitoring wells (A-9 through A-12) at the site. Subsequently, an Unauthorized Release Form was submitted in October 1987. Between November 1991 and April 1992, four single-walled underground storage tanks consisting of one 12,000-gallon fiberglass UST, two 8,000-gallon steel USTs and one 6,000-gallon steel UST) and associated product piping were removed from the site. All are reported to have dispensed gasoline. TPHg and benzene were detected at concentrations up to 430 mg/kg and 24 mg/kg, respectively, in soil sample SW12 collected at 12 feet bgs. Following UST pit over-excavation, ROUX stated that maximum residual TPH-g and benzene concentrations remaining in the UST cavity were detected at 250 mg/kg and 2.7 mg/kg, respectively. Product line samples documented concentrations up to 8,300 mg/kg TPHg, 3.1 mg/kg benzene, 23 mg/kg toluene, 40 mg/kg ethylbenzene and 300 mg/kg total xylenes in sample L6 at 3.5 feet bgs. Elevated product line samples were subsequently also overexcavated and removal was confirmed with subsequent deeper samples at 7 to 7.5 feet bgs. Following over-excavation of the product piping, maximum residual TPH-g and benzene concentrations remaining in the piping trenches were detected 400 mg/kg and 2.6 mg/kg, respectively, detected in sample L12 collected at 7.5 ft bgs. Approximately 1,900 cubic yards of soil was excavated during the removal of the former USTs and conveyance piping and the excavation of the current UST pit. In January 1992, GeoStrategies, Inc. (GSI) installed one vapor extraction well (AV-1) to conduct a vapor extraction test. GSI concluded that vapor extraction did not create significant pressure influence at the closest vapor monitoring point location four feet from the vapor extraction point and subsequently vapor extraction was not considered a viable or feasible remediation option for the site. In November 1992, three recovery wells (AR-1 through AR-3) were installed at the site to facilitate groundwater extraction and abate free product detected in monitoring wells A-4 and A-8. The groundwater extraction system operated from November 1992 to June 1996. The system operated and removed approximately 4,643,696 gallons of groundwater with approximately 2.74 pounds (0.45 gallons) of TPHg and 0.46 pounds (0.06 gallons) of benzene during the operation of the system. As of December 31, 1995, 23 pounds (3.75 gallons) of separate phase hydrocarbons (SPH) had been removed from the site by the GWETS or by hand bailing. Soil bores SB-1A, and SB-2 through SB-6 were installed in October 2010 up to 35 feet bgs to characterize soil beneath the site. Concentrations up to 1,400 mg/kg TPHg, 5.2 mg/kg benzene, 17 mg/kg ethylbenzene and 110 mg/kg total xylenes were detected in SB-1A at a depth of 25 feet bgs. This location is immediately west and adjacent to the former UST and product line overexcavation samples collected in 1991 / 1992, and based on the analytical sample location, depths, and results, represents residual contamination below a depth of approximately 20 feet bgs at the site. Downgradient and offsite soil bore SB-7 and onsite soil vapor wells SV-7 and SV-8 were installed in Mary 2015 and were analyzed for TPHg, BTEX, naphthalene, and fuel oxygenates and lead scavengers. All concentrations were non-detectable at standard limits of reporting. Soil bores SB-08 to SB-11, and soil vapor well SV-9 were installed in November 2016 along the eastern property line, and were analyzed for TPHg, BTEX, naphthalene, and fuel oxygenates and lead scavengers. In general most soil samples yielded non-detectable concentrations at standard limits of reporting; however, concentrations up to 990 mg/kg TPHg, <3.6 mg/kg benzene, 11.0 mg/kg ethylbenzene, and <7.20 mg/kg total xylenes were detected in soil sample SB-10 at a depth of 20.5 feet bgs.
Begin Date: 3/13/1983
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Close and Replace Tank, Repair Product Piping, Replace product piping
Stop Method Description: Not Reported
Agency Provided Latitude: 37.827139963
Agency Provided Longitude: -122.271487404

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Assessment & Interim Remedial Action	0.27 miles W	52 ft (15 ft lower than site)	53

SITE NAME	MAPS	ID
CHEVRON #9-2029	1, 4	T0600173887

ADDRESS	CITY	ZIP
890 W. MACARTHUR BLVD	OAKLAND	94608

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600173887
Global ID: T0600173887
Case Type: LUST Cleanup Site
Status: Open - Assessment & Interim Remedial Action
Status Date: 10/26/2005
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: MD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: NA
Loc Case Number: RO0002438
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at:
http://ehgis.acgov.org/dehpublic/dehpublic.jsp. In February 1997 five dispenser islands were removed and replaced;
associated excavations detected concentrations of hydrocarbons significantly below the current day ESLs. In October 2000 soil bores B-1 to B-10 were installed and grab groundwater concentrations of concern were encountered. In March 2002 wells MW-1 to MW-4 were installed. In April 2005 the station was demolished and all USTs and associated piping were removed. Also beginning in April 2005, a remedial excavation was conducted and removed 5,134 tons of soil, and 25,486 gallons of groundwater were pumped. In March 2006 soil bores SB-1 to SB-7 were installed. In September 2006 wells MW-1 to MW-4 were decommissioned to facilitate site redevelopment; including a residential option. In July 2008 wells MW-5 to MW-8 were installed offsite. Two additional soil bores are currently proposed to define the downgradient extent of dissolved phase impacts; downgradient well MW-7 has a strong increasing concentration trend.
Begin Date: 2/26/1997
How Discovered: UST System Modification
How Discovered Description: Not Reported
Stop Method: Replace product piping
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8282727309058
Agency Provided Longitude: -122.274194955826

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Eligible for Closure	0.28 miles SE	64 ft (3 ft lower than site)	54

SITE NAME	MAPS	ID
CHP - OAKLAND	1, 4	T0619763665

ADDRESS	CITY	ZIP
3601 TELEGRAPH AVENUE	OAKLAND	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0619763665
Global ID: T0619763665
Case Type: LUST Cleanup Site
Status: Open - Eligible for Closure
Status Date: 7/24/2018
CUF Case: NO
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: REL
Local Agency: Not Reported
RB Case Number: Jan-12
Loc Case Number: RO0002950
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Lead, Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: During UST system testing in 1988 and dispenser upgrades in 1997, unauthorized releases were detected. An indoor shooting range was located on the site and lead contamination was detected. Building demolition and lead abatement of shallow soil to 1 foot bgs was completed in 2008. A PSA completed in November 2008 collected limited soil samples above 5 feet bgs. UST system removal and replacement is proposed and confirmation soil sampling will be completed once the UST has been removed. Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at:
http://ehgis.acgov.org/dehpublic/dehpublic.jsp
Begin Date: 11/28/1988
How Discovered: Tank Tightness Test
How Discovered Description: Not Reported
Stop Method: Repair Product Piping
Stop Method Description: Not Reported
Agency Provided Latitude: 37.824405
Agency Provided Longitude: -122.265796

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Site Assessment	0.31 miles NW	60 ft (7 ft lower than site)	56

SITE NAME	MAPS	ID
SAN FRANCISCO FRENCH BREAD	1, 4	T0600101187

ADDRESS	CITY	ZIP
3924 MARKET ST.	Oakland	94608

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101187
Global ID: T0600101187
Case Type: LUST Cleanup Site
Status: Open - Site Assessment
Status Date: 5/15/1995
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: KEN
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-1290
Loc Case Number: RO0000490
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: The site is occupied by a single story commercial building with adjacent paved parking. The building is on a raised floor with basement and is currently occupied by Atthowe Fine Arts Services for storage, packaging, and shipping of fine art. One 500-gallon UST, reported to contain diesel fuel, and a fuel dispenser were removed from the site in March 1991. Analysis of confirmation samples performed following over excavation of the UST pit determined residual concentrations of total petroleum hydrocarbons (TPH) as gasoline (TPHg), and benzene at concentrations of 210 milligrams per kilogram (mg/kg) and 0.4 mg/kg, respectively. In 1995, three groundwater monitoring wells were installed and sampled quarterly for approximately one year. Maximum concentrations reported through 1996 included 220 micrograms per liter (ug/L) TPHg, 10,000 ug/L TPH as diesel (TPHd), and 3.5 ug/L, 1.0 ug/L, 3.0 ug/L for benzene, toluene, and xylenes (BTX) compounds, respectively. Ethylbenzene (E) concentrations were reported below the laboratory reporting limits. In 1999, to evaluate the case for closure, ACDEH requested recovery of groundwater samples to to include analysis for methyl tertiary butyl ether (MTBE). The monitoring event, conducted in August 1999, encountered a viscous free product (FP) in monitoring well MW-1, additionally FP was subsequently encountered in wells MW-2 and MW-3 in April 2000. The FP in the three wells was identified as Bunker C fuel oil. The source of the fuel oil has not been identified. Additionally, secondary evidence of free product concentrations of TPHd and TPH motor oil (TPHmo) were reported in water samples from MW-1 and MW-3 during the April 2000 monitoring event. BTEX and MTBE concentrations were reported below laboratory reporting limits in wells MW-2 and MW-3, the two wells sampled for these chemicals. The monitoring wells were not sampled between June 2000 and June 2015. Depth to water measurements for the seven groundwater monitoring events have ranged between 9.70 feet to 13.40 feet. An investigation consisting of both on- and off-site soil bores was conducted in 2013 to delineate the extent of the free phase hydrocarbons. TPH was not reported in in soil or grab-groundwater (GGW) samples collected from the two off-site soil bores, advanced to the west, roughly in the down gradient direction across Market Street, and soil bores B-5 and B-9 appear to have delineated the TPH plume to the south and east. In 2015, an on-site water supply well was decommissioned. The supply well, approximately 200 feet deep, was situated about 100 feet cross gradient from the former UST location and was reported to be last used prior to 1985. Prior to its abandonment, a water sample was collected from the well and analyzed for TPHg, TPHd, TPHmo, BTEX and the fuel oxygenates (FOs) MTBE, diisopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA), and the polynulear aromatic hydrocarbons (PNAs) naphthalene, acenaphthene, acenaphthylene, anthracene, phenanthrene, fluorene, chrysene, fluoranthene, pyrene, benzo(b)fluoranthene, benzo(a) pyrene, benzo(k)fluoranthene, benzo(a)anthracene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene. Benzene, at a concentration of 6.8 ug/L, was the only compound documented above the laboratory reporting limit. An investigation consisting of both on- and off-site soil bores was also conducted in 2015. Based on the findings of the investigation, the contaminant plume remains undefined to the north, in the up gradient direction from the former UST. Soil and GGW samples collected from bores advanced within the boundary of the plume (B-10 and B-11) were reported to contain PNAs. The three monitoring wells were also sampled, with FP present in each well. No BTEX, FOs, or naphthalene concentrations were detected in groundwater recovered from the wells. However, concentrations of several PNAs were reported above their respective laboratory reporting limits. Additionally, two soil gas samples were recovered for a vapor intrusion to indoor air evaluation. BTEX compounds were reported present in both samples at concentrations up to 17 micrograms per cubic meter (ug/m3), 94 ug/m3, 120 ug/m3, and 530 ug/m3, respectively. Naphthalene concentrations were not reported above the laboratory reporting limit, and oxygen was reported at 8.29 percent (%) and 9.10%. A well survey was conducted in 2016 with a search radius of 1,000 feet around the property. The survey contained Department of Water Resources (DWR) and Alameda County Public Works Agency (ACPWA) records review. No supply wells were identified within the search radius; however, a cathodic protection well is identified approximately 550 feet in the southly direction, roughly down gradient of the site. Findings of the August 2017 investigation did not locate an up gradient source of contaminants. ACDEH proposes a meeting to discuss the case and review for potential case closure.
Begin Date: 3/29/1991
How Discovered: Tank Closure
How Discovered Description: TANK CLOSURE
Stop Method: Close and Remove Tank
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8302031719854
Agency Provided Longitude: -122.27392984425

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
NCI-CA	Informational Item	0.16 miles W	61 ft (6 ft lower than site)	27

SITE NAME	MAPS	ID
820 W MACARTHUR BLVD	1, 2, 4	T10000012542

ADDRESS	CITY	ZIP
820 W MACARTHUR BLVD	OAKLAND	94608

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000012542
Global ID: T10000012542
Case Type: Non-Case Information
Status: Informational Item
Status Date: 2019-01-07 00:00:00
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: PK
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: Not Reported
Loc Case Number: RO0003347
File Location: Not Reported
Potential Contaminants of Concern: Not Reported
Potential Media Affected: Not Reported
Site History: Not Reported
Begin Date: 2019-01-07 00:00:00
How Discovered: Not Reported
How Discovered Description: Not Reported
Stop Method: Not Reported
Stop Method Description: Not Reported
Agency Provided Latitude: 37.82804
Agency Provided Longitude: -122.27224

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
RCRA-NON-US	Listed	0.03 miles SE	68 ft (1 ft higher than site)	3

SITE NAME	MAPS	ID
HK AUTO CARE	1, 2, 3, 4	CAL000408081

ADDRESS	CITY	ZIP
3806 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

Additional details may be found online using the following link:

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAL000408081&pgm_sys_acrnm_in=RCRAINFO

Source Type: Implementer
Generator Status Universe: N
Generator Status: Non-Generator
NAICS1: GENERAL AUTOMOTIVE REPAIR
Active Site Indicator: H----
Owner Name: HUI CHON SHIN
Operator Name: HUI CHON SHIN
In Handler Universes: Y
In a Universe: Y
Short Term Generator: N
Importer Activity: N
Mixed Waste Generator: N
Transporter Activity: Y
Transfer Facility: N
Recycler Activity: N
Onsite Burner Exemption: N
Furnace Exemption: N
Underground Injection Activity: N
Receives Waste From Off-site: N
Universal Waste: N
Universal Waste Destination Facility: Y
Used Oil Universe: NNNNNNN
Federal Universal Waste: N
Active Site Federally Regulated TSDF: ------

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
RCRA-NON-US	Listed	0.11 miles W	61 ft (6 ft lower than site)	17

SITE NAME	MAPS	ID
INSTA LUBE	1, 2, 4	CAL000171415

ADDRESS	CITY	ZIP
736 W MACARTHUR BLVD	OAKLAND	94609

DETAILS

Additional details may be found online using the following link:

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAL000171415&pgm_sys_acrnm_in=RCRAINFO

Source Type: Implementer
Generator Status Universe: N
Generator Status: Non-Generator
NAICS1: ALL OTHER WASTE MANAGEMENT SERVICES
Active Site Indicator: H----
Owner Name: DAN & MINH TRUONG
Operator Name: DAN TRUONG-MGR
In Handler Universes: Y
In a Universe: Y
Short Term Generator: N
Importer Activity: N
Mixed Waste Generator: N
Transporter Activity: Y
Transfer Facility: N
Recycler Activity: N
Onsite Burner Exemption: N
Furnace Exemption: N
Underground Injection Activity: N
Receives Waste From Off-site: N
Universal Waste: N
Universal Waste Destination Facility: Y
Used Oil Universe: NNNNNNN
Federal Universal Waste: N
Active Site Federally Regulated TSDF: ------

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
RCRA-NON-US	Listed	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
WESSTCO GAS MART INC MOBIL	1, 2, 4	CAL000442252

ADDRESS	CITY	ZIP
731 W MACARTHUR BLVD	OAKLAND	94609

DETAILS

Additional details may be found online using the following link:

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAL000442252&pgm_sys_acrnm_in=RCRAINFO

Source Type: Implementer
Generator Status Universe: N
Generator Status: Non-Generator
NAICS1: GENERAL AUTOMOTIVE REPAIR
Active Site Indicator: H----
Owner Name: ABDULRAHIM S. ALAZANI
Operator Name: ABDULRAHIM ALAZANI
In Handler Universes: Y
In a Universe: Y
Short Term Generator: N
Importer Activity: N
Mixed Waste Generator: N
Transporter Activity: Y
Transfer Facility: N
Recycler Activity: N
Onsite Burner Exemption: N
Furnace Exemption: N
Underground Injection Activity: N
Receives Waste From Off-site: N
Universal Waste: N
Universal Waste Destination Facility: Y
Used Oil Universe: NNNNNNN
Federal Universal Waste: N
Active Site Federally Regulated TSDF: ------
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
RCRA-NON-US	Listed	0.16 miles W	60 ft (7 ft lower than site)	29

SITE NAME	MAPS	ID
AUTOMECHS	1, 2, 4	CAL000366948

ADDRESS	CITY	ZIP
801 W MACARTHUR BLVD	OAKLAND	94608

DETAILS

Additional details may be found online using the following link:

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAL000366948&pgm_sys_acrnm_in=RCRAINFO

Source Type: Implementer
Generator Status Universe: N
Generator Status: Non-Generator
NAICS1: GENERAL AUTOMOTIVE REPAIR
Active Site Indicator: H----
Owner Name: WENDEWESEN F.
Operator Name: WENDEWESEN FETENE
In Handler Universes: Y
In a Universe: Y
Short Term Generator: N
Importer Activity: N
Mixed Waste Generator: N
Transporter Activity: Y
Transfer Facility: N
Recycler Activity: N
Onsite Burner Exemption: N
Furnace Exemption: N
Underground Injection Activity: N
Receives Waste From Off-site: N
Universal Waste: N
Universal Waste Destination Facility: Y
Used Oil Universe: NNNNNNN
Federal Universal Waste: N
Active Site Federally Regulated TSDF: ------
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
RCRA-NON-US	Listed	0.22 miles NE	81 ft (14 ft higher than site)	40

SITE NAME	MAPS	ID
BART/MACARTHUR STATION	1, 2, 4	CAL000015927

ADDRESS	CITY	ZIP
555 40TH ST	OAKLAND	94609

DETAILS

Additional details may be found online using the following link:

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAL000015927&pgm_sys_acrnm_in=RCRAINFO

Source Type: Implementer
Generator Status Universe: N
Generator Status: Non-Generator
NAICS1: URBAN TRANSIT SYSTEMS
Active Site Indicator: H----
Owner Name: SAN FRANCISCO BAY AREA RTD
Operator Name: GARY JENSEN
In Handler Universes: Y
In a Universe: Y
Short Term Generator: N
Importer Activity: N
Mixed Waste Generator: N
Transporter Activity: Y
Transfer Facility: N
Recycler Activity: N
Onsite Burner Exemption: N
Furnace Exemption: N
Underground Injection Activity: N
Receives Waste From Off-site: N
Universal Waste: N
Universal Waste Destination Facility: Y
Used Oil Universe: NNNNNNN
Federal Universal Waste: N
Active Site Federally Regulated TSDF: ------

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
RCRA-NON-US	Listed	0.23 miles N	81 ft (14 ft higher than site)	46

SITE NAME	MAPS	ID
1ST CHOICE AUTO REPAIR	1, 2, 4	CAL000350841

ADDRESS	CITY	ZIP
4101 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

Additional details may be found online using the following link:

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAL000350841&pgm_sys_acrnm_in=RCRAINFO

Source Type: Implementer
Generator Status Universe: N
Generator Status: Non-Generator
NAICS1: ALL OTHER WASTE MANAGEMENT SERVICES
Active Site Indicator: H----
Owner Name: PRABHJOT SINGH
Operator Name: PRABHJOT SINGH
In Handler Universes: Y
In a Universe: Y
Short Term Generator: N
Importer Activity: N
Mixed Waste Generator: N
Transporter Activity: Y
Transfer Facility: N
Recycler Activity: N
Onsite Burner Exemption: N
Furnace Exemption: N
Underground Injection Activity: N
Receives Waste From Off-site: N
Universal Waste: N
Universal Waste Destination Facility: Y
Used Oil Universe: NNNNNNN
Federal Universal Waste: N
Active Site Federally Regulated TSDF: ------
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
RCRA-NON-US	Listed	0.23 miles N	81 ft (14 ft higher than site)	46

SITE NAME	MAPS	ID
DAWIT AUTO BODY	1, 2, 4	CAL000384246

ADDRESS	CITY	ZIP
4101 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

Additional details may be found online using the following link:

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAL000384246&pgm_sys_acrnm_in=RCRAINFO

Source Type: Implementer
Generator Status Universe: N
Generator Status: Non-Generator
NAICS1: OTHER AUTOMOTIVE MECHANICAL AND ELECTRICAL REPAIR AND MAINTENANCE
Active Site Indicator: H----
Owner Name: DAWIT GOITOM ADELL M
Operator Name: DAWIT GOITOM
In Handler Universes: Y
In a Universe: Y
Short Term Generator: N
Importer Activity: N
Mixed Waste Generator: N
Transporter Activity: Y
Transfer Facility: N
Recycler Activity: N
Onsite Burner Exemption: N
Furnace Exemption: N
Underground Injection Activity: N
Receives Waste From Off-site: N
Universal Waste: N
Universal Waste Destination Facility: Y
Used Oil Universe: NNNNNNN
Federal Universal Waste: N
Active Site Federally Regulated TSDF: ------

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
RCRA-NON-US	Listed	0.24 miles N	81 ft (14 ft higher than site)	48

SITE NAME	MAPS	ID
LITHOGRAPH REPRODUCTIONS INC	1, 2, 4	CAL000098709

ADDRESS	CITY	ZIP
4120 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

Additional details may be found online using the following link:

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAL000098709&pgm_sys_acrnm_in=RCRAINFO

Source Type: Implementer
Generator Status Universe: N
Generator Status: Non-Generator
NAICS1: ALL OTHER WASTE MANAGEMENT SERVICES
Active Site Indicator: H----
Owner Name: LANCE GREEN
Operator Name: MIREILLE GREEN
In Handler Universes: Y
In a Universe: Y
Short Term Generator: N
Importer Activity: N
Mixed Waste Generator: N
Transporter Activity: Y
Transfer Facility: N
Recycler Activity: N
Onsite Burner Exemption: N
Furnace Exemption: N
Underground Injection Activity: N
Receives Waste From Off-site: N
Universal Waste: N
Universal Waste Destination Facility: Y
Used Oil Universe: NNNNNNN
Federal Universal Waste: N
Active Site Federally Regulated TSDF: ------
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
RCRA-NON-US	Listed	0.25 miles N	83 ft (16 ft higher than site)	50

SITE NAME	MAPS	ID
SVARTVIK METALWORKS LTD	1, 2, 4	CAL000316976

ADDRESS	CITY	ZIP
4126 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

Additional details may be found online using the following link:

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=CAL000316976&pgm_sys_acrnm_in=RCRAINFO

Source Type: Implementer
Generator Status Universe: N
Generator Status: Non-Generator
NAICS1: ALL OTHER WASTE MANAGEMENT SERVICES
Active Site Indicator: H----
Owner Name: SVARTVIK METALWORKS LTD
Operator Name: DAVID COLE
In Handler Universes: Y
In a Universe: Y
Short Term Generator: N
Importer Activity: N
Mixed Waste Generator: N
Transporter Activity: Y
Transfer Facility: N
Recycler Activity: N
Onsite Burner Exemption: N
Furnace Exemption: N
Underground Injection Activity: N
Receives Waste From Off-site: N
Universal Waste: N
Universal Waste Destination Facility: Y
Used Oil Universe: NNNNNNN
Federal Universal Waste: N
Active Site Federally Regulated TSDF: ------

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Response-CA	ACTIVE	0.55 miles SW	35 ft (32 ft lower than site)	77

SITE NAME	MAPS	ID
CAL TECH METALS	1, 4	1340118

ADDRESS	CITY	ZIP
825, 829, 841 31ST STREET	OAKLAND	94608

DETAILS
URL: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=1340118 Envirostor ID: 1340118 Program Type: STATE RESPONSE Cleanup Status: ACTIVE Status Date: 5/2/2006 CAL Enviro Screen Score: 86-90% County: ALAMEDA Site Code: 200882 Agency Provided Latitude: 37.8208694448441 Agency Provided Longitude: -122.274468449601

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Response-CA	ACTIVE	0.65 miles SW	29 ft (38 ft lower than site)	78

SITE NAME	MAPS	ID
LANE METAL FINISHERS	1, 4	60000594

ADDRESS	CITY	ZIP
2942 SAN PABLO AVENUE	OAKLAND	94608

DETAILS
URL: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60000594 Envirostor ID: 60000594 Program Type: STATE RESPONSE Cleanup Status: ACTIVE Status Date: 3/15/2007 CAL Enviro Screen Score: 86-90% County: ALAMEDA Site Code: 201736 Agency Provided Latitude: 37.8201518201527 Agency Provided Longitude: -122.275963675717

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Response-CA	ACTIVE	0.67 miles S	35 ft (32 ft lower than site)	79

SITE NAME	MAPS	ID
HARRIS DRY CLEANERS	1, 4	1720109

ADDRESS	CITY	ZIP
2801 MARTIN LUTHER KING JR. WAY	OAKLAND	94609

DETAILS
URL: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=1720109 Envirostor ID: 1720109 Program Type: STATE RESPONSE Cleanup Status: ACTIVE Status Date: 6/16/2000 CAL Enviro Screen Score: 86-90% County: ALAMEDA Site Code: 201253 Agency Provided Latitude: 37.8181288606979 Agency Provided Longitude: -122.271665945525

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Response-CA	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	0.69 miles NW	43 ft (24 ft lower than site)	80

SITE NAME	MAPS	ID
HERCULES INC	1, 4	7280156

ADDRESS	CITY	ZIP
CORNER OF SAN PABLO & SYCAMORE AVENUE	HERCULES	94547

DETAILS

URL:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=7280156
Envirostor ID: 7280156
Program Type: STATE RESPONSE
Cleanup Status: CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS
Status Date: 11/25/1992
CAL Enviro Screen Score: 31-35%
County: CONTRA COSTA
Site Code: 200044
Agency Provided Latitude: 38.0134086079359
Agency Provided Longitude: -122.280342578888

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
SLIC-Closed-CA	Completed - Case Closed	0.49 miles NE	102 ft (35 ft higher than site)	70

SITE NAME	MAPS	ID
SHATTUCK AVE PROPERTY	1, 4	T06019777882

ADDRESS	CITY	ZIP
4501 SHATTUCK	OAKLAND	94609

DETAILS
Sites Details URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T06019777882 Global ID: T06019777882 Case Type: Cleanup Program Site Status: Completed - Case Closed Status Date: 6/25/1999 CUF Case: NO Lead Agency: ALAMEDA COUNTY LOP Case Worker: Not Reported Local Agency: Not Reported RB Case Number: NA Loc Case Number: RO0002715 File Location: All Files are on GeoTracker or in the Local Agency Database Potential Contaminants of Concern: Not Reported Potential Media Affected: Other Groundwater (uses other than drinking water) Site History: Not Reported Begin Date: 6/25/1999 How Discovered: Other Means How Discovered Description: Not Reported Stop Method: Other Means Stop Method Description: Not Reported Agency Provided Latitude: 37.833522 Agency Provided Longitude: -122.263836 Regulatory Activities Details More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
SLIC-Open-CA	Open - Site Assessment	0.16 miles W	61 ft (6 ft lower than site)	27

SITE NAME	MAPS	ID
820 W MACARTHUR BLVD	1, 2, 4	T10000012542

ADDRESS	CITY	ZIP
820 W MACARTHUR BLVD	OAKLAND	94608

DETAILS
Sites Details URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000012542 Global ID: T10000012542 Case Type: Cleanup Program Site Status: Open - Site Assessment Status Date: 1/29/2019 CUF Case: NO Lead Agency: ALAMEDA COUNTY LOP Case Worker: DY Local Agency: ALAMEDA COUNTY LOP RB Case Number: Not Reported Loc Case Number: RO0003347 File Location: All Files are on GeoTracker or in the Local Agency Database Potential Contaminants of Concern: Tetrachloroethylene (PCE), Diesel, Gasoline, Total Petroleum Hydrocarbons (TPH), Waste Oil / Motor / Hydraulic / Lubricating Potential Media Affected: Aquifer used for drinking water supply, Soil, Soil Vapor, Under Investigation Site History: Not Reported Begin Date: 1/7/2019 How Discovered: Not Reported How Discovered Description: Not Reported Stop Method: Not Reported Stop Method Description: Not Reported Agency Provided Latitude: 37.82804 Agency Provided Longitude: -122.27224 Regulatory Activities Details More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
SLIC-Open-CA	Open - Remediation	0.18 miles E	70 ft (3 ft higher than site)	33
SITE NAME			MAPS	ID
MacArthur BART Parcels B-1 and B-2			1, 2, 4	T10000011256
ADDRESS			CITY	ZIP
3883 Turquoise Way			Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000011256
Global ID: T10000011256
Case Type: Cleanup Program Site
Status: Open - Remediation
Status Date: 1/25/2018
CUF Case: NO
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: MEJ
Local Agency: Not Reported
RB Case Number: 01S0696
Loc Case Number: Not Reported
File Location: Not Reported
Potential Contaminants of Concern: Gasoline, Total Petroleum Hydrocarbons (TPH)
Potential Media Affected: Not Reported
Site History: This project is Parcels B-1 and B-2 of the MacArthur BART Transit Village site.
Begin Date: 11/10/2017
How Discovered: Not Reported
How Discovered Description: Not Reported
Stop Method: Not Reported
Stop Method Description: Not Reported
Agency Provided Latitude: 37.82814
Agency Provided Longitude: -122.26608

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
SLIC-Open-CA	Open - Remediation	0.22 miles NE	70 ft (3 ft higher than site)	42

SITE NAME	MAPS	ID
MacArthur BART Parcels A and C-1 (aka MacArthur Commons)	1, 2, 4	T10000010286

ADDRESS	CITY	ZIP
0 40th Street and Telegraph	Oakland	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000010286
Global ID: T10000010286
Case Type: Cleanup Program Site
Status: Open - Remediation
Status Date: 1/3/2018
CUF Case: NO
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: MEJ
Local Agency: Not Reported
RB Case Number: 01S0696
Loc Case Number: Not Reported
File Location: Not Reported
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil, Soil Vapor
Site History: Not Reported
Begin Date: 4/5/2017
How Discovered: Not Reported
How Discovered Description: Not Reported
Stop Method: Not Reported
Stop Method Description: Not Reported
Agency Provided Latitude: 37.82897
Agency Provided Longitude: -122.26554

Regulatory Activities Details
[More Details Link]

<table>
<tr><th>DATABASE</th><th>STATUS</th><th>DISTANCE</th><th>ELEVATION</th><th>MAP ID</th></tr>
<tr><td>SLIC-Open-CA</td><td>Open - Inactive</td><td>0.27 miles E</td><td>84 ft
(17 ft higher than site)</td><td>52</td></tr>
<tr><th colspan="3">SITE NAME</th><th>MAPS</th><th>ID</th></tr>
<tr><td colspan="3">MacArthur BART Transit Village</td><td>1, 4</td><td>T10000000406</td></tr>
<tr><th colspan="3">ADDRESS</th><th>CITY</th><th>ZIP</th></tr>
<tr><td colspan="3">None 40th Street and Telegraph Avenue (APNs 012-0969-053-03, 012-0968-055-01, 012-0967-049-01)</td><td>Oakland</td><td>94612</td></tr>
</table>

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000000406
Global ID: T10000000406
Case Type: Cleanup Program Site
Status: Open - Inactive
Status Date: 6/27/2018
CUF Case: NO
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: MEJ
Local Agency: Not Reported
RB Case Number: 01S0696
Loc Case Number: Not Reported
File Location: Regional Board
Potential Contaminants of Concern: Diesel, Total Petroleum Hydrocarbons (TPH), Waste Oil / Motor / Hydraulic / Lubricating
Potential Media Affected: Indoor Air, Other Groundwater (uses other than drinking water), Soil Vapor
Site History: This site was contaminated with petroleum hydrocarbons from an off site, neighboring, former gas station facility. This site is composed of several different parcels that will be redeveloped into a mixed-use; commercial and residential space, vapor intrusion is a concern. A soil and vapor management plan has been required of the different parcels.
Begin Date: 10/10/2008
How Discovered: Not Reported
How Discovered Description: Not Reported
Stop Method: Not Reported
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8290735382453
Agency Provided Longitude: -122.264742851257

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
SLIC-Open-CA	Open - Site Assessment	0.43 miles SE	74 ft (7 ft higher than site)	59

SITE NAME	MAPS	ID
411 MACARTHUR REDEVELOPMENT	1, 4	T10000007937

ADDRESS	CITY	ZIP
411 WEST MACARTHUR BLVD	OAKLAND	94609

DETAILS

Sites Details
URL:
http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000007937
Global ID: T10000007937
Case Type: Cleanup Program Site
Status: Open - Site Assessment
Status Date: 11/4/2015
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: KEN
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: Not Reported
Loc Case Number: RO0003192
File Location: Not Reported
Potential Contaminants of Concern: Not Reported
Potential Media Affected: Not Reported
Site History: January 9, 2017 Conference call with Mr. Hernon and City of Oakland representatives fell through. ACDEH requesting additional dates and time for reschedule. Conference call with Messrs. Joe Hernon (RP) and consultants Michael Kara (prepared HHRA) and Jim Gribi (PG), and Heriberto Robles (performing HHRA 3rd party review) on 9/21/2016. Meeting to discuss the HHRA and review status. In summary, Mr. Robles requested the complete data set for the TO-15 and 8260 analyses in order to complete his HHRA review. Mr. Gribi indicated he would contact the lab for the data and provide to Mr. Robles. The path forward would be to complete the review, with ACDEH completing its review of the RAP upon completion of the HHRA review. Based on discussions during the first half of September, 2016 related to the scope of the HHRA third-party review, ACDEH has requested a conference call for September 20, 2016 to discuss the HHRA and the path forward. Meeting held on August 25, 2016 for follow up presentation of the current analytical data, and discussion of the human health risk assessment (HHRA) provided to our office on August 19, 2016. ACDEH pointed out that we did not have a qualified risk assessor (RA) on staff and that we would provide a list of RAs provided by California Environmental Protection Agency/ Department of Toxic Substances Control (DTSC). We requested the Responsible Party (RP) select an RA from the list to hire as a third-party consultant for the HHRA review. On August 30, 2016, Mr. Heriberto Robles contacted ACDEH informing us he had been contracted to perform the HHRA review. Meeting held on June 22, 2016 for presentation of data requested in meeting of April 20, 2016, including the soil sampling conducted in May 2016 along the swath of soil between the former fuel tank pit and Webster St. The only non-ACDEH attendee was a consultant who had not present at any of the previous meetings and had not been brief on the data to be presented. ACDEH reviewed case and rationale behind the request. Meeting held on April 20, 2016 for discussion of the results of the approved work plan to address residual contamination in the swath of soil between the former fuel tank pit and Webster St. The areas investigated are the location of the proposed elevator pit and the swath of soil between the former fuel tank pit and Webster St. The laboratory report documented concentrations of up to 42,000 micrograms per liter (ug/L) total petroleum hydrocarbons as gasoline (TPHg),110 ug/L benzene, and 2,300 ug/L naphthalene in groundwater and up to 2,700,000 micrograms per cubic meter (ug/m3) TPHg and ug/m3 benzene in soil gas. The sample collection and analysis provided to ACDEH as an email attachment on 4/19/2016 for the 4/20/2016 meeting. The data demonstrated the existence of potential vapor intrusion risks and indicates the presence of residual product. At the meeting, ACDEH requested an attempt be made to determine if residual source is present and the limits of the contamination. ACDEH requested on-site soil borings be advanced along the strip of native soil between the former tank pit and Webster Street and to present the findings in a document which would include a cross section through this area showing the distribution of contaminants, depth to water (dtw), and the proposed 'clean fill' line for a 5-foot sub-slab bioattenuation zone. Meeting held on March 30, 2016 for discussion of path forward addressing vapor intrusion due to residual contamination with respect to proposed development. ACEH requested preparation of a work plan to investigate this concern. Meeting held on January 08, 2016 for presentation of proposed development. ACEH requested figures, cross sections and data tables to be provided electronically for the case file. Case documents delivered to ACEH on 2/29/2016 for review prior to meeting of 3/30/2016. At the meeting, it was agreed that the next course of action is for work plan submittal for collection of soil gas and grab-groundwater samples. The work plan was approved and implemented. The laboratory report documented concentrations of up to 42,000 ug/L TPHg,110 ug/L benzene, and 2,300 ug/L naphthalene in groundwater and up to 2,700,000 ug/m3 TPHg and ug/m3 benzene in soil gas. The sample collection and analysis provided to ACDEH as an email attachment on 4/19/2016 for meeting held on 4/20/2016. The data demonstrated the existence of potential vapor intrusion risks and indicates the presence of residual product. At the meeting ACEH requested an attempt be made to determine if residual source is present and the limits of the contamination. ACDEH letter dated 4/22/2016 requested submittal of work plan.
Begin Date: 10/29/2015
How Discovered: Not Reported
How Discovered Description: Not Reported
Stop Method: Not Reported
Stop Method Description: Not Reported
Agency Provided Latitude: 37.825105
Agency Provided Longitude: -122.261965

Regulatory Activities Details
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Spills-SSO-CA	Listed	0.03 miles S	68 ft (1 ft higher than site)	2

SITE NAME	MAPS	ID
Martin Luther King Jr way & W. Macarthur Blvd Oakland ca	1, 2, 3, 4	833807

ADDRESS	CITY	ZIP
Not Reported by Agency		

DETAILS

Facility and Program Information
Event ID: 833807
Certificate ID: 599723
Region: 2
County: Alameda
Agency: Oakland City DPW
Collection SYS: Oakland City CS
WDID: 2SSO11204
Certificate Person Name: Johnny R Nicks
Certificate Person Title: Supervisor II
Certificate Location: 7101 Edgewater dr Oakland Ca. 94621
Certificate Date: 2017.04.11 00.00.00
Spill Location Description: Sewage spilled from manhole in street.
Spill Type: Category 3
Appear PT: Manhole
Appear PT Explanation: Sanitary Main Sewer plugged in street due to heavy grease, Staff used Hydro Flusher to clear blockage and restore flow in sewer line. Staff contained sewage and vacuumed and returned to sanitary system
Reach Surface: No
reach Storm Drainpipe: No
Return To SSS: Not Applicable - Spill did not reach a separate storm drainpipe
Privt Latrl Spill: No
Responsible Party: Not Reported
Final Spill Dest: Street/Curb and Gutter
Final Spill Dest Explanation: Not Reported
Spill Volume Reached Land: 825
Spill Volume Discharge A: 0
Spill Volume Discharge B: 0
Spill Volume Discharge C: 0
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Spills-SSO-CA	Listed	0.15 miles SE	71 ft (4 ft higher than site)	25

SITE NAME	MAPS	ID
37th St and West MacArthur Blvd	1, 2, 4	811301

ADDRESS	CITY	ZIP
Not Reported by Agency		

DETAILS

Facility and Program Information
Event ID: 811301
Certificate ID: 761464
Region: 2
County: Alameda
Agency: Oakland City DPW
Collection SYS: Oakland City CS
WDID: 2SSO11204
Certificate Person Name: Kenneth Patton
Certificate Person Title: Public Works Supervisor II
Certificate Location: 7101 Edgewater Dr. Oakland Ca, 94621
Certificate Date: 2014.12.26 00.00.00
Spill Location Description: Not Reported
Spill Type: Category 2
Appear PT: Gravity Mainline
Appear PT Explanation: Sanitary main sewer plugged and overflowed out of the manhole in the middle of the street.
Reach Surface: No
reach Storm Drainpipe: No
Return To SSS: Not Applicable - Spill did not reach a separate storm drainpipe
Privt Latrl Spill: No
Responsible Party: Not Reported
Final Spill Dest: Other (specify below);Street/Curb and Gutter
Final Spill Dest Explanation: 8 sanitary main sewer plugged due to grease and overflowed out of the manhole in the middle of the street into the curb and gutter and storm inlet.
Spill Volume Reached Land: 2500
Spill Volume Discharge A: 0
Spill Volume Discharge B: 0
Spill Volume Discharge C: 0

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Spills-SSO-CA	Listed	0.17 miles S	61 ft (6 ft lower than site)	32

SITE NAME	MAPS	ID
36 th & MLK	1, 2, 4	767184

ADDRESS	CITY	ZIP
36th	Oakland	

DETAILS

Facility and Program Information
Event ID: 767184
Certificate ID: 589008
Region: 2
County: Alameda
Agency: Oakland City DPW
Collection SYS: Oakland City CS
WDID: 2SSO11204
Certificate Person Name: Loren Little
Certificate Person Title: Public Works Supervisor II
Certificate Location: 7101Edgewater Dr. Oakland, Calif 94621
Certificate Date: 2011.06.08 00.00.00
Spill Location Description: Not Reported
Spill Type: Category 3
Appear PT: Gravity sewer
Appear PT Explanation: Not Reported
Reach Surface: No
reach Storm Drainpipe: Yes
Return To SSS: Yes
Privt Latrl Spill: No
Responsible Party: Not Reported
Final Spill Dest: Other (specify below)
Final Spill Dest Explanation: staff contained the overflow in the storm inlet, staff vaccumed all the sewage from the storm intet and returned it to the collection system.
Spill Volume Reached Land: 0
Spill Volume Discharge A: 0
Spill Volume Discharge B: 0
Spill Volume Discharge C: 0

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Spills-SSO-CA	Listed	0.17 miles S	61 ft (6 ft lower than site)	32

SITE NAME	MAPS	ID
36TH STREET & Martin Luther King Jr	1, 2, 4	758732

ADDRESS	CITY	ZIP
Martin Luther King Jr. way	Oakland	

DETAILS

Facility and Program Information
Event ID: 758732
Certificate ID: 159187
Region: 2
County: Alameda
Agency: Oakland City DPW
Collection SYS: Oakland City CS
WDID: 2SSO11204
Certificate Person Name: Loren Little
Certificate Person Title: Public Works Supervisor II
Certificate Location: 7101Edgewater Dr. Oakland, Calif 94621
Certificate Date: 2010.11.18 00.00.00
Spill Location Description: Not Reported
Spill Type: Category 1
Appear PT: Gravity sewer
Appear PT Explanation: Not Reported
Reach Surface: Yes
reach Storm Drainpipe: Yes
Return To SSS: No
Privt Latrl Spill: No
Responsible Party: Not Reported
Final Spill Dest: Other (specify below)
Final Spill Dest Explanation: 8" Main sewer spilled out into storm line and into the S/F Bay
Spill Volume Reached Land: 0
Spill Volume Discharge A: 0
Spill Volume Discharge B: 0
Spill Volume Discharge C: 0
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Spills-SSO-CA	Listed	0.18 miles E	73 ft (6 ft higher than site)	35

SITE NAME	MAPS	ID
544 MacArthur Blvd	1, 2, 4	738140

ADDRESS	CITY	ZIP
Not Reported by Agency		

DETAILS

Facility and Program Information
Event ID: 738140
Certificate ID: 323802
Region: 2
County: Alameda
Agency: Oakland City DPW
Collection SYS: Oakland City CS
WDID: 2SSO11204
Certificate Person Name: Loren Little
Certificate Person Title: Public Works Supervisor II
Certificate Location: 7101 Edgewater Dr. Oakland, Calif 94612
Certificate Date: 2010.02.22 00.00.00
Spill Location Description: Not Reported
Spill Type: Category 3
Appear PT: Manhole
Appear PT Explanation: Not Reported
Reach Surface: No
reach Storm Drainpipe: Yes
Return To SSS: Yes
Privt Latrl Spill: No
Responsible Party: Not Reported
Final Spill Dest: Storm drain
Final Spill Dest Explanation: Not Reported
Spill Volume Reached Land: 0
Spill Volume Discharge A: 0
Spill Volume Discharge B: 0
Spill Volume Discharge C: 0
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Spills-SSO-CA	Listed	0.22 miles N	80 ft (13 ft higher than site)	41

SITE NAME	MAPS	ID
4106 Martin Luther King Oakland, Ca	1, 2, 4	773405

ADDRESS	CITY	ZIP
4106 Martin Luther King Avenue	Oakland	

DETAILS

Facility and Program Information
Event ID: 773405
Certificate ID: 828613
Region: 2
County: Alameda
Agency: Oakland City DPW
Collection SYS: Oakland City CS
WDID: 2SSO11204
Certificate Person Name: Loren Little
Certificate Person Title: Public Works Supervisor II
Certificate Location: 7101Edgewater Dr. Oakland, Calif 94621
Certificate Date: 2011.12.08 00.00.00
Spill Location Description: 8 VCP main sewer was plugged with grease and overflowed out of the side sewer lateral in the side walk area.
Spill Type: Category 1
Appear PT: Gravity sewer;Other (specify)
Appear PT Explanation: 8 VCP main sewer was plugged with grease and overflowed out of the lateral connection in the side walk area. Sewage was running into the gutter and into the storm inlet.
Reach Surface: Yes
reach Storm Drainpipe: Yes
Return To SSS: No
Privt Latrl Spill: No
Responsible Party: Not Reported
Final Spill Dest: Separate storm drain;Surface water;Other (specify below)
Final Spill Dest Explanation: Main sewer was plugged and overflowing out of the house lateral and getting into the gutter and catch basin flowing to the S/F Bay.Staff rodded and flushed 8 VCP main sewer to unplug soppage of grease. Staff returned flow to the main sewer. Staff will CCTV the main sewer.
Spill Volume Reached Land: 0
Spill Volume Discharge A: 0
Spill Volume Discharge B: 0
Spill Volume Discharge C: 0
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
State-Response-Active-CA	Active	0.55 miles SW	35 ft (32 ft lower than site)	77

SITE NAME	MAPS	ID
CAL TECH METALS	1, 4	01340118

ADDRESS	CITY	ZIP
825, 829, 841 31ST STREET	OAKLAND	94608

DETAILS

URL:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=01340118
Envirostor ID: 01340118
County: ALAMEDA
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0.64
APN: 009 071003600, 009 071003700, 009 071003800, 009 071003900
National Priorities List: NO
Lead Agency: SMBRP
Project Manager: Henry Wong
Supervisor: Daniel Murphy
Division Branch: Cleanup Berkeley
Site Code: 200882
Assembly: 18
Senate: 9
Congressional District: 13
Special Program: Not Reported
Status: Active
Status Date: 5/2/2006
Past Uses: METAL PLATING - CHROME, METAL PLATING - OTHER
Restricted Use: NO
Funding: Orphan Funds
Regulatory Agencies Involved: SMBRP, US EPA
Potential Contamination of Concern: 30013, 30027, 30028, 30195, 30196, 30407
Confirmed Contamination of Concern: 301,953,019,630,407,000,000,000,000,000
Potential Media Affected: OTH, SOIL, SV
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
State-Response-Active-CA	Active	0.65 miles SW	29 ft (38 ft lower than site)	78

SITE NAME	MAPS	ID
Lane Metal Finishers	1, 4	60000594

ADDRESS	CITY	ZIP
2942 San Pablo Avenue	Oakland	94608

DETAILS

URL:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60000594
Envirostor ID: 60000594
County: ALAMEDA
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0.61
APN: 009 069402001, 009 069403400, 009 069403500
National Priorities List: NO
Lead Agency: SMBRP
Project Manager: Sagar Bhatt
Supervisor: Mark Piros
Division Branch: Cleanup Berkeley
Site Code: 201736
Assembly: 18
Senate: 9
Congressional District: 13
Special Program: Not Reported
Status: Active
Status Date: 3/15/2007
Past Uses: FUEL - VEHICLE STORAGE/ REFUELING, METAL PLATING - CHROME, METAL PLATING - OTHER
Restricted Use: NO
Funding: Orphan Funds
Regulatory Agencies Involved: SMBRP
Potential Contamination of Concern: 30005, 30013, 30016, 30022, 30025, 30027, 30028, 30108, 30116, 30152, 30153, 30156, 30194, 30195, 30272, 30384, 30407, 30594
Confirmed Contamination of Concern: 302,723,002,230,025,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000
Potential Media Affected: OTH, SOIL, SV

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
State-Response-Active-CA	Active	0.67 miles S	35 ft (32 ft lower than site)	79

SITE NAME	MAPS	ID
HARRIS DRY CLEANERS	1, 4	01720109

ADDRESS	CITY	ZIP
2801 MARTIN LUTHER KING JR. WAY	OAKLAND	94609

DETAILS

URL:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=01720109
Envirostor ID: 01720109
County: ALAMEDA
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0.3
APN: 009 069500600, 009-0695-006-00
National Priorities List: NO
Lead Agency: SMBRP
Project Manager: Henry Wong
Supervisor: Daniel Murphy
Division Branch: Cleanup Berkeley
Site Code: 201253
Assembly: 18
Senate: 9
Congressional District: 13
Special Program: Not Reported
Status: Active
Status Date: 6/16/2000
Past Uses: DRY CLEANING
Restricted Use: NO
Funding: Orphan Funds
Regulatory Agencies Involved: SMBRP, RWQCB 2 - San Francisco Bay, US EPA
Potential Contamination of Concern: 30022, 30025, 30027
Confirmed Contamination of Concern: 300,223,002,530,027
Potential Media Affected: OTH, SOIL, SV
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
Mobil	1, 2, 4	140046

ADDRESS	CITY	ZIP
731 W MacArthur Blvd	Oakland	94609

DETAILS

More Information on Site? Go to Following Link:
http://geotracker.waterboards.ca.gov/search.asp
CERSID: 10510504
Global ID: Not Reported
COUNTY: Alameda
Permitting Agency: Alameda County Environmental Health
Agency Provided Latitude: 37.82717
Agency Provided Longitude: -122.27142
PROJECT TYPE: Not Reported
RB Case Number: Not Reported
LOC Case Number: Not Reported
Case Worker: Not Reported
MTBE DATE: Not Reported
GW CONC (PPB): Not Reported
MATRIX: Not Reported

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-CRSP-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
Mobil	1, 2, 4	85423

ADDRESS	CITY	ZIP
731 W MACARTHUR BLVD	OAKLAND	94609

DETAILS

Site Regulated Program Information
Site ID: 85423
Site EI ID: 10510504
Agency Provided Latitude: 37.827168
Agency Provided Longitude: -122.271423

Program Description: Underground Storage Tank

Evaluation Information
Evaluation Date: 11/28/2018
Violations Found? (Y/N): Yes
Evaluation General Type: Compliance Evaluation Inspection
Evaluation Type: Routine done by local agency
Evaluation Note(s): ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH (ACDEH) ON SITE FOR HAZARDOUS MATERIALS BUSINESS PLAN (HMBP) INSPECTION. ESCORTED BY SALAM ALAZANI, THE MANAGER. ALL VIOLATIONS NOTED IN THE INSPECTION REPORT SHALL BE CORRECTED BY DECEMBER 28, 2018 AND ANY VERIFICATION DOCUMENTATION SUBMITTED WITHIN THE SAME TIME FRAME.
Evaluation Division: Alameda County Environmental Health
Evaluation Program: HMRRP
Evaluation Source: CERS

Evaluation Date: 11/28/2018
Violations Found? (Y/N): Yes
Evaluation General Type: Compliance Evaluation Inspection
Evaluation Type: Routine done by local agency
Evaluation Note(s): ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH (ACDEH) ON SITE FOR ANNUAL MONITORING CERTIFICATION, ROUTINE INSPECTION AND OVERFILL INSPECTION. THE SERVICE TECHNICIAN WAS NIK ZAGOROV OF ECO CHECK COMPLIANCE. CERTIFICATION ON FILE. ALL VIOLATIONS NOTED IN THE INSPECTION REPORT SHALL BE CORRECTED BY DECEMBER 28, 2018 AND ANY VERIFICATION DOCUMENTATION SUBMITTED WITHIN THE SAME TIME FRAME.
Evaluation Division: Alameda County Environmental Health
Evaluation Program: UST
Evaluation Source: CERS

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-Priority-CA	Listed	0.27 miles NE	84 ft (17 ft higher than site)	51

SITE NAME	MAPS	ID
FORMER SHELL STATION #129452	1, 4	T0600101265

ADDRESS	CITY	ZIP
500 40TH ST	OAKLAND	94609

DETAILS
Facility Information Global ID: T0600101265 Claim Number: 19548 SITE STATUS: Completed - Case Closed County: Alameda Priority: D Rank: 1940 Report Date: 7/1/1982 Discovered Date: 7/1/1982 Claimant: EQUILON ENTERPRISES LLC, ASSIGNEE Lead Agency: ALAMEDA COUNTY LOP Regional Board: SAN FRANCISCO BAY RWQCB (REGION 2) GIS Information Agency Provided Longitude: -122.264549312 Agency Provided Latitude: 37.829319002

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-Priority-CA	Listed	0.27 miles W	52 ft (15 ft lower than site)	53

SITE NAME	MAPS	ID
CHEVRON STATION #9-2029	1, 4	T0600173887
ADDRESS	**CITY**	**ZIP**
890 MACARTHUR BLVD	OAKLAND	94608

DETAILS
Facility Information Global ID: T0600173887 Claim Number: 19167 SITE STATUS: Open - Assessment & Interim Remedial Action County: Alameda Priority: D Rank: 1799 Report Date: 2/26/1997 Discovered Date: 2/26/1997 Claimant: CHEVRON U.S.A. INC. Lead Agency: ALAMEDA COUNTY LOP Regional Board: SAN FRANCISCO BAY RWQCB (REGION 2) GIS Information Agency Provided Longitude: -122.274194955826 Agency Provided Latitude: 37.8282727309058

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-Priority-CA	Listed	0.48 miles W	36 ft (31 ft lower than site)	66
SITE NAME			MAPS	ID
FORMER SHELL #139619			1, 4	T0600101253
ADDRESS			CITY	ZIP
3420 SAN PABLO AVE			OAKLAND	94608

DETAILS

Facility Information
Global ID: T0600101253
Claim Number: 19158
SITE STATUS: Completed - Case Closed
County: Alameda
Priority: D
Rank: 1807
Report Date: 2/15/1989
Discovered Date: Not Reported
Claimant: EQUILON ENTERPRISES LLC, ASSIGNEE
Lead Agency: ALAMEDA COUNTY LOP
Regional Board: SAN FRANCISCO BAY RWQCB (REGION 2)

GIS Information
Agency Provided Longitude: -122.277815937996
Agency Provided Latitude: 37.8259295780339

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-Proposed-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	21

SITE NAME	MAPS	ID
Arco Station #04931	1, 2, 4	10050

ADDRESS	CITY	ZIP
731 West Macarthur Boulevard	Oakland	94609

DETAILS

Note: This is an ERS assigned Automated ID.
County: Not Reported
Type: Not Reported
Documents: Not Reported
Notice Document URL:
https://www.waterboards.ca.gov/water_issues/programs/ustcf/docs/prop_closure_cases/ro0000076_notice.pdf
Draft Order Document URL:
https://www.waterboards.ca.gov/water_issues/programs/ustcf/docs/prop_closure_cases/ro0000076_draftorder.pdf
Summary Document URL:
http://www.waterboards.ca.gov/water_issues/programs/ustcf/docs/prop_closure_cases/ro0000076_closuresummary.pdf
Written Comments Received 1: Not Reported
Written Comments Received 2: Not Reported
Written Comments Received 3: Not Reported
Written Comments Received 4: Not Reported
Written Response to Comments 1: Not Reported
Written Response to Comments 2: Not Reported
Written Response to Comments 3: Not Reported
Claim No# / Case No#: Case No. RO0000076
Deadline to Receive Comments 12 Noon: 10/3/2014

RECORDS SOURCES SEARCHED

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
Air-CA	Air Permits with Emissions	ERS Supplemental Govt Sources	Click Here	3
AIR-DIST-CA	Air Pollution Control District	ERS Supplemental Govt Sources	Click Here	None Found
AST-CA	Historical Aboveground Storage Tanks	State/Tribal UST	Click Here	None Found
AST-CRSP-CA	Aboveground Storage Tanks	State/Tribal UST	Click Here	None Found
BF-MOA-CA	Brownfield MOA Sites (aka Considered Brownfield Sites, SWRCB MOA, Brownfield Memorandum of Agreement)	State/Tribal Brownfield	Click Here	1
BF-Tribal-US	Historical Tribal Brownfields	Federal Brownfield	Click Here	None Found
BF-US	Brownfields Sites	Federal Brownfields	Click Here	1
BioFuel-US	Bio Diesel Fuel	ERS Supplemental Govt Sources	Click Here	None Found
BZ-HazWaste-CA	Border Zone or Hazardous Waste Property	State/Tribal ASTM Other Med	Click Here	None Found
CAF-CA	Confined Animal Facilities	ERS Supplemental Govt Sources	Click Here	None Found
CDL-CA	Clandestine Drug Labs	ERS Supplemental Govt Sources	Click Here	None Found
CDL-US	National Clandestine Drug Lab Register	ERS Supplemental Govt Sources	Click Here	None Found
CERCLIS-Archived-US	CERCLIS sites that have been archived	Federal CERCLIS NFRAP	Click Here	None Found
CERCLIS-US	Comprehensive Environmental Response, Compensation, and Liability Information System	Federal CERCLIS	Click Here	None Found
CERS-CA	California Environmental Reporting System (CERS)	State/Tribal ASTM Other Med	Click Here	None Found
CHMIRS-CA	California Hazardous Material Incident Report System	Emergency Release Reports	Click Here	1
CHWF-CA	Commercial Offsite Hazardous Waste Facilities	ERS Supplemental Govt Sources	Click Here	None Found
City-AST-CA	Underground Storage Tanks	State/Tribal UST	Click Here	None Found
City-CUPA-CA	Certified Unified Program Agency	State/Tribal ASTM Other Med	Click Here	None Found
City-Others-CA	Hazardous Material Facilities	State/Tribal ASTM Other Med	Click Here	None Found

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
City-UST-CA	City Agency Underground Storage Tanks	State/Tribal UST	Click Here	None Found
Cleaners-CA	Cleaners	ERS Supplemental Govt Sources	Click Here	4
Coal-Ash-Dams-US	Coal Ash Contaminated Sites and Hazard Dams	ERS Supplemental Govt Sources	Click Here	None Found
Controls-CA	California sites with Deed Restrictions or other Controls	State/Tribal Inst/Eng Controls	Click Here	None Found
Controls-RCRA-US	RCRA Institutional and Engineering Controls Summary (aka Federal RCRA with Controls)	Federal Institutional/Engineering Controls	Click Here	None Found
Controls-US	US CERCLA Sites with Controls (aka US IC/EC, Institutional/Engineering List Controls, Land Use Controls)	Federal Institutional/Engineering Controls	Click Here	None Found
CorAct-Closed-CA	Corrective Action Sites	State/Tribal ASTM Other Low	Click Here	None Found
CorAct-Open-CA	Corrective Action Sites	State/Tribal ASTM Other High	Click Here	None Found
CorAct-Other-CA	Corrective Action Sites	State/Tribal ASTM Other Low	Click Here	None Found
CORTESE-CA	Cortese Hazardous Waste & Substances Sites List	State/Tribal ASTM Other Med	Click Here	None Found
County-AST-CA	Aboveground Storage Tanks	State/Tribal UST	Click Here	None Found
County-BI-CA	Business Inventory	ERS Supplemental Govt Sources	Click Here	None Found
County-Hist-CA	Historic Environmental County Listings	State/Tribal ASTM Other Med	Click Here	None Found
County-LUST-CA	County Agency Leaking Underground Storage Tanks	State/Tribal LUST	Click Here	1
County-LUST-Closed-CA	County Agency Leaking Underground Storage Tanks, Closed Cases	State/Tribal LUST	Click Here	17
County-LUST-Open-CA	County Agency Leaking Underground Storage Tanks, Open Cases	State/Tribal LUST	Click Here	17
County-Others-CA	Environmental Related Databases	State/Tribal ASTM Other Med	Click Here	None Found
County-SLIC-Closed-CA	County SLIC Sites	Emergency Release Reports	Click Here	None Found
County-SLIC-Open-CA	County SLIC Sites	Emergency Release Reports	Click Here	None Found

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
County-SML-CA	County Site Mitigation Unit List	State/Tribal ASTM Other Med	Click Here	None Found
County-SWF-CA	County Solid Waste Facilities	State/Tribal Landfill/Solid Waste	Click Here	None Found
County-UST-CA	County Agency Underground Storage Tanks	State/Tribal UST	Click Here	1
CRSP-CA	Cal EPA Regulated Site Portal	State/Tribal ASTM Other Med	Click Here	26
CUPA-CA	Certified Unified Program Agency	State/Tribal ASTM Other Med	Click Here	None Found
Dams-CA	California Dams	ERS Supplemental Govt Sources	Click Here	None Found
Debris-US	Historical Debris Sites	Federal Solid Waste	Click Here	None Found
Deed-CA	Deed Restrictions/Land Use Restrictions	State/Tribal Inst/Eng Controls	Click Here	None Found
Delisted-NPL-US	Delisted NPL Sites	Federal Delisted NPL	Click Here	None Found
DPR-CA	Pesticide Regulation Licenses	ERS Supplemental Govt Sources	Click Here	None Found
DryCleaners-CA	Dry Cleaner Facilities	ERS Supplemental Govt Sources	Click Here	1
EGRID-US	Emissions & Generation Resource Facilities	ERS Supplemental Govt Sources	Click Here	None Found
ENF-CA	Enforcement Actions Data	State/Tribal ASTM Other Med	Click Here	7
ENF-SMARTS-CA	Storm Water Enforcement Actions	State/Tribal ASTM Other Med	Click Here	None Found
ENF-Wastewater-CA	Wastewater Enforcement Actions	State/Tribal ASTM Other Med	Click Here	None Found
EPA-Watch-List-US	Historical EPA Watch List	ERS Supplemental Govt Sources	Click Here	None Found
ERNS-US	Emergency Response Notification System	Federal ERNS	Click Here	None Found
Eval-Hist-Active-CA	EnviroStor Evaluation History Sites	State/Tribal ASTM Other	Click Here	None Found
Eval-Hist-NFA-CA	EnviroStor Database Evaluation History NFA Sites	State/Tribal ASTM Other	Click Here	None Found
Eval-Hist-Other-CA	EnviroStor Database Evaluation History NFA Sites	State/Tribal ASTM Other	Click Here	1

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
FA-HW-CA	Financial Assurance, Hazardous Waste	ERS Supplemental Govt Sources	Click Here	None Found
FA-HW-US	Financial Assurance, Hazardous Waste	ERS Supplemental Govt Sources	Click Here	None Found
FA-SWF-CA	Financial Assurance, Solid Waste Facilities	ERS Supplemental Govt Sources	Click Here	None Found
FEMA-UST-US	Historical FEMA Underground Storage Tanks	Federal UST	Click Here	None Found
FRS-US	Facility Registry Index (FINDS)	ERS Supplemental Govt Sources	Click Here	None Found
FTTS-ENF-US	Historical FIFRA/TSCA Tracking System (FTTS) Enforcement Actions	Federal ASTM Other	Click Here	None Found
FTTS-INSP-US	Historical FIFRA/TSCA Tracking System (FTTS) Inspections	ERS Supplemental Govt Sources	Click Here	None Found
FUDS-US	Formerly Used Defense Sites	ERS Supplemental Govt Sources	Click Here	None Found
FUSRAP-US	Formerly Utilized Sites Remedial Action Program Sites	ERS Supplemental Govt Sources	Click Here	None Found
Haulers-CA	Registered Waste Tire Haulers Listing	ERS Supplemental Govt Sources	Click Here	None Found
HazWaste-CA	Hazardous Waste Facilities	State/Tribal ASTM Other Med	Click Here	None Found
Hist-AFS2-US	Historical Air Facility System for Clean Air Act stationary sources	ERS Supplemental Govt Sources	Click Here	None Found
Hist-AFS-US	Historical Air Facility System for Clean Air Act stationary sources	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Agriculture	Historical Ranches/Farms, Livestock/Agriculture	ERS Exclusive Historic Sources	Click Here	None Found
Hist-AST-CA	Historical Aboveground Storage Tanks	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Auto Dealers	Historical Auto and Truck Dealers	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Auto Repair	Historical Automotive Repair	ERS Exclusive Historic Sources	Click Here	6
Hist-AWS-CA	Historical Annual Workplan Sites	ERS Supplemental Govt Sources	Click Here	None Found
Hist-CA	Previously Listed California Sites	ERS Supplemental Govt Sources	Click Here	5
Hist-CalFID-CA	Historical Facility Inventory Database	ERS Supplemental Govt Sources	Click Here	17
Hist-CALSITES-CA	Historical Calsites Database	ERS Supplemental Govt Sources	Click Here	None Found

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
Hist-CERCLIS-NFRAP-US	Historical CERCLIS-NFRAP	ERS Supplemental Govt Sources	Click Here	None Found
Hist-CERCLIS-US	Historical CERCLIS Sites	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Chemical Manufacturing	Historical Manufacturing and Distribution of Chemicals, Gases, and/or Solids	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Chemical-Storage	Historical Chemical/Hazardous Use Storage	ERS Exclusive Historic Sources	Click Here	None Found
Hist-City-UST-CA	Historical Underground Storage Tanks	ERS Supplemental Govt Sources	Click Here	1
Hist-Cleaners	Historical Laundry, Cleaners, and Dry Cleaning Services	ERS Exclusive Historic Sources	Click Here	2
Hist-Controls-CA	Historical Restricted Use Sites	State/Tribal Inst/Eng Controls	Click Here	None Found
Hist-Convenience	Historical Convenience Store with Possible Gas	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Cort-CA	Historical Cortese list	State/Tribal ASTM Other Med	Click Here	None Found
Hist-Deed-CA	Historical Deed Restriction Properties	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Disposal-Recycle	Historical Hazardous Disposal/Recycle and Dumps/Waste	ERS Exclusive Historic Sources	Click Here	None Found
Hist-DTG-CA	Depth to Groundwater	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Dumps-US	Historical Dumps Inventory of 1985	Federal Solid Waste	Click Here	None Found
Hist-ERNS-US	Historical Emergency Response Notification System (ERNS)	ERS Supplemental Govt Sources	Click Here	3
Hist-FIFRA-US	Historical Case Administration Data from National Compliance Database (Federal Insecticide, Fungicide, and Rodenticide Act)	ERS Supplemental Govt Sources	Click Here	None Found
Hist-FINDS-US	Historical Facility Index System	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Food-Processors	Historical Food Processing Manufacturers	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Gun-Ranges	Historical Gun Ranges/Clubs	ERS Exclusive Historic Sources	Click Here	None Found
Hist-HWS-CA	Historical Cortese List-Hazardous Waste Substance Site List	ERS Supplemental Govt Sources	Click Here	3

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
Hist-LUSTIS-CA	Historical Lust Information System (LUSTIS)	ERS Supplemental Govt Sources	Click Here	5
Hist-Machine Shop	Historical Machine Shops, Welding, Machine Repair	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Manufacturing	Historical Sources US: Manufacturing	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Metal Plating	Historical Metal Plating	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Mining	Historical Mining Operations	ERS Exclusive Historic Sources	Click Here	None Found
HIST-MLTS-US	Historical Material Licensing Tracking System	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Mortuaries	Historical Crematories/Mortuaries	ERS Exclusive Historic Sources	Click Here	None Found
HIST-MTBE-CA	Historical Sites With MTBE (Methyl Tertiary-Butyl Ether) Contamination	ERS Supplemental Govt Sources	Click Here	2
Hist-NPL-US	Historical National Priority List	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Oil-Gas	Historical Oil and Gas Well Related Facilities	ERS Exclusive Historic Sources	Click Here	None Found
Hist-OilGas-Refiners	Historical Oil/Gas Refiners/Manufacturers/Plants	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Orange-County-LF-CA	Historical Orange County Landfills	ERS Supplemental Govt Sources	Click Here	None Found
Historical-CA	Historical Sites	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Other	Historical Environmental Facilities	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Paint-Stores	Historical Paint Stores	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Petroleum	Historical Petroleum Refining/ Manufacturing/ Chemicals	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Post-Offices	Historical Post Offices	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Printers	Historical Printers and Publishers	ERS Exclusive Historic Sources	Click Here	1
Hist-Prop65-CA	Historical Prop 65 Sites	ERS Supplemental Govt Sources	Click Here	None Found
HIST-R4-CA	Historical sites	State/Tribal ASTM Other Med	Click Here	None Found

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
Hist-RCRIS-US	Historical EPA's Resource Conservation and Recovery Act	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Regional-LUST-CA	Historical Leaking Underground Storage Tanks	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Regional-Other-CA	Historical Toxic Lists, Site Mitigation, and Groundwater Cleanup Program	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Regional-SLIC-CA	Historical Spills and Leak Sites	ERS Supplemental Govt Sources	Click Here	5
Hist-Regional-Spills-CA	Historical Industrial Cleanup Sites	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Regional-SWLF-CA	Historical County Landfills and Transfer Stations	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Regional-UST-CA	Historical Underground Storage Tanks	ERS Supplemental Govt Sources	Click Here	8
Hist-Rental	Historical Rental Equipment & Yards	ERS Exclusive Historic Sources	Click Here	None Found
Hist-RV-Dealers	Historical Trailer and Recreational Vehicle Dealers	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Salvage	Historical Vehicle Salvage Yards or Wreckers	ERS Exclusive Historic Sources	Click Here	None Found
Hist-SCL-CA	Historical California Cerclis Sites	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Service Stations	Historical Service Stations/Vehicle Fueling	ERS Exclusive Historic Sources	Click Here	5
HIST-SLIC-CV-CLOSED-CA	Historical Central Valley Spills and Leak Sites	Emergency Release Reports	Click Here	None Found
HIST-SLIC-CV-OPEN-CA	Historical Central Valley Spills and Leak Sites	Emergency Release Reports	Click Here	None Found
Hist-Steel-Metals	Historical Steel Mills/Manufacturers/Foundries/Smelters	ERS Exclusive Historic Sources	Click Here	None Found
Hist-SWIS-CA	Historical Solid Waste Information System (SWIS)	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Textile	Historical Textile Mills/Manufacturers	ERS Exclusive Historic Sources	Click Here	None Found
Hist-ToxicPits-CA	Historical Toxic Pits Cleanup Facilities	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Transportation	Historical Transportation Facilities	ERS Exclusive Historic Sources	Click Here	None Found

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
Hist-TRIS-US	Historical Toxic Release Inventory System	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Trucking	Historical Trucking, Shipping, Delivery, and/or Storage	ERS Exclusive Historic Sources	Click Here	None Found
Hist-US	Historical Previously Listed Federal Sites	ERS Supplemental Govt Sources	Click Here	None Found
Hist-US-EC	Historical Engineering Controls Sites (aka US EC, Engineering Controls, Land Use Controls)	Federal Institutional/Engineering Controls	Click Here	None Found
Hist-USGS-WaterWells-CA	Historical Ground Water Site Inventory for California	ERS Supplemental Govt Sources	Click Here	None Found
Hist-US-IC	Historical Sites with Institutional Controls (aka US IC, Institutional Controls, Land Use Controls)	Federal Institutional/Engineering Controls	Click Here	None Found
Hist-UST-CA	Historical Hazardous Substance Storage Infirmation (aka Historical Underground Storage Tanks)	State/Tribal UST	Click Here	2
Hist-UST-Cleanup-CA	Historic UST Cases Recommended for Closure under UST Cleanup Fund 5 Year Review (aka UST Cleanup Fund Cases)	State/Tribal LUST	Click Here	3
Hist-USTReg-CA	Historical Underground Storage Tank Registrations Database	ERS Supplemental Govt Sources	Click Here	None Found
Hist-Vehicle-Parts	Historical Vehicle Parts	ERS Exclusive Historic Sources	Click Here	None Found
Hist-Vehicle-Washing	Historical Vehicle/Truck Washing Facilities	ERS Exclusive Historic Sources	Click Here	1
Hist-WaterWells-US	Historical Public Community Water Supply/Well Head Protection Database	ERS Supplemental Govt Sources	Click Here	None Found
Hist-WIP-Active-CA	Historical Well Investigation Program Case List, Active Sites (aka WIP)	State/Tribal ASTM Other Med	Click Here	None Found
Hist-WIP-Backlog-CA	Historical Well Investigation Program Case List, Backlog Sites (aka WIP)	State/Tribal ASTM Other Med	Click Here	None Found
Hist-WIP-Historical-CA	Historical Well Investigation Program Case List, Historical Sites (aka WIP)	State/Tribal ASTM Other Low	Click Here	None Found
Hist-WMUDS-CA	Historical Waste Management Unit Database System	ERS Supplemental Govt Sources	Click Here	None Found
HMIS-US	Hazardous Materials Information System	Federal Emergency Release Reports	Click Here	None Found
HWIS-CA	Hazardous Waste Information Summary	State/Tribal RCRA Equivalent	Click Here	2

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
HWMP-Controls-CA	Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction	State/Tribal Inst/Eng Controls	Click Here	None Found
HWT-CA	Hazardous Waste Transporters	ERS Supplemental Govt Sources	Click Here	None Found
ICE-CA	Inspection, Compliance, and Enforcement	State/Tribal ASTM Other Med	Click Here	None Found
ICIS-Air-US	Integrated Compliance Information System for Air	ERS Supplemental Govt Sources	Click Here	None Found
ICIS-FEC-US	Integrated Compliance Information System for Federal Enforcement Data	ERS Supplemental Govt Sources	Click Here	None Found
ICIS-NPDES-US	National Pollutant Discharge Elimination System (NPDES)	ERS Supplemental Govt Sources	Click Here	None Found
LA-LF-CA	Los Angeles County Landfills	State/Tribal Solid Waste	Click Here	None Found
Land-Disposal-CA	Geotracker - Land Disposal Sites (aka Landfills, LDS)	State/Tribal Landfill/Solid Waste	Click Here	None Found
LA-Waste-Haulers-CA	Waste Haulers	ERS Supplemental Govt Sources	Click Here	None Found
Lead-Smelter-2-US	Historical Lead Smelter Sites	ERS Supplemental Govt Sources	Click Here	None Found
Lead-US	Lead Smelter Sites	ERS Supplemental Govt Sources	Click Here	None Found
Liens-CA	Environmental Liens	State/Tribal Inst/Eng Controls	Click Here	None Found
LIENS-US	Superfund Liens	Federal Institutional/Engineering Controls	Click Here	None Found
LMOP-US	Landfill Methane Outreach Program	ERS Supplemental Govt Sources	Click Here	None Found
LUST-Closed-CA	Geotracker - Leaking Underground Storage Tanks, Closed Cases	State/Tribal LUST	Click Here	20
LUST-Open-CA	Geotracker - Leaking Underground Storage Tanks, Open Cases	State/Tribal LUST	Click Here	5
Manifest2-RI	Hazardous Waste Manifest	State/Tribal RCRA Equivalent	Click Here	None Found
MethaneLF-CA	Methane Producing Landfills	State/Tribal Other	Click Here	None Found
Military-Active-CA	EnviroStor Database Military Active Sites (aka MCS)	State/Tribal Voluntary Cleanup Sites	Click Here	None Found
Military-Bases-US	Military Base Boundaries	ERS Supplemental Govt Sources	Click Here	None Found

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
Military-NFA-CA	EnviroStor Database Military Active Sites (aka MCS)	State/Tribal Voluntary Cleanup Sites	Click Here	None Found
Military-Other-CA	EnviroStor Database Military Active Sites (aka MCS)	State/Tribal Voluntary Cleanup Sites	Click Here	None Found
Mines2-CA	California Mines	ERS Supplemental Govt Sources	Click Here	None Found
Mines-CA	Historical Death Valley Mines	ERS Supplemental Govt Sources	Click Here	None Found
Mines-CDMG-CA	California Division of Mines and Geology	ERS Supplemental Govt Sources	Click Here	None Found
MINES-US	Mines Master Index File	ERS Supplemental Govt Sources	Click Here	None Found
MLTS-US	Material Licensing Tracking System	ERS Supplemental Govt Sources	Click Here	None Found
Mortgage-CA	Cal Mortgage Facilities	ERS Supplemental Govt Sources	Click Here	None Found
MRDS-US	Mineral Resources Data System (MRDS)	ERS Supplemental Govt Sources	Click Here	None Found
MWMP-CA	Medical Waste Management Program	ERS Supplemental Govt Sources	Click Here	None Found
NCI-CA	Non-Case Information	ERS Supplemental Govt Sources	Click Here	1
NEI-LF-CA	Historical NEI (National Emission Inventory) Landfill Point Sources	ERS Supplemental Govt Sources	Click Here	None Found
NPDES-CA	National Pollutant Discharge Elimination System	ERS Supplemental Govt Sources	Click Here	None Found
NPDES-SW-CA	Notice of Intent Data	ERS Supplemental Govt Sources	Click Here	None Found
NPL-R9-US	NPL Region 9 Site Boundaries	Federal NPL	Click Here	None Found
NPL-US	National Priorities List	Federal NPL	Click Here	None Found
OGM-CA	Oil and Gas Monitoring	ERS Supplemental Govt Sources	Click Here	None Found
OGW-CA	California Oil and Gas Wells	ERS Supplemental Govt Sources	Click Here	None Found
OSCF-CA	Orphan Site Cleanup Fund	ERS Supplemental Govt Sources	Click Here	None Found
PADS-US	PCB Registration Database System	Federal ASTM Other	Click Here	None Found
PCB-US	PCB Transformers	Federal ASTM Other	Click Here	None Found
PCS-US	Historical Permit Compliance System for Clean Water Act	ERS Supplemental Govt Sources	Click Here	None Found
Perch1-CA	Perchlorate Confirmed Contaminant Sites	ERS Supplemental Govt Sources	Click Here	None Found

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
Perch2-CA	Perchlorate Confirmed Contaminant Sites	ERS Supplemental Govt Sources	Click Here	None Found
PR-MOA-CA	Polanco Redevelopment MOA Sites	State/Tribal ASTM Other Med	Click Here	None Found
Project-CA	Project - Multipurpose Site Type	ERS Supplemental Govt Sources	Click Here	None Found
Proposed-NPL-US	Proposed NPL Sites	Federal NPL	Click Here	None Found
RADINFO-US	Radiation Information Database	ERS Supplemental Govt Sources	Click Here	None Found
RCRA-CESQG-US	Resource Conservation and Recovery Act, Conditionally Exempt Small Quantity Generators (aka RCRA CESQG)	Federal RCRA Generators	Click Here	None Found
RCRA-COR-US	Resource Conservation and Recovery Act, - Corrective Actions (aka RCRA CORRACTS)	Federal RCRA CORRACTS	Click Here	None Found
RCRA-LQG-US	Resource Conservation and Recovery Act, Large Quantity Generators (aka RCRA LQG)	Federal RCRA Generators	Click Here	None Found
RCRA-NON-US	Resource Conservation and Recovery Act, Non-Hazardous Generators (aka RCRA Non-Haz, RCRA NonGen, RCRA No longer Regulated)	Federal RCRA Generators	Click Here	9
RCRA-SQG-US	Resource Conservation and Recovery Act, Small Quantity Generators (aka RCRA SQG)	Federal RCRA Generators	Click Here	None Found
RCRA-TSDF-US	Resource Conservation and Recovery Act -, Treatment, Storage, and Disposal Facilities (aka RCRA TSD, RCRA TSDF)	Federal RCRA non-CORRACTS TSD	Click Here	None Found
Response-CA	State Response Sites and National Priorities List (NPL)	State/Tribal NPL	Click Here	4
RFG-Lab-US	Reformulated Gasoline (RFG)	ERS Supplemental Govt Sources	Click Here	None Found
RMP-US	Risk Management Plans	ERS Supplemental Govt Sources	Click Here	None Found
ROD-US	Records of Decision	ERS Supplemental Govt Sources	Click Here	None Found
SAA-Agreements-US	Sites with Superfund Alternative Approach Agreements	Federal ASTM Other	Click Here	None Found

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
School-Active-CA	EnviroStor Database School Active Sites (aka School Property Evaluation Program, SCH)	State/Tribal Voluntary Cleanup Sites	Click Here	None Found
School-NFA-CA	EnviroStor Database School Active Sites (aka School Property Evaluation Program, SCH)	State/Tribal Voluntary Cleanup Sites	Click Here	None Found
School-Other-CA	EnviroStor Database School Active Sites (aka School Property Evaluation Program, SCH)	State/Tribal Voluntary Cleanup Sites	Click Here	None Found
SDWIS-US	Safe Drinking Water Information System	ERS Supplemental Govt Sources	Click Here	None Found
SGV-Deep-Plumes-CA	San Gabriel Valley Deep Plumes	State/Tribal Solid Waste	Click Here	None Found
SGV-Shallow-Plumes-CA	San Gabriel Valley Shallow Plumes	State/Tribal Solid Waste	Click Here	None Found
SGV-Shallow-Plumes-Puente-Valley-CA	Puente Valley Shallow Plumes	State/Tribal Solid Waste	Click Here	None Found
SLIC-Closed-CA	Geotracker - The Spills, Leaks, Investigation & Cleanup (SLIC), Closed Cases	Emergency Release Reports	Click Here	1
SLIC-Open-CA	Geotracker -Spills, Leaks, Investigation & Cleanup (SLIC), Open Cases	Emergency Release Reports	Click Here	5
SML-CA	Site Mitigation List	State/Tribal ASTM Other Med	Click Here	None Found
SP-CA	Sampling Points	ERS Supplemental Govt Sources	Click Here	None Found
Spills-SSO-CA	Sanitary Sewer System	ERS Supplemental Govt Sources	Click Here	6
SSTS-US	Section 7 Tracking System	ERS Supplemental Govt Sources	Click Here	None Found
State-Response-Active-CA	EnviroStor State Response Active Sites	State/Tribal NPL	Click Here	3
State-Response-NFA-CA	EnviroStor State Response NFA Sites	State/Tribal NPL	Click Here	None Found
State-Response-Other-CA	EnviroStor State Response Other Sites	State/Tribal NPL	Click Here	None Found

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
Superfund-Active-CA	Envirorstor Superfund Active Sites (aka BEAP, CalSites, Brownfields and Environmental Restoration Program)	State/Tribal CERCLIS Equivalent	Click Here	None Found
Superfund-NFA-CA	EnviroStor Superfund NFA Sites (aka BEAP, CalSites, Brownfields and Environmental Restoration Program)	State/Tribal CERCLIS Equivalent	Click Here	None Found
Superfund-Other-CA	EnviroStor Superfund Sites (aka BEAP, CalSites, Brownfields and Environmental Restoration Program)	State/Tribal CERCLIS Equivalent	Click Here	None Found
SWIS-CA	Solid Waste Information System	State/Tribal Landfill/Solid Waste	Click Here	None Found
SWLF-US	Solid Waste Facilities	Federal Solid Waste	Click Here	None Found
SWRCY-CA	Beverage Container Recycler Database	State/Tribal ASTM Other Med	Click Here	None Found
TierPer-CA	Tiered Permits	ERS Supplemental Govt Sources	Click Here	None Found
TOMS-CA	Topographically Occurring Mine Symbols	ERS Supplemental Govt Sources	Click Here	None Found
Tribal-Air-US	Tribal Air Permitted Facilities	ERS Supplemental Govt Sources	Click Here	None Found
Tribal-LUST-Closed-Reg9	Tribal Leaking Underground Storage Tanks, Region 9 (aka Indian Lust)	Federal LUST	Click Here	None Found
Tribal-LUST-Open-Reg9	Tribal Leaking Underground Storage Tanks , Region 9 (aka Indian Lust)	Federal LUST	Click Here	None Found
Tribal-ODI-US	Tribal Open Dump Sites	Federal Solid Waste	Click Here	None Found
Tribal-UST-Reg9	Tribal Underground Storage Tanks (aka Tribal UST)	Federal UST	Click Here	None Found
Tribal-VCP-US	Tribal VCP	Federal Tribal VCP	Click Here	None Found
TRIS2000-US	Historical Toxics Release Inventory System	ERS Supplemental Govt Sources	Click Here	None Found
TRIS2010-US	Toxics Release Inventory System	ERS Supplemental Govt Sources	Click Here	None Found
TRIS80-US	Historical Toxics Release Inventory System	ERS Supplemental Govt Sources	Click Here	None Found
TRIS90-US	Historical Toxics Release Inventory System	ERS Supplemental Govt Sources	Click Here	None Found
TSCA-US	Toxics Substance Control Sites	ERS Supplemental Govt Sources	Click Here	None Found
UIC2-CA	Injection Wells	ERS Supplemental Govt Sources	Click Here	None Found
UIC-CA	Underground Injection Control Wells	ERS Supplemental Govt Sources	Click Here	None Found

ABREVIATION	DATABASE FULLNAME	DATABASE CATEGORY	DATABASE DETAILS LINK	TOTAL LISTINGS
UMTRA-US	Historical Uranium Mill Tailings Remedial Action Sites	ERS Supplemental Govt Sources	Click Here	None Found
USGS-Waterwells-US	Ground Water Site Inventory	ERS Supplemental Govt Sources	Click Here	None Found
UST-Abandoned-CA	Abandoned UST Initiative (aka Inventory of Abandoned Tank Sites)	State/Tribal UST	Click Here	None Found
UST-CA	Geotracker - Underground Storage Tanks	State/Tribal UST	Click Here	1
UST-Closed-CA	UST Case Closure Review Denials and Approved Orders (aka Closure of Underground Storage Tank (UST) Cases)	State/Tribal UST	Click Here	None Found
USTComp-CA	Previously Abandoned Tanks Now in Compliance (aka Compliance UST)	State/Tribal UST	Click Here	None Found
UST-CRSP-CA	Underground Storage Tanks	State/Tribal UST	Click Here	1
UST-Priority-CA	UST Cleanup Fund Priority List	State/Tribal UST	Click Here	3
UST-Proposed-CA	Proposed Closure of UST Cases (aka UST Proposed for Closure)	State/Tribal UST	Click Here	1
Vapor-Intrusions-US	Vapor Intrusion Database	ERS Supplemental Govt Sources	Click Here	None Found
VCP-Active-CA	EnviroStor VCP Active Sites	State/Tribal Voluntary Cleanup Sites	Click Here	None Found
VCP-NFA-CA	EnviroStor Database VCP NFA Listing	State/Tribal Voluntary Cleanup Sites	Click Here	None Found
VCP-Other-CA	EnviroStor VCP Other Sites	State/Tribal Voluntary Cleanup Sites	Click Here	None Found
WDR-CA	Waste Discharge Requirements	ERS Supplemental Govt Sources	Click Here	None Found

UN-MAPPABLE OCCURRENCES

The following occurrences were not mapped primarily due to incomplete or inaccurate address information. All of the following occurrences were determined to share the same zip code as the area searched. General status information is given with each occurrence along with any address information entered by the agency responsible for the list.

ID	Facility Name	Address	Database	Status
No "un-mapped" sites requested.				

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The data presented in this report should only be interpreted by an experienced environmental professional, as per EPA definition, that completely understands the potential inaccuracy of the data derived from others, the possible existence of contaminated occurrences that have not been listed, and the possibility that the governmental database misrepresents the actual status of an occurrence or listing. Prior to relying completely on any of the data within this report, an environmental professional should verify the accuracy of the information presented unless one of ERS's Environmental Professionals has interpreted the data and/or report.

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APPENDIX C
CITY DIRECTORIES
CHRONOLOGICAL SUMMARY

CHART C-1

Previous Addresses of Parcels along Grove Street/M.L.K. Jr. Way

Current Address	Year 1951 Address	Year 1911 Address
3801-3807 M.L.K. Jr. Way	3801-3807 Grove Street	3801 Grove Street
3813-15 & 3817-19 M.L.K. Jr. Way	3813-15 & 3817-19 Grove St.	3803-05 & 3805½-07 Grove St.
3823 M.L.K. Jr. Way	3823 Grove Street	3809-09½ Grove Street
3829 M.L.K. Jr. Way	3829-31 Grove Street	3813 Grove Street
3833-37 M.L.K. Jr. Way	3833-37 Grove Street	3815-17-17½ Grove Street
3841-43 & 3845 M.L.K. Jr. Way	3841-43 & 3845 M.L.K. Jr. Way	3819 Grove Street

NOTES:

1. Based upon the 1911 Sanborn map, a cleaning works was located in the commercial building at 3815-17-17½ Grove Street. The cleaning works was located in the southern half of the building, at 3815 Grove St.
2. In 1928, Fred Kuhnie & Son retail meats was listed at 3819 Grove Street, which was probably located in the commercial store on APN 12-964-6.
3. In 1928, Minute Kleen and A.A. Harris were likely located in the off-site commercial building on APN 12-964-3, which adjoins the Property.
4. In 1933, Michael Henry foods and Jacob Pearlman clothes cleaner & presser were likely located in the off-site commercial building on APN 12-964-3, which adjoins the Property.
5. Use of 3829-31 Grove Street appear to have been residential during 1928-2000.

CHRONOLOGICAL CITY DIRECTORY SUMMARY
ORGANIZED BY STREET ADDRESS AND YEAR

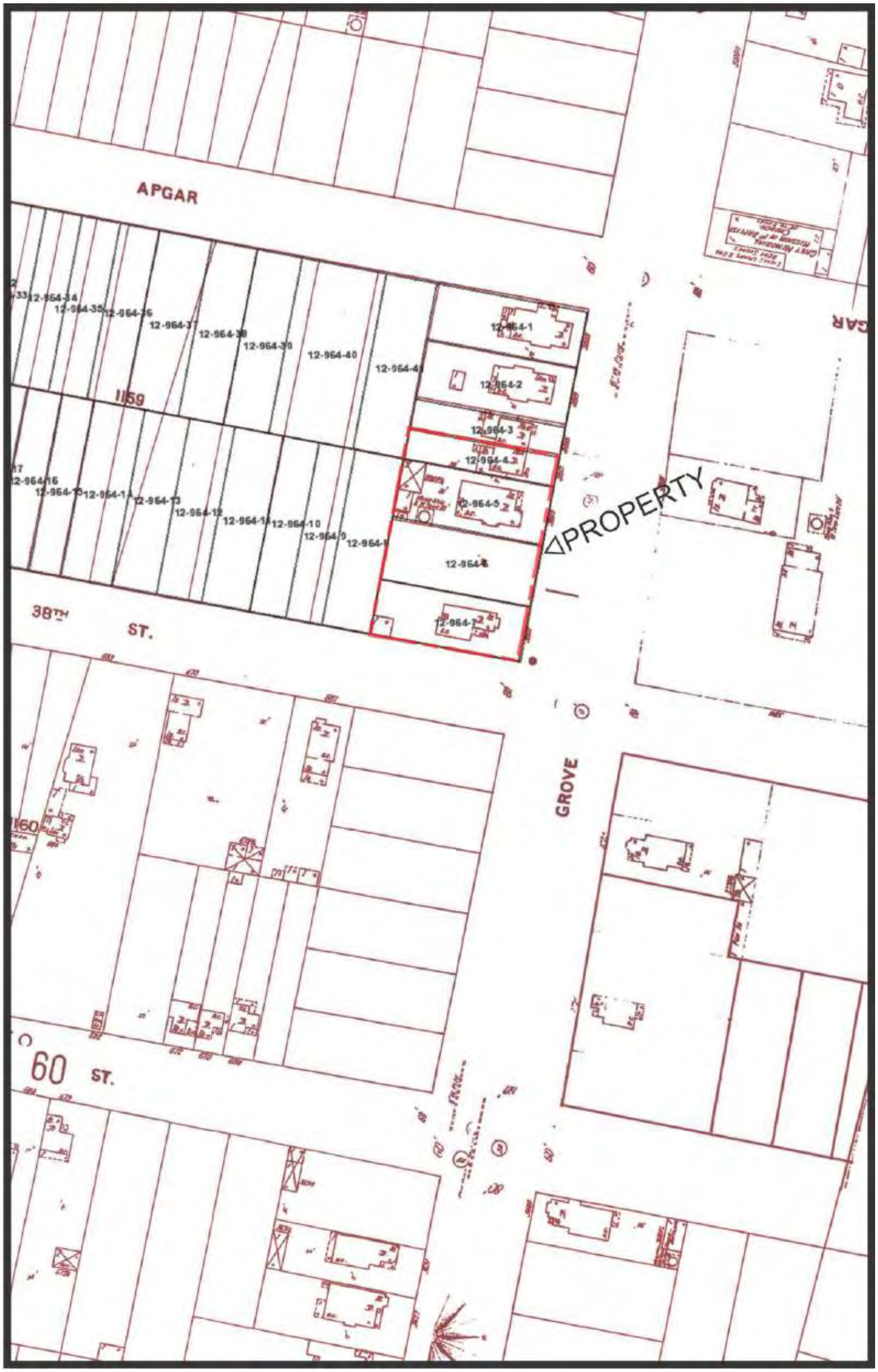
ADDRESS	YEAR									
	1928	1930-35	1940-46	1950-56	1961-66	1969-70	1980-85	1990-96	2000	2005
621 W. MacArthur Blvd. (38th St)	John H.& Helen Valerga residence	John H. Valerga ('35)	John E. Anthon resid Lela M. Elkin ('40)	Leo Alexander res No listing ('56)	No listing	No listing	No listing	No listing	No listing	No listing
625 W. MacArthur Blvd. (38th Street)	Ant'n'tte, Nina, Rbt & Jason Zollner	No listing ('35)	No listing	No listing ('51-'56)	No listing	No listing	No listing ('80) Gd Samaritan ('85)	Good Samaritan Church	Good Samaritan Church	Good Samaritan Church
3740 Grove St (cnr 38th-Grove)r	Shaw & Garland Service station	No listing ('35)	---	Standard Stations Inc.	Standard Station	Elbert Kimbrough Chevron	No listing	No listing	No listing	No listing
655 W. MacArthur Blvd. (38th Street)	Bertha Apartments	Arthur R. Reese residence ('35)	---	---	---	No listing	---	---	---	---
657-59 W. MacArthur Blvd.	Joseph Merlino residence	Bertha Merlino ('35)	Signal Service	Signal Service	Calhoun's Signal Service	ENCO service station	Burely's Detail Center	Burley's Detail Center	Burley's Detail Center	Downtown Glass Tinting
663-65 W. MacArthur Blvd	No listing	A.B. Connelly ('35) Matthew Silva ('35)	T.W. Helli res Matthew Silva ('40)	T.W. Helli res ('51) Richard Egan ('56)	Mrs. M.R. Silva	Pressie Woodyard Preston Early	Preston Ealy	Preston Ealy	Lavolia Baker	No listing
634 W. MacArthur Blvd. (38th Street)	Lawrence Valerga Maria Valerga	Lawrence Valerga Poland Zimmerman	L.J. Valerga resid. ('40) W.F. Kuhnie resid.	Michael Martin res Elsie E. Dodd ('56)	W. Tiffieney	No listing	No listing	No listing	Richard Van Camp	No listing
640-44½-46 W. MacArthur Blvd	No listing	No listing ('35)	Alf T. Kates ('40) Nahmen Paulson ('40)	No listing (1951-56)	Tri-Bay Construction	No listing	Vacant XXXX ('80) Quality Tune-('85)	Quality Tune-Up	Quality Tune-Up	Quality Tune-Up
652 W. MacArthur Blvd. (38th Street)	No listing	Alf E. Hughes dentist M.B. Hadden doctor	Mrs. Jean Voit res	Shirley Jordan res Robert L. Hooper	Rose Bud Studio J. H. Hooper	Estelle Hughes Oliver Trice resid	Eva Tucker ('80) XXXX ('85)	XXXX	XXXX	No listing
654 W. MacArthur Blvd. (38th Street)	Ella Hicks resid.	Mrs. Ella Hicks residence ('35)	No listing	No listing ('51) Rose Daniels ('56)	Rose Daniels	Rose S. Daniels	Elouise Rawlins	Elouise Rawlins	XXXX	Brenda Appleby
656 W. MacArthur Blvd. (38th Street)	Wm. B. Wenger residence	Claude Galmarino residence ('35)	James A Ford res	Raul Valencia ('51) No listing ('56)	No listing	Frances & Reuben Lano	No listing ('80) XXXX ('85)	XXXX	Nettie Lee Brandon	No listing
3801 Grove Street	Walter & Eda Rose confectionery	Rose-Waterman Drug Co.	Pacific Teleph & Tel Waterman Drug Store	Burnett's Pharmacy	Burnett's Pharmacy	Vacant ('69)	Terry's Sound House	Terry's Sound House	Terry's Sound House	Terry's Sound House
3807 Grove Street	No listing	E. Ray Lav barber ('35)	No listing	No listing ('51) Bush's Barber ('56)	Louise's Well Groomed	Louise's Well Groomed salon	Vacant XXXX	XXXX (1990) Ishmallah's Hats	Ishmallah's Famous Hats	No listing
3813 Grove Street	No listing	Kurt W. Luehe restaurant ('35)	John Curtin ('40) New Bridge Inn	John Curtin ('51-'56) New Bridge Inn ('56)	New Bridge Inn	Champagne Lounge	No listing	No listing	No listing	No listing
3817 Grove Street	Eliz E. Reeves nurse	Mrs. Hazel Baker Wm. A. Barkmeyer	Freada Jones res	Mary Boyes Clementina Carbone	Alice Ryia H. Nishita	Apartments	No listing	No listing	No listing	No listing
3819 Grove Street	Fred Kuhnie & Son retail meats	No listing ('35)	No listing	No listing	Bush's Barber Shop	Bush's Barber Serv Mr. H's Barber Serv	Vacant XXXX	No listing	No listing	No listing
3823 Grove Street	No listing	Simon Moving ('35)	Simon's Moving Co. Victoria Harvie restau	Simon's Moving Co.	Simon's Moving Co	Percy Tucker	No listing	No listing	No listing	No listing
3829-31 Grove St	Alice Swope dressmaker	---	Olga Johnson residence	Olga Johnson residence	No listing	Rosie Mae Chiles	Rosie Mae Chiles	XXXX	Joyce Kelley	No listing
3833 Grove St	Minute Kleen Polish manufactu'r	M. Henry foods ('33) J Pearlman presser ('35)	New Lake Liquor Store	Gallagher's Liquor S	Blanche's Little House ('66)	Rosie's Little House U C Cleaners ('69)	Rosie's Little House	Rosie's Little House	XXXX	Joni McFarlin
3835 Grove Street	A.A. Harris cleaners & press'rs	No listing ('35)	No listing	---	---	George L. Jung res	---	---	---	---

Continued

CHRONOLOGICAL CITY DIRECTORY SUMMARY
ORGANIZED BY STREET ADDRESS AND YEAR

ADDRESS	YEAR									
	1928	1930-35	1940-46	1950-56	1961-66	1969-70	1980-85	1990-96	2000	2005
3837 Grove Street	C.Martine residence	Laura Shields residence('35)	Lillian Alling resid. ('40)	---	---	Vacant ('69)	---	---	---	---
3802 Grove Street	Rose-Waterman Drug Co.	No listing	No listing	No listing	No listing	No listing	No listing	No listing	No listing	No listing
3806 Grove Street	Thomas T. Valerga	Claude Fitzsimmons ('35)	C.E. Black residence	C.E. Black res T.T. Valerga res	T. Calarifi	No listing	No listing	No listing	Larry Armstrong	No listing
3810 Grove Street	Al & Etta Russell	Jesse Mendonca residence ('35)	Frank L. Burns residence	No listing ('51) Joyce Jackson ('56)	No listing	No listing ('69) Elnora Banks ('70)	Lionell Clark	No listing	Mohamed Mosleh	XXXX
3812 Grove Street	No listing	Louisa Oriand residence ('35)	No listing	---	---	Hunter Realty & Larry Jones Insuran	Velma Robinson ('85)	Douglas Blakey ('96)	Saad Awadalla	Doretha Jackson
3820 Grove Street	William Rae Hardware	No listing	Central Shade Factory	Central Shade Factory' Distinctive Interiors	Creative Promotions	Creative Promotions	Vacant XXXX	No listing	Roosevelt Thompson	No listing
3828 Grove Street	P.J. Gallinger restaurant	Laura E. Ogle residence ('35)	Clara's Beauty Shop	No listing ('51,'56)	Top Flight Bldg Maintenance	Identification Photography	Vacant XXXX	Bibleway Fellowship	Christian Bibleway Church	Christian Bibleway Church
3830-32 Grove St	Byron Power barber	Byron Powers barber ('35)	A & B Furniture Co.	Gwendolyn Whitlow res	Service Beauty Supply	Serv Beauty S ('69) Esirg's Hair Food ('70)	Vacant XXXX	No listing	Vacant XXXX	No listing
3834 Grove Street	Kirkwood Pie Co.	Furrer & Whitlock Pies ('35)	No listing	No Listing ('56)	Allied Sales Co.	New & Used Clothing Store ('69)	V. Robinson ('80) XXXX ('85)	No listing	No listing	No listing
3884 Grove Street	D.R. Hart gas station	D.R. Hart gas station ('35)	Dean's Expert Auto Repair	Gowan's Mobil service	Grove St Wash Rack	Luckett's Phillips 66 Grove Street Wash	Grove St Wash Rack	Grove St Wash Rack	Grove St Wash Rack	Grove St Wash Rack
3701 Grove Street	No listing	A.F. McAllen gas station	Portz Bros. service sta A.F. Allen serv sta ('40)	Portz Bros. service station	Halls Service Sta	Hammond's Service	Hammond's Services	Hammond Services	Bernadine Hammond	No listing
668 W. MacArthur Blvd (38th Street)	Kath Lorimer Jason Burke Mrs. Veronica Nall	Betty & Richard Foudy resid ('35)	No listing	No listing (1951) David Williams Gerthan Chambers	A.Hilliard	Mrs. Elise Hilliard	No listing	To Chi Tran	Long Nguyen Justin Vo	Justin Vo
670 W. MacArthur Blvd. (38th Street)	Gabriel & Eva Thornton residence	Gable & Eva Thornton resid ('35)	Gable & Eva Thornton resid ('40)	Mrs. E. L. Thornton	---	Mrs. Eva Thornton	No listing ('80) XXXX ('85)	Vacant XXXX	Allen Jones	Suzette Nubie
674 W. MacArthur Blvd. (38th Street)	John P. & Anna Curran residence	Walter E. Blakey residence ('35)	Walter E. Blakey res	No listing (1951) Allan D. Henderson	Ivory Ford	Ivory Ford	Ivory Ford	Vacant XXXX	James McConville	Li Li
669 W. MacArthur Blvd. (38th Street)	No listing	Isabelle L. Ockey ('35)	Court Apartments ('40)	---	---	MacArthur Motel	---	---	---	---
671-673 W. MacArthur Blvd.	Court Apartments	---	Cal B. Cruse resid ('40)	---	---	No listing	---	---	---	---

APPENDIX D
SANBORN MAPS


APGAR
GROVE
38TH
ST.
60
ST.
1159
1160
12-964-1
12-964-2
12-964-3
12-964-4
12-964-5
12-964-6
12-964-7
12-964-40
PROPERTY

1902


PGAR
GROVE
12-964-1
12-964-2
12-964-3
12-964-4
12-964-5
12-964-6
12-964-7
12-964-39
12-964-40
12-964-10
PROPERTY
Scale of Feet

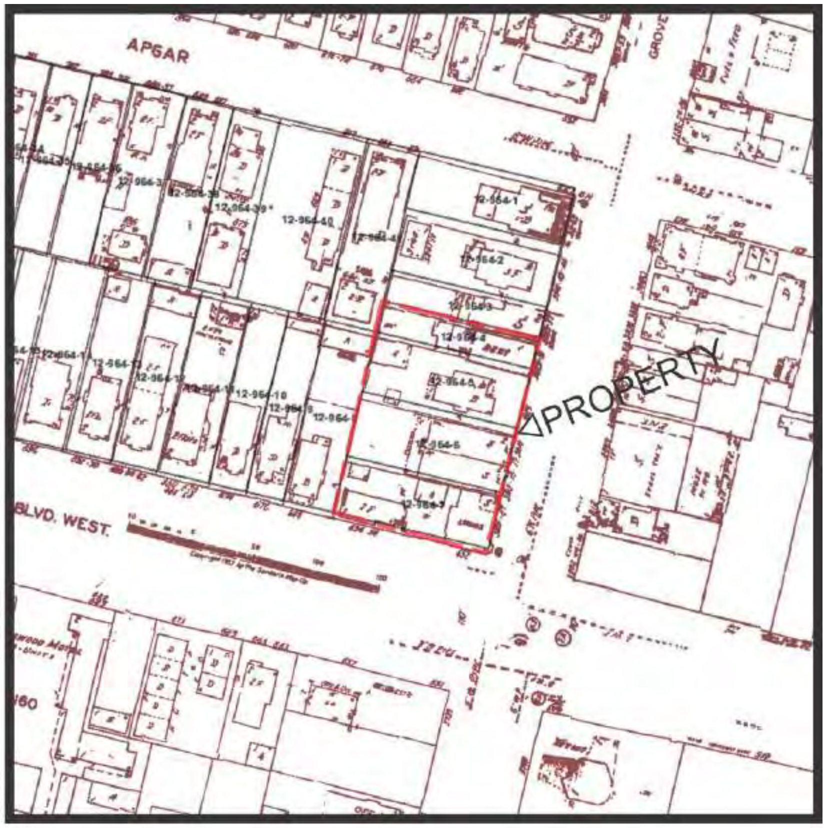
1911


12-964-1
12-964-2
12-964-3
12-964-5
12-964-6
12-964-40
12-964-10
PROPERTY
ST.

1951

1952-54

1967



1969-70

NO IMAGE

APPENDIX E
AERIAL PHOTOGRAPHIC IMAGES


UCSB
C1600
25
5-26-1931
service
stations
Apgar Street
(Martin Luther King Jr. Way)
PROPERTY
38th Street
(W. MacArthur Blvd.)
West Street
service
station
Grove St
37th Street

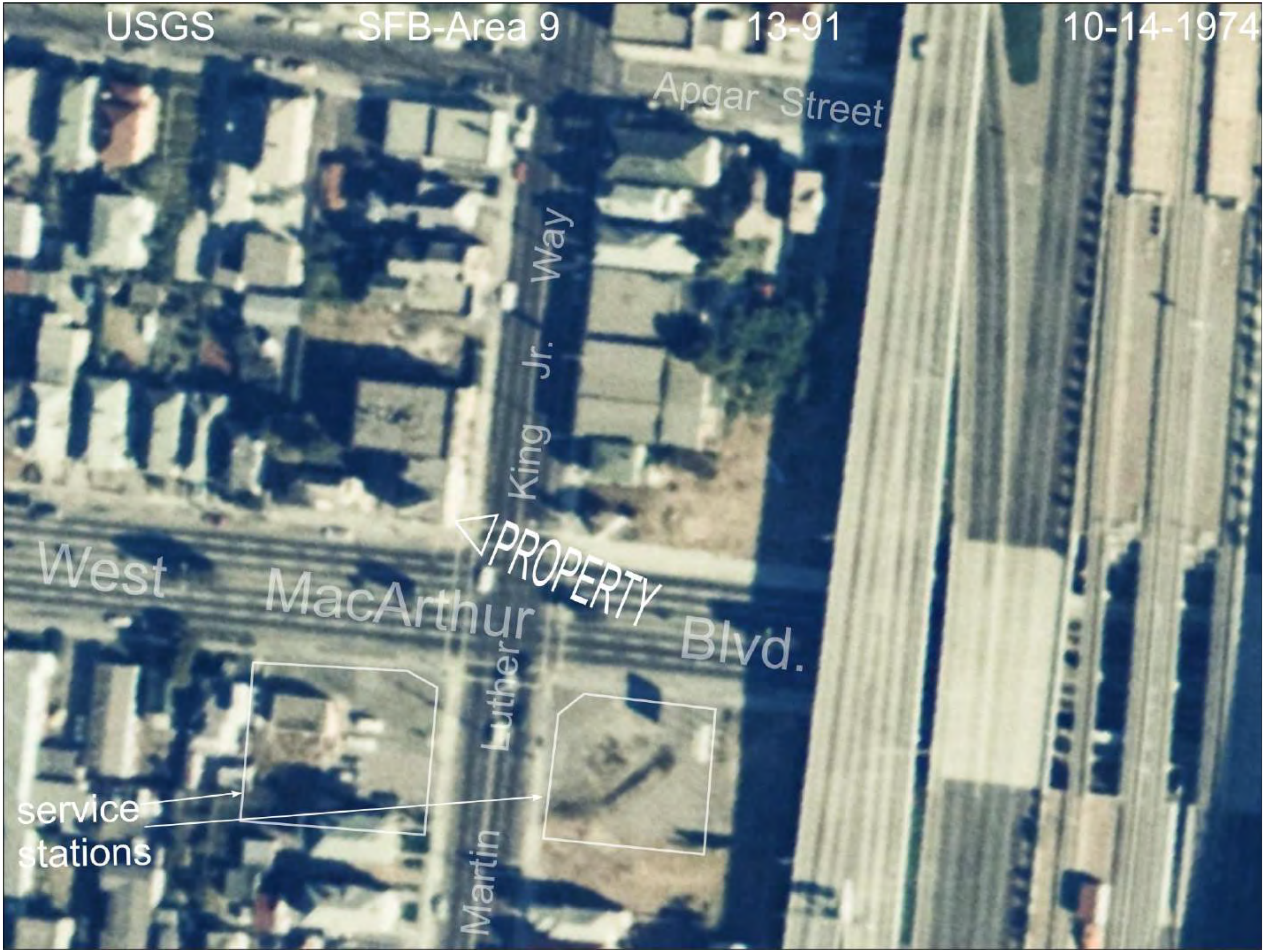

USGS
CP 6-41
10-28-1946
39th Street
service stations
Apgar Street
(Martin Luther King Jr. Way
PROPERTY
(W. MacArthur Blvd.)
38th Street
service stations
West Street
Grove Street
37th Street


USGS
GS-VUO
1-184
7-25-1958
39th Street
service
stations
Way
Jr.
Apgar Street
Luther King
W. MacArthur Blvd.
PROPERTY
Martin
service
stations


UCSB
BUT-4V-76
8-13-1958
39th Street
service
stations
Apgar Street
(Martin Luther King Jr. Way
PROPERTY
(W. MacArthur Blvd.)
38th Street
West Street
service
stations
37th Street
Grove Street
Telegraph Ave.


UCSB
CAS15-130
ALA 15-136
5-18-1965
Apgar Street
West Street
Martin Luther King Jr. Way
PROPERTY
38th Street
(W. MacArthur Blvd.)
37th Street
Grove St
service
stations


USGS
GS-VBZJ
2-98
4-20-1968
Apgar Street
W. MacArthur Blvd.
Martin Luther King Jr. Way
PROPERTY
service stations


USGS
SFB-Area 9
13-91
10-14-1974
Apgar Street
Martin Luther King Jr. Way
West MacArthur Blvd.
PROPERTY
service stations


USGS
GS-VEZR
1-41
10-1-1980
Apgar Street
Martin Luther King Jr. Way
West MacArthur Blvd.
PROPERTY
service station


USGS
GS-VFNZ-C
2-53
6-5-1991
Apgar Street
W. MacArthur Blvd.
Martin Luther King Jr. Way
PROPERTY
former service stations

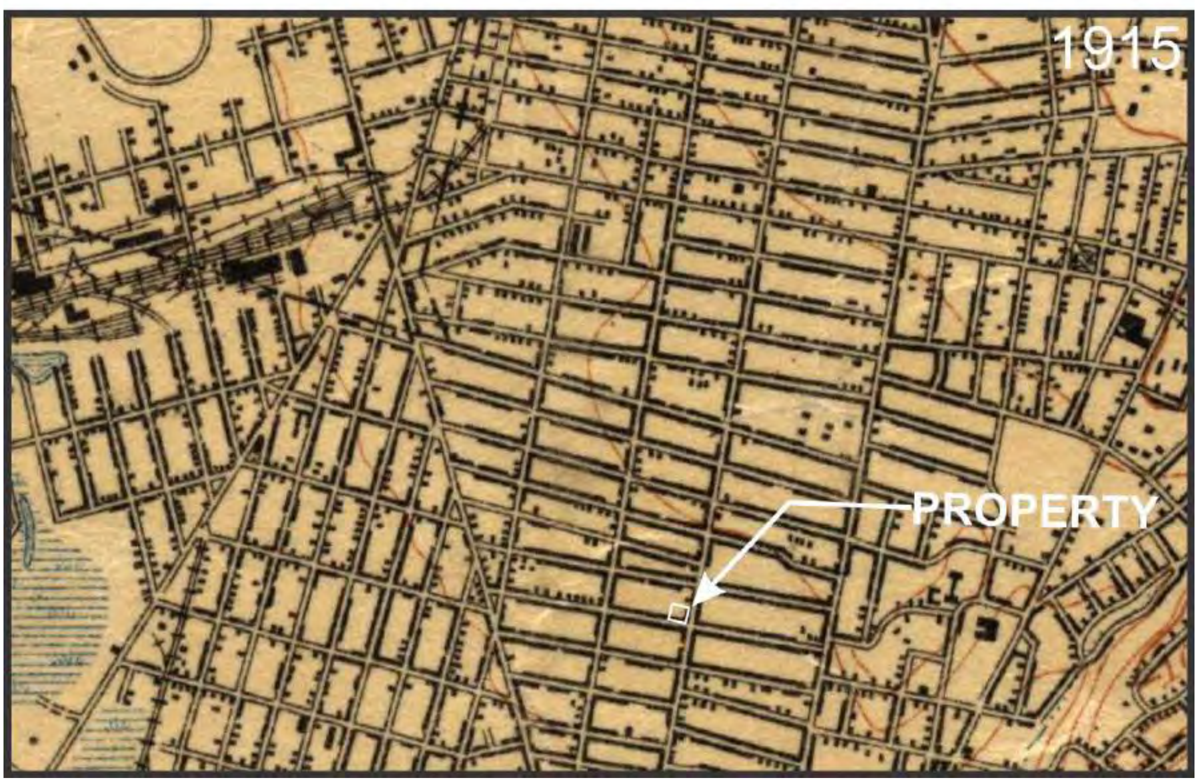

USGS
in Google Earth
12-31-2002
Apgar Street
Martin Luther King Jr. Way
PROPERTY
W. MacArthur Blvd.
former
service
stations
Image U.S. Geological Survey


USGS in Google Earth
5-31-2007
Apgar Street
Martin Luther King Jr. Way
PROPERTY
W. MacArthur Blvd.
former service stations


USGS
in Google Earth
8-6-2012
Apgar Street
W. MacArthur Blvd.
Martin Luther King Jr. Way
PROPERTY
former service stations

APPENDIX F
TOPOGRAPHIC MAPS


1895
PROPERTY


1915
PROPERTY

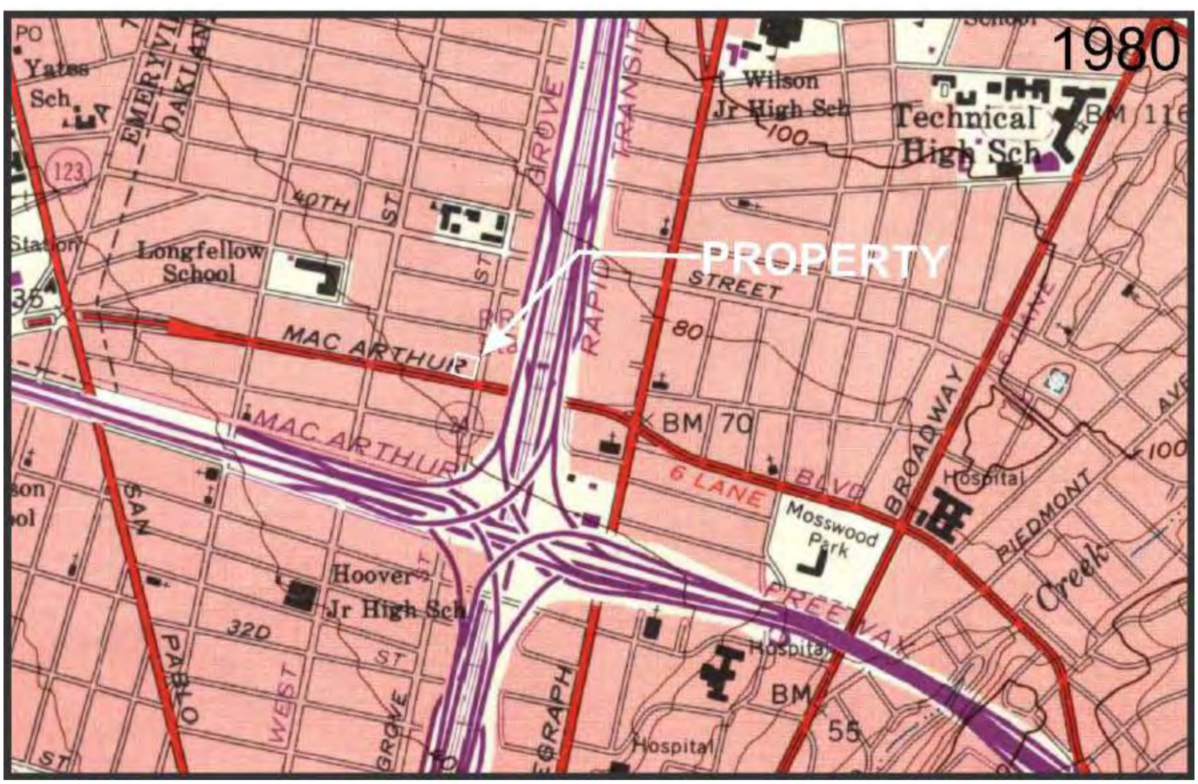

1942
PROPERTY
AVENUE


1948
PROPERTY
SACRAMENTO
AVENUE
BROADWAY


1959
PROPERTY
Temescal
Emery High Sch
Yates Sch
EMERYVILLE
OAKLAND
Wilson Jr High Sch
Emerson School
Technical High Sch
Sacred Heart School
Longfellow School
MAC ARTHUR
BLVD
6 LANE
STREET
BROADWAY
Clawson School
Poplar Playground
Hoover Jr High Sch
Mosswood Park
PIEDMONT
Creek
Hospital


1968
PROPERTY
Santa Fe School
Temescal
Emerson School
Wilson Jr High Sch
Technical High Sch
Yates Sch
EMERYVILLE
OAKLAND
Longfellow School
MAC ARTHUR
BLVD
STREET
6 LANE
BROADWAY
Clawson School
Poplar Playground
Hoover Jr High Sch
Mosswood Park
PIEDMONT


1973
PROPERTY
40TH ST
STREET
MAC ARTHUR
MAC ARTHUR
BM 70
6 LANE BLVD
BROADWAY
Hospital
PIEDMONT
Creek
Mosswood Park
FREEWAY
Hospital
BM
55
Hospital
Echo
Edison School
Hospital
BM 40
TELEGRAPH
GROVE
WEST
SAN PABLO
32D ST
Durant School
27TH
STREET
Station
35


1980
PROPERTY
Yates Sch.
EMERYVILLE
OAKLAND
Wilson Jr High Sch
Technical High Sch
40TH ST
Longfellow School
STREET
MAC ARTHUR
MAC ARTHUR
BM 70
6 LANE BLVD
BROADWAY
Hospital
PIEDMONT
Creek
Mosswood Park
FREEWAY
Hoover Jr High Sch
32D ST
Hospital
BM
55
Hospital
SAN PABLO
WEST
GROVE
RAPID TRANSIT
Station
35

APPENDIX G
LABORATORY TEST RESULTS

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1706881 **Amended:** 07/13/2017

Report Created for: Environmental Service

2220 Oxford Street
Berkeley, CA 94704

Project Contact: Marc Papineau
Project P.O.:
Project Name: 2017-28; 3801-07 MLK

Project Received: 06/16/2017

Analytical Report reviewed & approved for release on 06/23/2017 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com
CA ELAP 1644 ♦ NELAP 4033ORELAP

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Environmental Service
Project: 2017-28; 3801-07 MLK
WorkOrder: 1706881

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 μm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Glossary of Terms & Qualifier Definitions

Client: Environmental Service
Project: 2017-28; 3801-07 MLK
WorkOrder: 1706881

Analytical Qualifiers

J	Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
P	Agreement between quantitative confirmation results exceed method recommended limits

Quality Control Qualifiers

F2	LCS/LCSD recovery and/or RPD is out of acceptance criteria.
F13	Indigenous sample results too high for a representative matrix spike analysis.

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B
Date Prepared:	6/19/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS4-0.5	**1706881-004A**	**Soil**	**06/14/2017 10:52**	**GC22**	**140676**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	06/22/2017 23:16
a-BHC	ND	0.00010	0.0010	1	06/22/2017 23:16
b-BHC	ND	0.00025	0.0010	1	06/22/2017 23:16
d-BHC	ND	0.00037	0.0010	1	06/22/2017 23:16
g-BHC	ND	0.000097	0.0010	1	06/22/2017 23:16
Chlordane (Technical)	**0.035**	0.016	0.025	1	06/22/2017 23:16
a-Chlordane	**0.0051**	0.00047	0.0010	1	06/22/2017 23:16
g-Chlordane	**0.0029**	0.00021	0.0010	1	06/22/2017 23:16
p,p-DDD	**0.0013**	0.00014	0.0010	1	06/22/2017 23:16
p,p-DDE	**0.0041**	0.00032	0.0010	1	06/22/2017 23:16
p,p-DDT	**0.048**	0.00043	0.0010	1	06/22/2017 23:16
Dieldrin	**0.041**	0.00033	0.0010	1	06/22/2017 23:16
Endosulfan I	ND	0.00065	0.0010	1	06/22/2017 23:16
Endosulfan II	ND	0.00020	0.0010	1	06/22/2017 23:16
Endosulfan sulfate	ND	0.00063	0.0010	1	06/22/2017 23:16
Endrin	**0.0020**	0.00097	0.0010	1	06/22/2017 23:16
Endrin aldehyde	ND	0.00020	0.0010	1	06/22/2017 23:16
Endrin ketone	ND	0.00013	0.0010	1	06/22/2017 23:16
Heptachlor	ND	0.00021	0.0010	1	06/22/2017 23:16
Heptachlor epoxide	ND	0.00020	0.0010	1	06/22/2017 23:16
Hexachlorobenzene	ND	0.00027	0.010	1	06/22/2017 23:16
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	06/22/2017 23:16
Methoxychlor	**0.012**	0.00089	0.0010	1	06/22/2017 23:16
Toxaphene	ND	0.035	0.050	1	06/22/2017 23:16

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	104	70-130	06/22/2017 23:16

Analyst(s): CK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B
Date Prepared:	6/19/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS9-0.5	**1706881-009A**	**Soil**	**06/14/2017 11:16**	**GC22**	**140678**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	06/23/2017 09:27
a-BHC	ND	0.00010	0.0010	1	06/23/2017 09:27
b-BHC	ND	0.00025	0.0010	1	06/23/2017 09:27
d-BHC	ND	0.00037	0.0010	1	06/23/2017 09:27
g-BHC	ND	0.000097	0.0010	1	06/23/2017 09:27
Chlordane (Technical)	ND	0.016	0.025	1	06/23/2017 09:27
a-Chlordane	**0.0022**	0.00047	0.0010	1	06/23/2017 09:27
g-Chlordane	**0.0014**	0.00021	0.0010	1	06/23/2017 09:27
p,p-DDD	ND	0.00014	0.0010	1	06/23/2017 09:27
p,p-DDE	**0.0024**	0.00032	0.0010	1	06/23/2017 09:27
p,p-DDT	**0.0073**	0.00043	0.0010	1	06/23/2017 09:27
Dieldrin	**0.015**	0.00033	0.0010	1	06/23/2017 09:27
Endosulfan I	ND	0.00065	0.0010	1	06/23/2017 09:27
Endosulfan II	ND	0.00020	0.0010	1	06/23/2017 09:27
Endosulfan sulfate	ND	0.00063	0.0010	1	06/23/2017 09:27
Endrin	ND	0.00042	0.0010	1	06/23/2017 09:27
Endrin aldehyde	ND	0.00020	0.0010	1	06/23/2017 09:27
Endrin ketone	ND	0.00013	0.0010	1	06/23/2017 09:27
Heptachlor	ND	0.00021	0.0010	1	06/23/2017 09:27
Heptachlor epoxide	ND	0.00020	0.0010	1	06/23/2017 09:27
Hexachlorobenzene	ND	0.00027	0.010	1	06/23/2017 09:27
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	06/23/2017 09:27
Methoxychlor	ND	0.00089	0.0010	1	06/23/2017 09:27
Toxaphene	ND	0.035	0.050	1	06/23/2017 09:27

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	116	70-130	06/23/2017 09:27

Analyst(s): CK

(Cont.)

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B
Date Prepared:	6/19/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS10-0.5	1706881-010A	Soil	06/14/2017 11:19	GC22	140678

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	**0.00045**	J	0.00027	0.0010	1	06/23/2017 10:02
a-BHC	ND		0.00010	0.0010	1	06/23/2017 10:02
b-BHC	ND		0.00025	0.0010	1	06/23/2017 10:02
d-BHC	ND		0.00037	0.0010	1	06/23/2017 10:02
g-BHC	ND		0.000097	0.0010	1	06/23/2017 10:02
Chlordane (Technical)	**0.10**		0.016	0.025	1	06/23/2017 10:02
a-Chlordane	**0.019**		0.00047	0.0010	1	06/23/2017 10:02
g-Chlordane	**0.0096**		0.00021	0.0010	1	06/23/2017 10:02
p,p-DDD	**0.0011**		0.00014	0.0010	1	06/23/2017 10:02
p,p-DDE	**0.020**		0.00032	0.0010	1	06/23/2017 10:02
p,p-DDT	**0.040**		0.00043	0.0010	1	06/23/2017 10:02
Dieldrin	**0.16**		0.00033	0.0010	1	06/23/2017 10:02
Endosulfan I	ND		0.00065	0.0010	1	06/23/2017 10:02
Endosulfan II	ND		0.00020	0.0010	1	06/23/2017 10:02
Endosulfan sulfate	ND		0.00063	0.0010	1	06/23/2017 10:02
Endrin	**0.0022**		0.00042	0.0010	1	06/23/2017 10:02
Endrin aldehyde	ND		0.00020	0.0010	1	06/23/2017 10:02
Endrin ketone	ND		0.00013	0.0010	1	06/23/2017 10:02
Heptachlor	ND		0.00021	0.0010	1	06/23/2017 10:02
Heptachlor epoxide	**0.0028**		0.00020	0.0010	1	06/23/2017 10:02
Hexachlorobenzene	**0.00076**	J	0.00027	0.010	1	06/23/2017 10:02
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	06/23/2017 10:02
Methoxychlor	ND		0.00089	0.0010	1	06/23/2017 10:02
Toxaphene	ND		0.035	0.050	1	06/23/2017 10:02

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	105	70-130	06/23/2017 10:02

Analyst(s): CK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B
Date Prepared:	6/19/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS11-0.5	**1706881-011A**	**Soil**	**06/14/2017 11:23**	**GC22**	**140678**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	06/23/2017 10:36
a-BHC	ND		0.00010	0.0010	1	06/23/2017 10:36
b-BHC	ND		0.00025	0.0010	1	06/23/2017 10:36
d-BHC	ND		0.00037	0.0010	1	06/23/2017 10:36
g-BHC	ND		0.000097	0.0010	1	06/23/2017 10:36
Chlordane (Technical)	**0.051**		0.016	0.025	1	06/23/2017 10:36
a-Chlordane	**0.0049**		0.00047	0.0010	1	06/23/2017 10:36
g-Chlordane	**0.0041**		0.00021	0.0010	1	06/23/2017 10:36
p,p-DDD	**0.00054**	J	0.00014	0.0010	1	06/23/2017 10:36
p,p-DDE	**0.0059**		0.00032	0.0010	1	06/23/2017 10:36
p,p-DDT	**0.039**		0.00043	0.0010	1	06/23/2017 10:36
Dieldrin	**0.0020**		0.00033	0.0010	1	06/23/2017 10:36
Endosulfan I	ND		0.00065	0.0010	1	06/23/2017 10:36
Endosulfan II	ND		0.00020	0.0010	1	06/23/2017 10:36
Endosulfan sulfate	ND		0.00063	0.0010	1	06/23/2017 10:36
Endrin	ND		0.00097	0.0010	1	06/23/2017 10:36
Endrin aldehyde	ND		0.00020	0.0010	1	06/23/2017 10:36
Endrin ketone	ND		0.00013	0.0010	1	06/23/2017 10:36
Heptachlor	ND		0.00021	0.0010	1	06/23/2017 10:36
Heptachlor epoxide	ND		0.00020	0.0010	1	06/23/2017 10:36
Hexachlorobenzene	ND		0.00027	0.010	1	06/23/2017 10:36
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	06/23/2017 10:36
Methoxychlor	**0.0024**		0.00089	0.0010	1	06/23/2017 10:36
Toxaphene	ND		0.035	0.050	1	06/23/2017 10:36

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	111	70-130	06/23/2017 10:36

Analyst(s): CK

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1-0.5	**1706881-001A**	**Soil**	**06/14/2017 10:37**	**GC22**	**141965**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	07/11/2017 14:45
a-BHC	ND		0.00010	0.0010	1	07/11/2017 14:45
b-BHC	ND		0.00025	0.0010	1	07/11/2017 14:45
d-BHC	ND		0.00037	0.0010	1	07/11/2017 14:45
g-BHC	ND		0.000097	0.0010	1	07/11/2017 14:45
Chlordane (Technical)	**0.083**		0.016	0.025	1	07/11/2017 14:45
a-Chlordane	**0.012**		0.00047	0.0010	1	07/11/2017 14:45
g-Chlordane	**0.0097**		0.00021	0.0010	1	07/11/2017 14:45
p,p-DDD	**0.015**		0.00014	0.0010	1	07/11/2017 14:45
p,p-DDE	**0.011**		0.00032	0.0010	1	07/11/2017 14:45
p,p-DDT	**0.11**		0.00043	0.0010	1	07/11/2017 14:45
Dieldrin	**0.014**		0.00033	0.0010	1	07/11/2017 14:45
Endosulfan I	ND		0.00065	0.0010	1	07/11/2017 14:45
Endosulfan II	ND		0.00020	0.0010	1	07/11/2017 14:45
Endosulfan sulfate	ND		0.00063	0.0010	1	07/11/2017 14:45
Endrin	**0.0025**		0.00042	0.0010	1	07/11/2017 14:45
Endrin aldehyde	ND		0.00020	0.0010	1	07/11/2017 14:45
Endrin ketone	ND		0.00013	0.0010	1	07/11/2017 14:45
Heptachlor	ND		0.00021	0.0010	1	07/11/2017 14:45
Heptachlor epoxide	**0.00080**	JP	0.00020	0.0010	1	07/11/2017 14:45
Hexachlorobenzene	**0.00036**	J	0.00027	0.010	1	07/11/2017 14:45
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	07/11/2017 14:45
Methoxychlor	ND		0.00089	0.0010	1	07/11/2017 14:45
Toxaphene	ND		0.035	0.050	1	07/11/2017 14:45

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	106	70-130	07/11/2017 14:45

Analyst(s): CK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS2-0.5	**1706881-002A**	**Soil**	**06/14/2017 10:43**	**GC22**	**141965**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	07/11/2017 15:20
a-BHC	ND		0.00010	0.0010	1	07/11/2017 15:20
b-BHC	ND		0.00025	0.0010	1	07/11/2017 15:20
d-BHC	ND		0.00037	0.0010	1	07/11/2017 15:20
g-BHC	ND		0.000097	0.0010	1	07/11/2017 15:20
Chlordane (Technical)	**0.21**		0.016	0.025	1	07/11/2017 15:20
a-Chlordane	**0.035**		0.00047	0.0010	1	07/11/2017 15:20
g-Chlordane	**0.027**		0.00021	0.0010	1	07/11/2017 15:20
p,p-DDD	**0.041**		0.00014	0.0010	1	07/11/2017 15:20
p,p-DDE	**0.016**		0.00032	0.0010	1	07/11/2017 15:20
p,p-DDT	**0.36**		0.00043	0.0010	1	07/11/2017 15:20
Dieldrin	**0.019**	P	0.00033	0.0010	1	07/11/2017 15:20
Endosulfan I	ND		0.00065	0.0010	1	07/11/2017 15:20
Endosulfan II	ND		0.00020	0.0010	1	07/11/2017 15:20
Endosulfan sulfate	ND		0.00063	0.0010	1	07/11/2017 15:20
Endrin	ND		0.00042	0.0010	1	07/11/2017 15:20
Endrin aldehyde	ND		0.00020	0.0010	1	07/11/2017 15:20
Endrin ketone	ND		0.00013	0.0010	1	07/11/2017 15:20
Heptachlor	ND		0.00021	0.0010	1	07/11/2017 15:20
Heptachlor epoxide	**0.0019**	P	0.00020	0.0010	1	07/11/2017 15:20
Hexachlorobenzene	ND		0.00027	0.010	1	07/11/2017 15:20
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	07/11/2017 15:20
Methoxychlor	ND		0.00089	0.0010	1	07/11/2017 15:20
Toxaphene	ND		0.035	0.050	1	07/11/2017 15:20

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	116	70-130	07/11/2017 15:20

Analyst(s): CK

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NELAP 4033ORELAP

Angela Rydelius, Lab Manager

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS3-0.5	1706881-003A	Soil	06/14/2017 10:47	GC22	141965

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	07/11/2017 15:54
a-BHC	ND		0.00010	0.0010	1	07/11/2017 15:54
b-BHC	ND		0.00025	0.0010	1	07/11/2017 15:54
d-BHC	ND		0.00037	0.0010	1	07/11/2017 15:54
g-BHC	ND		0.000097	0.0010	1	07/11/2017 15:54
Chlordane (Technical)	**1.2**		0.080	0.12	5	07/11/2017 19:58
a-Chlordane	**0.19**		0.00047	0.0010	1	07/11/2017 15:54
g-Chlordane	**0.16**		0.00021	0.0010	1	07/11/2017 15:54
p,p-DDD	**0.091**		0.00014	0.0010	1	07/11/2017 15:54
p,p-DDE	**0.048**		0.00032	0.0010	1	07/11/2017 15:54
p,p-DDT	**0.84**		0.0022	0.0050	5	07/11/2017 19:58
Dieldrin	**0.031**	P	0.00033	0.0010	1	07/11/2017 15:54
Endosulfan I	ND		0.00065	0.0010	1	07/11/2017 15:54
Endosulfan II	ND		0.00020	0.0010	1	07/11/2017 15:54
Endosulfan sulfate	ND		0.00063	0.0010	1	07/11/2017 15:54
Endrin	ND		0.00042	0.0010	1	07/11/2017 15:54
Endrin aldehyde	ND		0.00020	0.0010	1	07/11/2017 15:54
Endrin ketone	ND		0.00013	0.0010	1	07/11/2017 15:54
Heptachlor	**0.0021**		0.00021	0.0010	1	07/11/2017 15:54
Heptachlor epoxide	**0.0063**	P	0.00020	0.0010	1	07/11/2017 15:54
Hexachlorobenzene	ND		0.00027	0.010	1	07/11/2017 15:54
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	07/11/2017 15:54
Methoxychlor	ND		0.00089	0.0010	1	07/11/2017 15:54
Toxaphene	ND		0.035	0.050	1	07/11/2017 15:54

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	130	70-130	07/11/2017 15:54

Analyst(s): CK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS5-0.5	1706881-005A	Soil	06/14/2017 10:56	GC22	141965

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	07/11/2017 16:30
a-BHC	ND		0.00010	0.0010	1	07/11/2017 16:30
b-BHC	ND		0.00025	0.0010	1	07/11/2017 16:30
d-BHC	ND		0.00037	0.0010	1	07/11/2017 16:30
g-BHC	ND		0.000097	0.0010	1	07/11/2017 16:30
Chlordane (Technical)	**0.28**		0.016	0.025	1	07/11/2017 16:30
a-Chlordane	**0.046**		0.00047	0.0010	1	07/11/2017 16:30
g-Chlordane	**0.041**		0.00021	0.0010	1	07/11/2017 16:30
p,p-DDD	**0.028**		0.00014	0.0010	1	07/11/2017 16:30
p,p-DDE	**0.0092**		0.00032	0.0010	1	07/11/2017 16:30
p,p-DDT	**0.42**		0.00043	0.0010	1	07/11/2017 16:30
Dieldrin	**0.010**	P	0.00033	0.0010	1	07/11/2017 16:30
Endosulfan I	ND		0.00065	0.0010	1	07/11/2017 16:30
Endosulfan II	ND		0.00020	0.0010	1	07/11/2017 16:30
Endosulfan sulfate	ND		0.00063	0.0010	1	07/11/2017 16:30
Endrin	ND		0.00042	0.0010	1	07/11/2017 16:30
Endrin aldehyde	ND		0.00020	0.0010	1	07/11/2017 16:30
Endrin ketone	ND		0.00013	0.0010	1	07/11/2017 16:30
Heptachlor	ND		0.00021	0.0010	1	07/11/2017 16:30
Heptachlor epoxide	**0.0022**	P	0.00020	0.0010	1	07/11/2017 16:30
Hexachlorobenzene	**0.00040**	J	0.00027	0.010	1	07/11/2017 16:30
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	07/11/2017 16:30
Methoxychlor	ND		0.00089	0.0010	1	07/11/2017 16:30
Toxaphene	ND		0.035	0.050	1	07/11/2017 16:30

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	100	70-130	07/11/2017 16:30

Analyst(s): CK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS6-0.5	1706881-006A	Soil	06/14/2017 11:00	GC22	140811

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	06/21/2017 21:34
a-BHC	ND	0.00010	0.0010	1	06/21/2017 21:34
b-BHC	ND	0.00025	0.0010	1	06/21/2017 21:34
d-BHC	ND	0.00037	0.0010	1	06/21/2017 21:34
g-BHC	ND	0.000097	0.0010	1	06/21/2017 21:34
Chlordane (Technical)	**0.10**	0.016	0.025	1	06/21/2017 21:34
a-Chlordane	**0.019**	0.00047	0.0010	1	06/21/2017 21:34
g-Chlordane	**0.018**	0.00021	0.0010	1	06/21/2017 21:34
p,p-DDD	**0.0030**	0.00014	0.0010	1	06/21/2017 21:34
p,p-DDE	**0.010**	0.00032	0.0010	1	06/21/2017 21:34
p,p-DDT	**0.040**	0.00043	0.0010	1	06/21/2017 21:34
Dieldrin	**0.016**	0.00033	0.0010	1	06/21/2017 21:34
Endosulfan I	ND	0.00065	0.0010	1	06/21/2017 21:34
Endosulfan II	ND	0.00020	0.0010	1	06/21/2017 21:34
Endosulfan sulfate	ND	0.00063	0.0010	1	06/21/2017 21:34
Endrin	ND	0.00042	0.0010	1	06/21/2017 21:34
Endrin aldehyde	ND	0.00020	0.0010	1	06/21/2017 21:34
Endrin ketone	ND	0.00013	0.0010	1	06/21/2017 21:34
Heptachlor	ND	0.00021	0.0010	1	06/21/2017 21:34
Heptachlor epoxide	ND	0.00020	0.0010	1	06/21/2017 21:34
Hexachlorobenzene	ND	0.00027	0.010	1	06/21/2017 21:34
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	06/21/2017 21:34
Methoxychlor	ND	0.00089	0.0010	1	06/21/2017 21:34
Toxaphene	ND	0.035	0.050	1	06/21/2017 21:34

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	101	70-130	06/21/2017 21:34

Analyst(s): CK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS7-0.5	1706881-007A	Soil	06/14/2017 11:06	GC22	140811

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	06/21/2017 19:48
a-BHC	ND		0.00010	0.0010	1	06/21/2017 19:48
b-BHC	ND		0.00025	0.0010	1	06/21/2017 19:48
d-BHC	ND		0.00037	0.0010	1	06/21/2017 19:48
g-BHC	ND		0.000097	0.0010	1	06/21/2017 19:48
Chlordane (Technical)	**0.074**		0.016	0.025	1	06/21/2017 19:48
a-Chlordane	**0.0066**		0.00047	0.0010	1	06/21/2017 19:48
g-Chlordane	**0.0075**		0.00021	0.0010	1	06/21/2017 19:48
p,p-DDD	**0.0019**		0.00014	0.0010	1	06/21/2017 19:48
p,p-DDE	**0.0038**	P	0.00032	0.0010	1	06/21/2017 19:48
p,p-DDT	**0.052**		0.00043	0.0010	1	06/21/2017 19:48
Dieldrin	**0.0021**		0.00033	0.0010	1	06/21/2017 19:48
Endosulfan I	ND		0.00065	0.0010	1	06/21/2017 19:48
Endosulfan II	ND		0.00020	0.0010	1	06/21/2017 19:48
Endosulfan sulfate	ND		0.00063	0.0010	1	06/21/2017 19:48
Endrin	ND		0.00042	0.0010	1	06/21/2017 19:48
Endrin aldehyde	ND		0.00020	0.0010	1	06/21/2017 19:48
Endrin ketone	ND		0.00013	0.0010	1	06/21/2017 19:48
Heptachlor	ND		0.00021	0.0010	1	06/21/2017 19:48
Heptachlor epoxide	ND		0.00020	0.0010	1	06/21/2017 19:48
Hexachlorobenzene	ND		0.00027	0.010	1	06/21/2017 19:48
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	06/21/2017 19:48
Methoxychlor	ND		0.00089	0.0010	1	06/21/2017 19:48
Toxaphene	ND		0.035	0.050	1	06/21/2017 19:48

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	123	70-130	06/21/2017 19:48

Analyst(s): CK

(Cont.)

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS8-0.5	**1706881-008A**	**Soil**	**06/14/2017 11:09**	**GC22**	**141965**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	07/11/2017 14:10
a-BHC	ND		0.00010	0.0010	1	07/11/2017 14:10
b-BHC	ND		0.00025	0.0010	1	07/11/2017 14:10
d-BHC	ND		0.00037	0.0010	1	07/11/2017 14:10
g-BHC	ND		0.000097	0.0010	1	07/11/2017 14:10
Chlordane (Technical)	**0.27**		0.016	0.025	1	07/11/2017 14:10
a-Chlordane	**0.052**		0.00047	0.0010	1	07/11/2017 14:10
g-Chlordane	**0.035**		0.00021	0.0010	1	07/11/2017 14:10
p,p-DDD	**0.015**	P	0.00014	0.0010	1	07/11/2017 14:10
p,p-DDE	**0.025**		0.00032	0.0010	1	07/11/2017 14:10
p,p-DDT	**0.12**		0.00043	0.0010	1	07/11/2017 14:10
Dieldrin	**0.012**	P	0.00033	0.0010	1	07/11/2017 14:10
Endosulfan I	ND		0.00065	0.0010	1	07/11/2017 14:10
Endosulfan II	ND		0.00020	0.0010	1	07/11/2017 14:10
Endosulfan sulfate	ND		0.00063	0.0010	1	07/11/2017 14:10
Endrin	ND		0.00042	0.0010	1	07/11/2017 14:10
Endrin aldehyde	ND		0.00020	0.0010	1	07/11/2017 14:10
Endrin ketone	ND		0.00013	0.0010	1	07/11/2017 14:10
Heptachlor	**0.0011**		0.00021	0.0010	1	07/11/2017 14:10
Heptachlor epoxide	**0.0029**	P	0.00020	0.0010	1	07/11/2017 14:10
Hexachlorobenzene	ND		0.00027	0.010	1	07/11/2017 14:10
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	07/11/2017 14:10
Methoxychlor	ND		0.00089	0.0010	1	07/11/2017 14:10
Toxaphene	ND		0.035	0.050	1	07/11/2017 14:10

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	120	70-130	07/11/2017 14:10

Analyst(s): CK

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3050B
Date Prepared:	6/19/17	**Analytical Method:**	SW6020
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1-0.5	**1706881-001A**	**Soil**	**06/14/2017 10:37**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**2300**	5.0	10	06/20/2017 13:04

Surrogates	REC (%)	Limits	
Terbium	94	70-130	06/20/2017 13:04

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS2-0.5	**1706881-002A**	**Soil**	**06/14/2017 10:43**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**2600**	5.0	10	06/21/2017 12:59

Surrogates	REC (%)	Limits	
Terbium	101	70-130	06/21/2017 12:59

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS3-0.5	**1706881-003A**	**Soil**	**06/14/2017 10:47**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**1400**	5.0	10	06/21/2017 13:05

Surrogates	REC (%)	Limits	
Terbium	97	70-130	06/21/2017 13:05

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS4-0.5	**1706881-004A**	**Soil**	**06/14/2017 10:52**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**160**	0.50	1	06/20/2017 18:40

Surrogates	REC (%)	Limits	
Terbium	113	70-130	06/20/2017 18:40

Analyst(s): JC

(Cont.)

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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3050B
Date Prepared:	6/19/17	**Analytical Method:**	SW6020
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS5-0.5	**1706881-005A**	**Soil**	**06/14/2017 10:56**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**850**	5.0	10	06/21/2017 13:11

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	107	70-130	06/21/2017 13:11

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS6-0.5	**1706881-006A**	**Soil**	**06/14/2017 11:00**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**430**	0.50	1	06/20/2017 18:53

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	102	70-130	06/20/2017 18:53

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS7-0.5	**1706881-007A**	**Soil**	**06/14/2017 11:06**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**590**	5.0	10	06/21/2017 13:17

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	103	70-130	06/21/2017 13:17

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS8-0.5	**1706881-008A**	**Soil**	**06/14/2017 11:09**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**870**	5.0	10	06/21/2017 13:24

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	102	70-130	06/21/2017 13:24

Analyst(s): ND

(Cont.)

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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3050B
Date Prepared:	6/19/17	**Analytical Method:**	SW6020
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS9-0.5	**1706881-009A**	**Soil**	**06/14/2017 11:16**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**300**	0.50	1	06/20/2017 19:11
Surrogates	REC (%)	Limits		
Terbium	103	70-130		06/20/2017 19:11

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS10-0.5	**1706881-010A**	**Soil**	**06/14/2017 11:19**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**160**	0.50	1	06/20/2017 19:17
Surrogates	REC (%)	Limits		
Terbium	102	70-130		06/20/2017 19:17

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS11-0.5	**1706881-011A**	**Soil**	**06/14/2017 11:23**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**970**	5.0	10	06/21/2017 13:30
Surrogates	REC (%)	Limits		
Terbium	101	70-130		06/21/2017 13:30

Analyst(s): ND

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Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Prepared:	6/19/17	**BatchID:**	140676
Date Analyzed:	6/22/17 - 6/26/17	**Extraction Method:**	SW3550B/3620B
Instrument:	GC20, GC22	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	2017-28; 3801-07 MLK	**Sample ID:**	MB/LCS-140676

QC Summary Report for SW8081A w/ Florisil Clean-up

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0556	0.00027	0.0010	0.050	-	111	70-130
a-BHC	ND	0.0615	0.00010	0.0010	0.050	-	123	70-130
b-BHC	ND	0.0532	0.00025	0.0010	0.050	-	106	70-130
d-BHC	ND	0.0588	0.00037	0.0010	0.050	-	118	70-130
g-BHC	ND	0.0573	0.000097	0.0010	0.050	-	115	70-130
Chlordane (Technical)	ND	-	0.016	0.025	-	-	-	-
a-Chlordane	ND	0.0553	0.00047	0.0010	0.050	-	111	70-130
g-Chlordane	ND	0.0576	0.00021	0.0010	0.050	-	115	70-130
p,p-DDD	ND	0.0557	0.00014	0.0010	0.050	-	111	70-130
p,p-DDE	ND	0.0577	0.00032	0.0010	0.050	-	115	70-130
p,p-DDT	ND	0.0536	0.00043	0.0010	0.050	-	107	70-130
Dieldrin	ND	0.0646	0.00033	0.0010	0.050	-	129	70-130
Endosulfan I	ND	0.0548	0.00065	0.0010	0.050	-	110	70-130
Endosulfan II	ND	0.0557	0.00020	0.0010	0.050	-	111	70-130
Endosulfan sulfate	ND	0.0597	0.00063	0.0010	0.050	-	119	70-130
Endrin	ND	0.0506	0.00042	0.0010	0.050	-	101	70-130
Endrin aldehyde	ND	0.0365	0.00020	0.0010	0.050	-	73	70-130
Endrin ketone	ND	0.0621	0.00013	0.0010	0.050	-	124	70-130
Heptachlor	ND	0.0525	0.00021	0.0010	0.050	-	105	70-130
Heptachlor epoxide	ND	0.0557	0.00020	0.0010	0.050	-	111	70-130
Hexachlorobenzene	ND	-	0.00027	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.00040	0.020	-	-	-	-
Methoxychlor	ND	0.0537	0.00089	0.0010	0.050	-	107	70-130
Toxaphene	ND	-	0.035	0.050	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	0.05826	0.0466			0.050	117	93	70-130

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

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Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Prepared:	6/19/17	**BatchID:**	140678
Date Analyzed:	6/23/17 - 6/26/17	**Extraction Method:**	SW3550B/3620B
Instrument:	GC20, GC22	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	2017-28; 3801-07 MLK	**Sample ID:**	MB/LCS-140678

QC Summary Report for SW8081A w/ Florisil Clean-up

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0553	0.00027	0.0010	0.050	-	111	70-130
a-BHC	ND	0.0605	0.00010	0.0010	0.050	-	121	70-130
b-BHC	ND	0.0530	0.00025	0.0010	0.050	-	106	70-130
d-BHC	ND	0.0578	0.00037	0.0010	0.050	-	116	70-130
g-BHC	ND	0.0562	0.000097	0.0010	0.050	-	112	70-130
Chlordane (Technical)	ND	-	0.016	0.025	-	-	-	-
a-Chlordane	ND	0.0553	0.00047	0.0010	0.050	-	111	70-130
g-Chlordane	ND	0.0577	0.00021	0.0010	0.050	-	115	70-130
p,p-DDD	ND	0.0555	0.00014	0.0010	0.050	-	111	70-130
p,p-DDE	ND	0.0583	0.00032	0.0010	0.050	-	117	70-130
p,p-DDT	ND	0.0536	0.00043	0.0010	0.050	-	107	70-130
Dieldrin	ND	0.0648	0.00033	0.0010	0.050	-	130	70-130
Endosulfan I	ND	0.0548	0.00065	0.0010	0.050	-	110	70-130
Endosulfan II	ND	0.0557	0.00020	0.0010	0.050	-	111	70-130
Endosulfan sulfate	ND	0.0594	0.00063	0.0010	0.050	-	119	70-130
Endrin	ND	0.0507	0.00042	0.0010	0.050	-	101	70-130
Endrin aldehyde	ND	0.0380	0.00020	0.0010	0.050	-	76	70-130
Endrin ketone	ND	0.0618	0.00013	0.0010	0.050	-	123	70-130
Heptachlor	ND	0.0521	0.00021	0.0010	0.050	-	104	70-130
Heptachlor epoxide	ND	0.0558	0.00020	0.0010	0.050	-	112	70-130
Hexachlorobenzene	ND	-	0.00027	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.00040	0.020	-	-	-	-
Methoxychlor	ND	0.0537	0.00089	0.0010	0.050	-	107	70-130
Toxaphene	ND	-	0.035	0.050	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	0.05847	0.0391			0.050	117	78	70-130

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Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Prepared:	6/19/17	**BatchID:**	140811
Date Analyzed:	6/23/17 - 6/27/17	**Extraction Method:**	SW3550B/3620B/3640A
Instrument:	GC22, GC23	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	2017-28; 3801-07 MLK	**Sample ID:**	MB/LCS-140811

QC Summary Report OC Pesticides w/ GPC & Florisil

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0486	0.00027	0.0010	0.050	-	97	70-130
a-BHC	ND	0.0460	0.00010	0.0010	0.050	-	92	70-130
b-BHC	ND	0.0512	0.00025	0.0010	0.050	-	102	70-130
d-BHC	ND	0.0519	0.00037	0.0010	0.050	-	104	70-130
g-BHC	ND	0.0515	0.000097	0.0010	0.050	-	103	70-130
Chlordane (Technical)	ND	-	0.016	0.025	-	-	-	-
a-Chlordane	ND	0.0479	0.00047	0.0010	0.050	-	96	70-130
g-Chlordane	ND	0.0556	0.00021	0.0010	0.050	-	111	70-130
p,p-DDD	ND	0.0476	0.00014	0.0010	0.050	-	95	70-130
p,p-DDE	ND	0.0472	0.00032	0.0010	0.050	-	94	70-130
p,p-DDT	ND	0.0475	0.00043	0.0010	0.050	-	95	70-130
Dieldrin	ND	0.0529	0.00033	0.0010	0.050	-	106	70-130
Endosulfan I	ND	0.0466	0.00065	0.0010	0.050	-	93	70-130
Endosulfan II	ND	0.0466	0.00020	0.0010	0.050	-	93	70-130
Endosulfan sulfate	ND	0.0466	0.00063	0.0010	0.050	-	93	70-130
Endrin	ND	0.0470	0.00042	0.0010	0.050	-	94	70-130
Endrin aldehyde	ND	0.0472	0.00020	0.0010	0.050	-	94	70-130
Endrin ketone	ND	0.0476	0.00013	0.0010	0.050	-	95	70-130
Heptachlor	ND	0.0520	0.00021	0.0010	0.050	-	104	70-130
Heptachlor epoxide	ND	0.0489	0.00020	0.0010	0.050	-	98	70-130
Hexachlorobenzene	ND	-	0.00027	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.00040	0.020	-	-	-	-
Methoxychlor	ND	0.0475	0.00089	0.0010	0.050	-	95	70-130
Toxaphene	ND	-	0.035	0.050	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	0.06412	0.0492			0.050	128	98	70-130

(Cont.)

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Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Prepared:	7/7/17	**BatchID:**	141965
Date Analyzed:	7/11/17	**Extraction Method:**	SW3550B/3620B/3640A
Instrument:	GC20	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	2017-28; 3801-07 MLK	**Sample ID:**	MB/LCS-141965

QC Summary Report OC Pesticides w/ GPC & Florisil

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0506	0.00027	0.0010	0.050	-	101	70-130
a-BHC	ND	0.0563	0.00010	0.0010	0.050	-	113	70-130
b-BHC	ND	0.0493	0.00025	0.0010	0.050	-	99	70-130
d-BHC	ND	0.0531	0.00037	0.0010	0.050	-	106	70-130
g-BHC	ND	0.0525	0.000097	0.0010	0.050	-	105	70-130
Chlordane (Technical)	ND	-	0.016	0.025	-	-	-	-
a-Chlordane	ND	0.0474	0.00047	0.0010	0.050	-	95	70-130
g-Chlordane	ND	0.0540	0.00021	0.0010	0.050	-	108	70-130
p,p-DDD	ND	0.0511	0.00014	0.0010	0.050	-	102	70-130
p,p-DDE	ND	0.0524	0.00032	0.0010	0.050	-	105	70-130
p,p-DDT	ND	0.0501	0.00043	0.0010	0.050	-	100	70-130
Dieldrin	ND	0.0572	0.00033	0.0010	0.050	-	114	70-130
Endosulfan I	ND	0.0502	0.00065	0.0010	0.050	-	100	70-130
Endosulfan II	ND	0.0519	0.00020	0.0010	0.050	-	104	70-130
Endosulfan sulfate	ND	0.0512	0.00063	0.0010	0.050	-	102	70-130
Endrin	ND	0.0544	0.00042	0.0010	0.050	-	109	70-130
Endrin aldehyde	ND	0.0518	0.00020	0.0010	0.050	-	104	70-130
Endrin ketone	ND	0.0559	0.00013	0.0010	0.050	-	112	70-130
Heptachlor	ND	0.0514	0.00021	0.0010	0.050	-	103	70-130
Heptachlor epoxide	ND	0.0503	0.00020	0.0010	0.050	-	101	70-130
Hexachlorobenzene	ND	-	0.00027	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.00040	0.020	-	-	-	-
Methoxychlor	ND	0.0512	0.00089	0.0010	0.050	-	102	70-130
Toxaphene	ND	-	0.035	0.050	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	0.0463	0.0495			0.050	93	99	70-130

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Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Prepared:	6/19/17	**BatchID:**	140644
Date Analyzed:	6/19/17 - 6/20/17	**Extraction Method:**	SW3050B
Instrument:	ICP-MS2, ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	2017-28; 3801-07 MLK	**Sample ID:**	MB/LCS-140644 1706881-001AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Lead	ND	49.5	0.50	50	-	99	75-125
Surrogate Recovery							
Terbium	498.1	488		500	100	98	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	2990	7520	50	2335	1300,F13	10400,F1	75-125	86.3,F13	20
Surrogate Recovery									
Terbium	480	428	500		96	86	70-130	11.6	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	2350	2335	0.642	20

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1706881 **ClientCode: ENVC** **QuoteID: 7424**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Marc Papineau
Environmental Service
5789 Gold Creek Drive
Castro Valley, CA 94552
510-881-8574 FAX: 510-581-7204

Email: marc_p@sbcglobal.net
cc/3rd Party:
PO:
ProjectNo: 2017-28; 3801-07 MLK

Bill to:
Accounts Payable
Resources for Community Development
2220 Oxfard Street
Berkeley, CA 94704

Requested TAT: 5 days;

Date Received: 06/16/2017
Date Logged: 06/19/2017

Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
					Requested Tests (See legend below)											
1706881-001	SS1-0.5	Soil	6/14/2017 10:37	☐	A	A	A	A								
1706881-002	SS2-0.5	Soil	6/14/2017 10:43	☐	A	A	A	A								
1706881-003	SS3-0.5	Soil	6/14/2017 10:47	☐	A	A	A	A								
1706881-004	SS4-0.5	Soil	6/14/2017 10:52	☐	A	A		A								
1706881-005	SS5-0.5	Soil	6/14/2017 10:56	☐	A	A	A	A								
1706881-006	SS6-0.5	Soil	6/14/2017 11:00	☐	A	A	A	A								
1706881-007	SS7-0.5	Soil	6/14/2017 11:06	☐	A	A	A	A								
1706881-008	SS8-0.5	Soil	6/14/2017 11:09	☐	A	A	A	A								
1706881-009	SS9-0.5	Soil	6/14/2017 11:16	☐	A	A		A								
1706881-010	SS10-0.5	Soil	6/14/2017 11:19	☐	A	A		A								
1706881-011	SS11-0.5	Soil	6/14/2017 11:23	☐	A	A		A								

Test Legend:

1	8081_ESL_S [J]	2	8081_FLORISIL_S [J]	3	8081_GPCFLSL_S [J]	4	PBMS_TTLC_S
5		6		7		8	
9		10		11		12	

Project Manager: Blake Brown **Prepared by: Jena Alfaro**

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: ENVIRONMENTAL SERVICE **Project:** 2017-28; 3801-07 MLK **Work Order:** 1706881

Client Contact: Marc Papineau **QC Level:**

Contact's Email: marc_p@sbcglobal.net **Comments:** **Date Logged:** 6/19/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1706881-001A	SS1-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 10:37	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-002A	SS2-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 10:43	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-003A	SS3-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 10:47	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-004A	SS4-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 10:52	5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☐	

NOTES: **- STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).**

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WORK ORDER SUMMARY

Client Name: ENVIRONMENTAL SERVICE **Project:** 2017-28; 3801-07 MLK **Work Order:** 1706881
Client Contact: Marc Papineau **QC Level:**
Contact's Email: marc_p@sbcglobal.net **Comments:** **Date Logged:** 6/19/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1706881-004A	SS4-0.5	Soil	SW8081A (OC Pesticides)	1	4OZ GJ	☐	6/14/2017 10:52	5 days		☑	
1706881-005A	SS5-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 10:56	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-006A	SS6-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:00	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-007A	SS7-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:06	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-008A	SS8-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:09	5 days		☐	

NOTES: **- STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).**

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WORK ORDER SUMMARY

Client Name: ENVIRONMENTAL SERVICE **Project:** 2017-28; 3801-07 MLK **Work Order:** 1706881

Client Contact: Marc Papineau **QC Level:**

Contact's Email: marc_p@sbcglobal.net **Comments:** **Date Logged:** 6/19/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1706881-008A	SS8-0.5	Soil	SW8081A (OC Pesticides w/ GPC & Florisil)	1	4OZ GJ	☐	6/14/2017 11:09	5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-009A	SS9-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:16	5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☐	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-010A	SS10-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:19	5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☐	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-011A	SS11-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:23	5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☐	
			SW8081A (OC Pesticides)			☐		5 days		☑	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1706881

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1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701
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Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☑ 5 DAY

☐ GeoTracker EDF ☑ PDF ☐ Excel ☐ Write On (DW)

QUOTE ID 7424

Report To: M. Papineau Bill To: Resources for Community Dev.
Company: Environmental Service 2220 Oxford Street
5789 Gold Creek Drive Berkeley, CA 94704
Castro Valley, CA e-mail: marc_p@sbcglobal.net
Tele: (510) 881-8574 Fax: (510) 581-7204
Project #: 2017-028 QUOTE ID#: 7424 Project Name: 3801-07 MLK
Location: 3801-07 Martin Luther King Jr. Way at W. MacArthur Blvd. in Oakland, CA
Sampler Signature: M. PAPINEAU *MP*

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other
SS1-0.5	SS1	6/14/2017	1037	1	J4		X				X			
SS2-0.5	SS2	6/14/2017	1043	1	J4		X				X			
SS3-0.5	SS3	6/14/2017	1047	1	J4		X				X			
SS4-0.5	SS4	6/14/2017	1052	1	J4		X				X			
SS5-0.5	SS5	6/14/2017	1056	1	J4		X				X			
SS6-0.5	SS6	6/14/2017	1100	1	J4		X				X			
SS7-0.5	SS7	6/14/2017	1106	1	J4		X				X			
SS8-0.5	SS8	6/14/2017	1109	1	J4		X				X			
SS9-0.5	SS9	6/14/2017	1116	1	J4		X				X			
SS10-0.5	SS10	6/14/2017	1119	1	J4		X				X			
SS11-0.5	SS11	6/14/2017	1123	1	J4		X				X			

Analysis Request

SAMPLE ID	MTBE / BTEX & TPH as Gas (602 / 8021 + 8015)	MTBE / BTEX ONLY (EPA 602 / 8021)	TPH as Diesel / Motor Oil (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	Other: Composite	Other	Other: HOLD sample	Comments
SS1-0.5							X									X				
SS2-0.5							X									X				
SS3-0.5							X									X				
SS4-0.5							X									X				
SS5-0.5							X									X				
SS6-0.5							X									X				
SS7-0.5							X									X				
SS8-0.5							X									X				
SS9-0.5							X									X				
SS10-0.5							X									X				
SS11-0.5							X									X				

Relinquished By:	Date:	Time:	Received By:
MP	6/16/17	1115	*[signature]*
[signature]	6/16/17	1830	*[signature]*

ICE/t° ______
GOOD CONDITION ______
HEAD SPACE ABSENT ______
DECHLORINATED IN LAB ______
APPROPRIATE CONTAINERS ______
PRESERVED IN LAB ______
VOAS O&G METALS OTHER
PRESERVATION ______ pH<2 ______

COMMENTS: J4 wide-mouth glass jar

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Sample Receipt Checklist

Client Name:	**Environmental Service**	Date and Time Received	**6/16/2017 18:30**
Project Name:	**2017-28; 3801-07 MLK**	Date Logged:	**6/19/2017**
		Received by:	Jena Alfaro
WorkOrder №:	**1706881** Matrix: Soil	Logged by:	Jena Alfaro
Carrier:	Benjamin Yslas (MAI Courier)		

Chain of Custody (COC) Information

	Yes	No	NA
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Sample IDs noted by Client on COC?	☑	☐	
Date and Time of collection noted by Client on COC?	☑	☐	
Sampler's name noted on COC?	☑	☐	

Sample Receipt Information

	Yes	No	NA
Custody seals intact on shipping container/cooler?	☐	☐	☑
Shipping container/cooler in good condition?	☑	☐	
Samples in proper containers/bottles?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	

Sample Preservation and Hold Time (HT) Information

	Yes	No	NA
All samples received within holding time?	☑	☐	☐
Sample/Temp Blank temperature	Temp: 6.3°C		☐
Water - VOA vials have zero headspace / no bubbles?	☐	☐	☑
Sample labels checked for correct preservation?	☑	☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	☐	☐	☑
Samples Received on Ice?	☐	☑	

UCMR Samples:

	Yes	No	NA
Total Chlorine tested and acceptable upon receipt for EPA 522?	☐	☐	☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	☐	☐	☑

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder:	1908700
Report Created for:	Environmental Service
	5789 Gold Creek Drive Castro Valley, CA 94552
Project Contact:	Marc Papineau
Project P.O.:	
Project:	2019-017; 3823-29 MLK Jr. Way
Project Received:	08/13/2019

Analytical Report reviewed & approved for release on 08/20/2019 by:

Yen Cao

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

NELAP ACCREDITED TNI LABORATORY

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Glossary of Terms & Qualifier Definitions

Client: Environmental Service
Project: 2019-017; 3823-29 MLK Jr. Way
WorkOrder: 1908700

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Glossary of Terms & Qualifier Definitions

Client: Environmental Service
Project: 2019-017; 3823-29 MLK Jr. Way
WorkOrder: 1908700

Analytical Qualifiers

P	Agreement between quantitative confirmation results exceed method recommended limits.
S	Spike recovery outside accepted recovery limits.
a3	Sample diluted due to high organic content.
c1	Surrogate recovery outside of the control limits due to the dilution of the sample.

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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Received:	8/13/19 15:45	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	8/15/19	**Analytical Method:**	SW8081A
Project:	2019-017; 3823-29 MLK Jr. Way	**Unit:**	mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS12-0.5	1908700-001A	Soil	08/09/2019 13:09	GC40 08151936.d	183630

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00050	5	08/15/2019 21:20
a-BHC	ND		0.00050	5	08/15/2019 21:20
b-BHC	ND		0.0015	5	08/15/2019 21:20
d-BHC	ND		0.0010	5	08/15/2019 21:20
g-BHC	ND		0.00050	5	08/15/2019 21:20
Chlordane (Technical)	**0.14**		0.012	5	08/15/2019 21:20
a-Chlordane	**0.026**		0.00050	5	08/15/2019 21:20
g-Chlordane	**0.014**		0.00050	5	08/15/2019 21:20
p,p-DDD	ND		0.00050	5	08/15/2019 21:20
p,p-DDE	**0.011**		0.00050	5	08/15/2019 21:20
p,p-DDT	**0.019**		0.00050	5	08/15/2019 21:20
Dieldrin	**0.0016**		0.00050	5	08/15/2019 21:20
Endosulfan I	ND		0.00050	5	08/15/2019 21:20
Endosulfan II	ND		0.00050	5	08/15/2019 21:20
Endosulfan sulfate	ND		0.00050	5	08/15/2019 21:20
Endrin	ND		0.00050	5	08/15/2019 21:20
Endrin aldehyde	ND		0.00050	5	08/15/2019 21:20
Endrin ketone	**0.00088**	P	0.00050	5	08/15/2019 21:20
Heptachlor	ND		0.00050	5	08/15/2019 21:20
Heptachlor epoxide	**0.0020**		0.00050	5	08/15/2019 21:20
Hexachlorobenzene	ND		0.0050	5	08/15/2019 21:20
Hexachlorocyclopentadiene	ND		0.010	5	08/15/2019 21:20
Methoxychlor	ND		0.0010	5	08/15/2019 21:20
Toxaphene	ND		0.025	5	08/15/2019 21:20

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
Decachlorobiphenyl	208	S	20-145	08/15/2019 21:20

Analyst(s): CN   Analytical Comments: a3,c1

(Cont.)

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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Received:	8/13/19 15:45	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	8/15/19	**Analytical Method:**	SW8081A
Project:	2019-017; 3823-29 MLK Jr. Way	**Unit:**	mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS13-0.5	**1908700-002A**	**Soil**	**08/09/2019 13:01**	**GC40 08151937.d**	**183630**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00050	5	08/15/2019 21:34
a-BHC	ND		0.00050	5	08/15/2019 21:34
b-BHC	ND		0.0015	5	08/15/2019 21:34
d-BHC	ND		0.0010	5	08/15/2019 21:34
g-BHC	**0.0014**		0.00050	5	08/15/2019 21:34
Chlordane (Technical)	ND		0.012	5	08/15/2019 21:34
a-Chlordane	**0.00069**		0.00050	5	08/15/2019 21:34
g-Chlordane	**0.00053**	P	0.00050	5	08/15/2019 21:34
p,p-DDD	**0.00057**	P	0.00050	5	08/15/2019 21:34
p,p-DDE	**0.0066**		0.00050	5	08/15/2019 21:34
p,p-DDT	**0.017**		0.00050	5	08/15/2019 21:34
Dieldrin	**0.0017**		0.00050	5	08/15/2019 21:34
Endosulfan I	ND		0.00050	5	08/15/2019 21:34
Endosulfan II	ND		0.00050	5	08/15/2019 21:34
Endosulfan sulfate	ND		0.00050	5	08/15/2019 21:34
Endrin	ND		0.00050	5	08/15/2019 21:34
Endrin aldehyde	ND		0.00050	5	08/15/2019 21:34
Endrin ketone	**0.0011**		0.00050	5	08/15/2019 21:34
Heptachlor	ND		0.00050	5	08/15/2019 21:34
Heptachlor epoxide	ND		0.00050	5	08/15/2019 21:34
Hexachlorobenzene	ND		0.0050	5	08/15/2019 21:34
Hexachlorocyclopentadiene	ND		0.010	5	08/15/2019 21:34
Methoxychlor	ND		0.0010	5	08/15/2019 21:34
Toxaphene	ND		0.025	5	08/15/2019 21:34

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
Decachlorobiphenyl	167	S	20-145	08/15/2019 21:34

Analyst(s): CN

Analytical Comments: a3,c1

(Cont.)

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Received:	8/13/19 15:45	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	8/15/19	**Analytical Method:**	SW8081A
Project:	2019-017; 3823-29 MLK Jr. Way	**Unit:**	mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS14-0.5	1908700-003A	Soil	08/09/2019 12:24	GC40 08151938.d	183630

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00050	5	08/15/2019 21:48
a-BHC	ND	0.00050	5	08/15/2019 21:48
b-BHC	ND	0.0015	5	08/15/2019 21:48
d-BHC	ND	0.0010	5	08/15/2019 21:48
g-BHC	ND	0.00050	5	08/15/2019 21:48
Chlordane (Technical)	ND	0.012	5	08/15/2019 21:48
a-Chlordane	**0.0016**	0.00050	5	08/15/2019 21:48
g-Chlordane	**0.0015**	0.00050	5	08/15/2019 21:48
p,p-DDD	**0.0019**	0.00050	5	08/15/2019 21:48
p,p-DDE	**0.015**	0.00050	5	08/15/2019 21:48
p,p-DDT	**0.020**	0.00050	5	08/15/2019 21:48
Dieldrin	**0.00088**	0.00050	5	08/15/2019 21:48
Endosulfan I	ND	0.00050	5	08/15/2019 21:48
Endosulfan II	ND	0.00050	5	08/15/2019 21:48
Endosulfan sulfate	ND	0.00050	5	08/15/2019 21:48
Endrin	ND	0.00050	5	08/15/2019 21:48
Endrin aldehyde	ND	0.00050	5	08/15/2019 21:48
Endrin ketone	ND	0.00050	5	08/15/2019 21:48
Heptachlor	ND	0.00050	5	08/15/2019 21:48
Heptachlor epoxide	ND	0.00050	5	08/15/2019 21:48
Hexachlorobenzene	ND	0.0050	5	08/15/2019 21:48
Hexachlorocyclopentadiene	ND	0.010	5	08/15/2019 21:48
Methoxychlor	ND	0.0010	5	08/15/2019 21:48
Toxaphene	ND	0.025	5	08/15/2019 21:48

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	145	20-145	08/15/2019 21:48

Analyst(s): CN   Analytical Comments: a3,c1

(Cont.)

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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Received:	8/13/19 15:45	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	8/15/19	**Analytical Method:**	SW8081A
Project:	2019-017; 3823-29 MLK Jr. Way	**Unit:**	mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS15-0.5	1908700-004A	Soil	08/09/2019 12:38	GC40 08151939.d	183630

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00050	5	08/15/2019 22:03
a-BHC	ND	0.00050	5	08/15/2019 22:03
b-BHC	ND	0.0015	5	08/15/2019 22:03
d-BHC	ND	0.0010	5	08/15/2019 22:03
g-BHC	ND	0.00050	5	08/15/2019 22:03
Chlordane (Technical)	ND	0.012	5	08/15/2019 22:03
a-Chlordane	**0.0033**	0.00050	5	08/15/2019 22:03
g-Chlordane	**0.0032**	0.00050	5	08/15/2019 22:03
p,p-DDD	**0.0052**	0.00050	5	08/15/2019 22:03
p,p-DDE	**0.048**	0.00050	5	08/15/2019 22:03
p,p-DDT	**0.065**	0.00050	5	08/15/2019 22:03
Dieldrin	**0.0011**	0.00050	5	08/15/2019 22:03
Endosulfan I	ND	0.00050	5	08/15/2019 22:03
Endosulfan II	ND	0.00050	5	08/15/2019 22:03
Endosulfan sulfate	ND	0.00050	5	08/15/2019 22:03
Endrin	ND	0.00050	5	08/15/2019 22:03
Endrin aldehyde	ND	0.00050	5	08/15/2019 22:03
Endrin ketone	ND	0.00050	5	08/15/2019 22:03
Heptachlor	ND	0.00050	5	08/15/2019 22:03
Heptachlor epoxide	ND	0.00050	5	08/15/2019 22:03
Hexachlorobenzene	ND	0.0050	5	08/15/2019 22:03
Hexachlorocyclopentadiene	ND	0.010	5	08/15/2019 22:03
Methoxychlor	ND	0.0010	5	08/15/2019 22:03
Toxaphene	ND	0.025	5	08/15/2019 22:03

Surrogates	REC (%)	Qualifiers	Limits	
Decachlorobiphenyl	252	S	20-145	08/15/2019 22:03

Analyst(s): CN

Analytical Comments: a3,c1

(Cont.)

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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Received:	8/13/19 15:45	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	8/15/19	**Analytical Method:**	SW8081A
Project:	2019-017; 3823-29 MLK Jr. Way	**Unit:**	mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS16-0.5	**1908700-005A**	**Soil**	**08/09/2019 13:17**	**GC40 08151948.d**	**183630**

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00020	2	08/16/2019 00:09
a-BHC	ND	0.00020	2	08/16/2019 00:09
b-BHC	ND	0.00060	2	08/16/2019 00:09
d-BHC	ND	0.00040	2	08/16/2019 00:09
g-BHC	ND	0.00020	2	08/16/2019 00:09
Chlordane (Technical)	**0.12**	0.0050	2	08/16/2019 00:09
a-Chlordane	**0.013**	0.00020	2	08/16/2019 00:09
g-Chlordane	**0.0090**	0.00020	2	08/16/2019 00:09
p,p-DDD	ND	0.00020	2	08/16/2019 00:09
p,p-DDE	**0.00068**	0.00020	2	08/16/2019 00:09
p,p-DDT	**0.0071**	0.00020	2	08/16/2019 00:09
Dieldrin	**0.00025**	0.00020	2	08/16/2019 00:09
Endosulfan I	ND	0.00020	2	08/16/2019 00:09
Endosulfan II	ND	0.00020	2	08/16/2019 00:09
Endosulfan sulfate	ND	0.00020	2	08/16/2019 00:09
Endrin	ND	0.00020	2	08/16/2019 00:09
Endrin aldehyde	ND	0.00020	2	08/16/2019 00:09
Endrin ketone	**0.00021**	0.00020	2	08/16/2019 00:09
Heptachlor	ND	0.00020	2	08/16/2019 00:09
Heptachlor epoxide	**0.00030**	0.00020	2	08/16/2019 00:09
Hexachlorobenzene	ND	0.0020	2	08/16/2019 00:09
Hexachlorocyclopentadiene	ND	0.0040	2	08/16/2019 00:09
Methoxychlor	ND	0.00040	2	08/16/2019 00:09
Toxaphene	ND	0.010	2	08/16/2019 00:09

Surrogates	REC (%)	Qualifiers	Limits	
Decachlorobiphenyl	184	S	20-145	08/16/2019 00:09

Analyst(s): CN   Analytical Comments: a3,c1

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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Received:	8/13/19 15:45	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	8/15/19	**Analytical Method:**	SW8081A
Project:	2019-017; 3823-29 MLK Jr. Way	**Unit:**	mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS17-0.5	1908700-006A	Soil	08/09/2019 13:24	GC40 08151949.d	183630

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00050	5	08/16/2019 00:23
a-BHC	ND		0.00050	5	08/16/2019 00:23
b-BHC	ND		0.0015	5	08/16/2019 00:23
d-BHC	ND		0.0010	5	08/16/2019 00:23
g-BHC	ND		0.00050	5	08/16/2019 00:23
Chlordane (Technical)	ND		0.012	5	08/16/2019 00:23
a-Chlordane	**0.0027**		0.00050	5	08/16/2019 00:23
g-Chlordane	**0.0022**		0.00050	5	08/16/2019 00:23
p,p-DDD	**0.00062**	P	0.00050	5	08/16/2019 00:23
p,p-DDE	**0.0016**		0.00050	5	08/16/2019 00:23
p,p-DDT	**0.0025**		0.00050	5	08/16/2019 00:23
Dieldrin	ND		0.00050	5	08/16/2019 00:23
Endosulfan I	ND		0.00050	5	08/16/2019 00:23
Endosulfan II	ND		0.00050	5	08/16/2019 00:23
Endosulfan sulfate	ND		0.00050	5	08/16/2019 00:23
Endrin	ND		0.00050	5	08/16/2019 00:23
Endrin aldehyde	ND		0.00050	5	08/16/2019 00:23
Endrin ketone	ND		0.00050	5	08/16/2019 00:23
Heptachlor	ND		0.00050	5	08/16/2019 00:23
Heptachlor epoxide	ND		0.00050	5	08/16/2019 00:23
Hexachlorobenzene	ND		0.0050	5	08/16/2019 00:23
Hexachlorocyclopentadiene	ND		0.010	5	08/16/2019 00:23
Methoxychlor	ND		0.0010	5	08/16/2019 00:23
Toxaphene	ND		0.025	5	08/16/2019 00:23

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	119	20-145	08/16/2019 00:23

Analyst(s): CN

Analytical Comments: a3

(Cont.)

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Received:	8/13/19 15:45	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	8/15/19	**Analytical Method:**	SW8081A
Project:	2019-017; 3823-29 MLK Jr. Way	**Unit:**	mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS18-0.5	1908700-007A	Soil	08/09/2019 13:33	GC40 08151950.d	183630

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00050	5	08/16/2019 00:37
a-BHC	ND		0.00050	5	08/16/2019 00:37
b-BHC	ND		0.0015	5	08/16/2019 00:37
d-BHC	ND		0.0010	5	08/16/2019 00:37
g-BHC	ND		0.00050	5	08/16/2019 00:37
Chlordane (Technical)	ND		0.012	5	08/16/2019 00:37
a-Chlordane	**0.0011**		0.00050	5	08/16/2019 00:37
g-Chlordane	**0.00099**		0.00050	5	08/16/2019 00:37
p,p-DDD	**0.00068**	P	0.00050	5	08/16/2019 00:37
p,p-DDE	**0.0015**		0.00050	5	08/16/2019 00:37
p,p-DDT	**0.011**		0.00050	5	08/16/2019 00:37
Dieldrin	ND		0.00050	5	08/16/2019 00:37
Endosulfan I	**0.00055**	P	0.00050	5	08/16/2019 00:37
Endosulfan II	ND		0.00050	5	08/16/2019 00:37
Endosulfan sulfate	ND		0.00050	5	08/16/2019 00:37
Endrin	ND		0.00050	5	08/16/2019 00:37
Endrin aldehyde	ND		0.00050	5	08/16/2019 00:37
Endrin ketone	ND		0.00050	5	08/16/2019 00:37
Heptachlor	ND		0.00050	5	08/16/2019 00:37
Heptachlor epoxide	ND		0.00050	5	08/16/2019 00:37
Hexachlorobenzene	ND		0.0050	5	08/16/2019 00:37
Hexachlorocyclopentadiene	ND		0.010	5	08/16/2019 00:37
Methoxychlor	ND		0.0010	5	08/16/2019 00:37
Toxaphene	ND		0.025	5	08/16/2019 00:37

Surrogates	REC (%)	Qualifiers	Limits		
Decachlorobiphenyl	242	S	20-145		08/16/2019 00:37

Analyst(s): CN — Analytical Comments: a3,c1

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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Received:	8/13/19 15:45	**Extraction Method:**	SW3550B/3640Am/3630Cm
Date Prepared:	8/15/19	**Analytical Method:**	SW8081A
Project:	2019-017; 3823-29 MLK Jr. Way	**Unit:**	mg/kg

Organochlorine Pesticides

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS19-0.5	**1908700-008A**	**Soil**	**08/09/2019 12:47**	**GC40 08151951.d**	**183630**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	ND		0.00050	5	08/16/2019 00:51
a-BHC	ND		0.00050	5	08/16/2019 00:51
b-BHC	ND		0.0015	5	08/16/2019 00:51
d-BHC	ND		0.0010	5	08/16/2019 00:51
g-BHC	ND		0.00050	5	08/16/2019 00:51
Chlordane (Technical)	ND		0.012	5	08/16/2019 00:51
a-Chlordane	**0.0069**		0.00050	5	08/16/2019 00:51
g-Chlordane	**0.0051**		0.00050	5	08/16/2019 00:51
p,p-DDD	**0.0019**	P	0.00050	5	08/16/2019 00:51
p,p-DDE	**0.033**		0.00050	5	08/16/2019 00:51
p,p-DDT	**0.051**		0.00050	5	08/16/2019 00:51
Dieldrin	**0.0010**		0.00050	5	08/16/2019 00:51
Endosulfan I	ND		0.00050	5	08/16/2019 00:51
Endosulfan II	ND		0.00050	5	08/16/2019 00:51
Endosulfan sulfate	ND		0.00050	5	08/16/2019 00:51
Endrin	ND		0.00050	5	08/16/2019 00:51
Endrin aldehyde	ND		0.00050	5	08/16/2019 00:51
Endrin ketone	**0.0011**	P	0.00050	5	08/16/2019 00:51
Heptachlor	ND		0.00050	5	08/16/2019 00:51
Heptachlor epoxide	ND		0.00050	5	08/16/2019 00:51
Hexachlorobenzene	ND		0.0050	5	08/16/2019 00:51
Hexachlorocyclopentadiene	ND		0.010	5	08/16/2019 00:51
Methoxychlor	ND		0.0010	5	08/16/2019 00:51
Toxaphene	ND		0.025	5	08/16/2019 00:51

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
Decachlorobiphenyl	191	S	20-145	08/16/2019 00:51

Analyst(s): CN   Analytical Comments: a3,c1

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Received:	8/13/19 15:45	**Extraction Method:**	SW3050B
Date Prepared:	8/13/19	**Analytical Method:**	SW6020
Project:	2019-017; 3823-29 MLK Jr. Way	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS12-0.5	1908700-001A	Soil	08/09/2019 13:09	ICP-MS1 030SMPL.D	183440

Analytes	Result	RL	DF	Date Analyzed
Lead	**810**	2.5	5	08/15/2019 13:33

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	97	70-130	08/15/2019 13:33

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS13-0.5	1908700-002A	Soil	08/09/2019 13:01	ICP-MS2 092SMPL.D	183440

Analytes	Result	RL	DF	Date Analyzed
Lead	**140**	0.50	1	08/14/2019 18:22

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	86	70-130	08/14/2019 18:22

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS14-0.5	1908700-003A	Soil	08/09/2019 12:24	ICP-MS1 031SMPL.D	183485

Analytes	Result	RL	DF	Date Analyzed
Lead	**620**	2.5	5	08/15/2019 13:39

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	94	70-130	08/15/2019 13:39

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS15-0.5	1908700-004A	Soil	08/09/2019 12:38	ICP-MS2 149SMPL.D	183485

Analytes	Result	RL	DF	Date Analyzed
Lead	**490**	2.5	5	08/15/2019 00:11

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	107	70-130	08/15/2019 00:11

Analyst(s): JC

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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Received:	8/13/19 15:45	**Extraction Method:**	SW3050B
Date Prepared:	8/13/19	**Analytical Method:**	SW6020
Project:	2019-017; 3823-29 MLK Jr. Way	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS16-0.5	**1908700-005A**	**Soil**	**08/09/2019 13:17**	**ICP-MS2 102SMPL.D**	**183485**

Analytes	Result	RL	DF	Date Analyzed
Lead	**450**	0.50	1	08/14/2019 19:23

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	100	70-130	08/14/2019 19:23

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS17-0.5	**1908700-006A**	**Soil**	**08/09/2019 13:24**	**ICP-MS2 150SMPL.D**	**183485**

Analytes	Result	RL	DF	Date Analyzed
Lead	**540**	2.5	5	08/15/2019 00:17

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	88	70-130	08/15/2019 00:17

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS18-0.5	**1908700-007A**	**Soil**	**08/09/2019 13:33**	**ICP-MS1 032SMPL.D**	**183485**

Analytes	Result	RL	DF	Date Analyzed
Lead	**860**	2.5	5	08/15/2019 13:45

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	95	70-130	08/15/2019 13:45

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS19-0.5	**1908700-008A**	**Soil**	**08/09/2019 12:47**	**ICP-MS1 036SMPL.D**	**183485**

Analytes	Result	RL	DF	Date Analyzed
Lead	**880**	2.5	5	08/15/2019 14:09

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	92	70-130	08/15/2019 14:09

Analyst(s): JC

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Prepared:	8/15/19	**BatchID:**	183630
Date Analyzed:	8/15/19	**Extraction Method:**	SW3550B/3640Am/3630Cm
Instrument:	GC40	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	2019-017; 3823-29 MLK Jr. Way	**Sample ID:**	MB/LCS/LCSD-183630

QC Summary Report for SW8081A/8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.000036	0.00010	-	-	-
a-BHC	ND	0.000025	0.00010	-	-	-
b-BHC	ND	0.00025	0.00030	-	-	-
d-BHC	ND	0.00013	0.00020	-	-	-
g-BHC	ND	0.000066	0.00010	-	-	-
Chlordane (Technical)	ND	0.00043	0.0025	-	-	-
a-Chlordane	ND	0.000095	0.00010	-	-	-
g-Chlordane	ND	0.000047	0.00010	-	-	-
p,p-DDD	ND	0.000043	0.00010	-	-	-
p,p-DDE	ND	0.000094	0.00010	-	-	-
p,p-DDT	ND	0.000092	0.00010	-	-	-
Dieldrin	ND	0.000061	0.00010	-	-	-
Endosulfan I	ND	0.000048	0.00010	-	-	-
Endosulfan II	ND	0.000076	0.00010	-	-	-
Endosulfan sulfate	ND	0.000078	0.00010	-	-	-
Endrin	ND	0.000035	0.00010	-	-	-
Endrin aldehyde	ND	0.000067	0.00010	-	-	-
Endrin ketone	ND	0.000084	0.00010	-	-	-
Heptachlor	ND	0.000040	0.00010	-	-	-
Heptachlor epoxide	ND	0.000054	0.00010	-	-	-
Hexachlorobenzene	ND	0.00011	0.0010	-	-	-
Hexachlorocyclopentadiene	ND	0.00034	0.0020	-	-	-
Methoxychlor	ND	0.00013	0.00020	-	-	-
Toxaphene	ND	0.0034	0.0050	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.0048			0.005	96	28-170

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Prepared:	8/15/19	**BatchID:**	183630
Date Analyzed:	8/15/19	**Extraction Method:**	SW3550B/3640Am/3630Cm
Instrument:	GC40	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	2019-017; 3823-29 MLK Jr. Way	**Sample ID:**	MB/LCS/LCSD-183630

QC Summary Report for SW8081A/8082

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.0037	0.0040	0.0050	74	80	31-155	8.57	20
a-BHC	0.0033	0.0036	0.0050	67	72	32-160	8.12	20
b-BHC	0.0036	0.0040	0.0050	73	79	44-149	8.63	20
d-BHC	0.0044	0.0049	0.0050	88	98	37-157	10.4	20
g-BHC	0.0037	0.0040	0.0050	74	80	43-154	8.81	20
a-Chlordane	0.0039	0.0043	0.0050	79	87	39-150	9.83	20
g-Chlordane	0.0040	0.0044	0.0050	79	87	39-151	9.82	20
p,p-DDD	0.0033	0.0038	0.0050	66	75	30-158	12.4	20
p,p-DDE	0.0041	0.0046	0.0050	82	92	47-149	10.7	20
p,p-DDT	0.0047	0.0053	0.0050	94	106	56-166	12.6	20
Dieldrin	0.0044	0.0048	0.0050	87	96	50-163	9.98	20
Endosulfan I	0.0040	0.0044	0.0050	80	89	45-159	10.3	20
Endosulfan II	0.0040	0.0045	0.0050	81	91	41-155	11.5	20
Endosulfan sulfate	0.0043	0.0048	0.0050	86	97	45-156	12.0	20
Endrin	0.0039	0.0044	0.0050	78	89	54-154	12.6	20
Endrin aldehyde	0.0042	0.0046	0.0050	83	93	27-159	11.1	20
Endrin ketone	0.0045	0.0050	0.0050	89	101	40-147	12.1	20
Heptachlor	0.0037	0.0041	0.0050	75	82	52-165	9.87	20
Heptachlor epoxide	0.0037	0.0041	0.0050	74	82	46-145	10.0	20
Hexachlorobenzene	0.0030	0.0033	0.0050	61	66	22-156	8.24	20
Hexachlorocyclopentadiene	0.0040	0.0042	0.0050	79	85	43-173	6.64	20
Methoxychlor	0.0042	0.0048	0.0050	83	96	49-150	13.7	20
Surrogate Recovery								
Decachlorobiphenyl	0.0051	0.0055	0.0050	101	110	28-170	7.68	20

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Prepared:	8/13/19	**BatchID:**	183440
Date Analyzed:	8/13/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	2019-017; 3823-29 MLK Jr. Way	**Sample ID:**	MB/LCS/LCSD-183440

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Lead	ND	0.094	0.50	-	-	-
Surrogate Recovery						
Terbium	510			500	103	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	51	52	50	103	104	75-125	1.22	20
Surrogate Recovery								
Terbium	520	530	500	104	106	70-130	2.23	20

(Cont.)

Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1908700
Date Prepared:	8/13/19	**BatchID:**	183485
Date Analyzed:	8/14/19	**Extraction Method:**	SW3050B
Instrument:	ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	2019-017; 3823-29 MLK Jr. Way	**Sample ID:**	MB/LCS/LCSD-183485

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Lead	ND	0.094	0.50	-	-	-
Surrogate Recovery						
Terbium	500			500	100	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Lead	52	57	50	105	114	75-125	8.22	20
Surrogate Recovery								
Terbium	530	580	500	106	117	70-130	9.41	20

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1908700 **ClientCode: ENVC**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:
Marc Papineau
Environmental Service
5789 Gold Creek Drive
Castro Valley, CA 94552
510-881-8574 FAX: 510-581-7204

Email: marc_p@sbcglobal.net
cc/3rd Party:
PO:
Project: 2019-017; 3823-29 MLK Jr. Way

Bill to:
Accounts Payable
Resources for Community Development
2220 Oxford Street
Berkeley, CA 94704

Requested TAT: **5 days;**

Date Received: **08/13/2019**
Date Logged: **08/13/2019**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1908700-001	SS12-0.5	Soil	8/9/2019 13:09	☐	A	A										
1908700-002	SS13-0.5	Soil	8/9/2019 13:01	☐	A	A										
1908700-003	SS14-0.5	Soil	8/9/2019 12:24	☐	A	A										
1908700-004	SS15-0.5	Soil	8/9/2019 12:38	☐	A	A										
1908700-005	SS16-0.5	Soil	8/9/2019 13:17	☐	A	A										
1908700-006	SS17-0.5	Soil	8/9/2019 13:24	☐	A	A										
1908700-007	SS18-0.5	Soil	8/9/2019 13:33	☐	A	A										
1908700-008	SS19-0.5	Soil	8/9/2019 12:47	☐	A	A										

Test Legend:

1	**8081_ESL_LL_S**	**2**	**PBMS_TTLC_S**	**3**		**4**	
5		**6**		**7**		**8**	
9		**10**		**11**		**12**	

Project Manager: Angela Rydelius **Prepared by: Agustina Venegas**

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: ENVIRONMENTAL SERVICE **Project:** 2019-017; 3823-29 MLK Jr. Way **Work Order:** 1908700
Client Contact: Marc Papineau **QC Level:**
Contact's Email: marc_p@sbcglobal.net **Comments:** **Date Logged:** 8/13/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1908700-001A	SS12-0.5	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	8/9/2019 13:09	5 days		☐	
			SW8081A (OC Pesticides) ESLs			☐		5 days		☐	
1908700-002A	SS13-0.5	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	8/9/2019 13:01	5 days		☐	
			SW8081A (OC Pesticides) ESLs			☐		5 days		☐	
1908700-003A	SS14-0.5	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	8/9/2019 12:24	5 days		☐	
			SW8081A (OC Pesticides) ESLs			☐		5 days		☐	
1908700-004A	SS15-0.5	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	8/9/2019 12:38	5 days		☐	
			SW8081A (OC Pesticides) ESLs			☐		5 days		☐	
1908700-005A	SS16-0.5	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	8/9/2019 13:17	5 days		☐	
			SW8081A (OC Pesticides) ESLs			☐		5 days		☐	
1908700-006A	SS17-0.5	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	8/9/2019 13:24	5 days		☐	
			SW8081A (OC Pesticides) ESLs			☐		5 days		☐	
1908700-007A	SS18-0.5	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	8/9/2019 13:33	5 days		☐	
			SW8081A (OC Pesticides) ESLs			☐		5 days		☐	
1908700-008A	SS19-0.5	Soil	SW6020 (Lead)	1	8OZ GJ, Unpres	☐	8/9/2019 12:47	5 days		☐	
			SW8081A (OC Pesticides) ESLs			☐		5 days		☐	

NOTES: **- STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).**

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1908700

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☑ 5 DAY

☐ GeoTracker EDF ☑ PDF ☐ Excel ☐ Write On (DW)

QUOTE ID 192940

Report To: M. Papineau	Bill To: Resources for Community Dev.
Company: Environmental Service	2220 Oxford Street
5789 Gold Creek Drive	Berkeley, CA 94704
Castro Valley, CA	e-mail: marc_p@sbcglobal.net
Tele: (510) 881-8574	Fax: (510) 581-7204
Project #: 2019-017 QUOTE ID#: 192940	Project Name: 3823-29 MLK Jr. Way

Location: 3823-29 Martin Luther King Jr. Way at W. MacArthur Blvd. in Oakland, CA

Sampler Signature: M. PAPINEAU *mP*

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other
SS12-0.5	SS12	8/9/2019	1309	1	J8		X				X			
SS13-0.5	SS13	8/9/2019	1301	1	J8		X				X			
SS14-0.5	SS14	8/9/2019	1224	1	J8		X				X			
SS15-0.5	SS15	8/9/2019	1238	1	J8		X				X			
SS16-0.5	SS16	8/9/2019	1317	1	J8		X				X			
SS17-0.5	SS17	8/9/2019	1324	1	J8		X				X			
SS18-0.5	SS18	8/9/2019	1333	1	J8		X				X			
SS19-0.5	SS19	8/9/2019	1247	1	J8		X				X			

Analysis Request

SAMPLE ID	MTBE / BTEX & TPH as Gas (602 / 8021 + 8015)	MTBE / BTEX ONLY (EPA 602 / 8021)	TPH as Diesel / Motor Oil (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	Other: Composite	Other	Other: HOLD sample	Comments: ESLs
SS12-0.5							X									X				
SS13-0.5							X									X				
SS14-0.5							X									X				
SS15-0.5							X									X				
SS16-0.5							X									X				
SS17-0.5							X									X				
SS18-0.5							X									X				
SS19-0.5							X									X				

Relinquished By:	Date:	Time:	Received By:
Marc Papineau	8/13/2019	1430	Bmy
Bmy	8/13/19	1545	[illegible signature]

ICE/t° 3.20 WET

GOOD CONDITION____

HEAD SPACE ABSENT____

DECHLORINATED IN LAB____

APPROPRIATE CONTAINERS____

PRESERVED IN LAB____

VOAS O&G METALS OTHER

PRESERVATION____ pH<2____

COMMENTS: J8 8-ounce wide-mouth glass jar

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name:	**Environmental Service**	Date and Time Received	**8/13/2019 15:45**
Project:	**2019-017; 3823-29 MLK Jr. Way**	Date Logged:	**8/13/2019**
		Received by:	Agustina Venegas
WorkOrder №:	**1908700** Matrix: Soil	Logged by:	Agustina Venegas
Carrier:	Benjamin Yslas (MAI Courier)		

Chain of Custody (COC) Information

	Yes	No	NA
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Sample IDs noted by Client on COC?	☑	☐	
Date and Time of collection noted by Client on COC?	☑	☐	
Sampler's name noted on COC?	☑	☐	
COC agrees with Quote?	☐	☐	☑

Sample Receipt Information

	Yes	No	NA
Custody seals intact on shipping container/cooler?	☐	☐	☑
Shipping container/cooler in good condition?	☑	☐	
Samples in proper containers/bottles?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	

Sample Preservation and Hold Time (HT) Information

	Yes	No	NA
All samples received within holding time?	☑	☐	☐
Samples Received on Ice?	☑	☐	
(Ice Type: WET ICE)			
Sample/Temp Blank temperature	Temp: 3.2°C		☐
Water - VOA vials have zero headspace / no bubbles?	☐	☐	☑
Sample labels checked for correct preservation?	☑	☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	☐	☐	☑
UCMR Samples:			
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	☐	☐	☑
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	☐	☐	☑

Comments:

APPENDIX H
QUALIFICATIONS OF ASSESSOR

MARC PAPINEAU

B.S., Mathematics and Physics, Haverford College, 1976
M.B.A., Finance, UC Berkeley, 1981

1995-2019 Environmental Service (Castro Valley, CA)
Founded Environmental Service in October 1995. Mr. Papineau offers specialized services in Phase I Environmental Site Assessment, community noise assessment, and air pollution impact assessment. His services have supported the land development projects of not-for-profit affordable housing developers and market-rate housing developers. Mr. Papineau has managed multidisciplinary teams preparing Environmental Impact Reports (EIRs) including a Redevelopment Plan Amendment EIR for the Turlock Redevelopment Agency, the Arbor Avenue Hotel and Alternatives EIR for Alameda County, and the Sky Ranch II 415-Unit Residential Subdivision and Alternatives for the City of Pittsburg.

1992-1995 Levine Fricke Recon (LFR), formerly Certified Engineering & Testing Co.
Mr. Papineau managed the Physical Sciences Department whose emphasis was Phase I environmental site assessments for developers and lenders.

1982-1991 Earth Metrics Incorporated (Burlingame, CA)
Managed the Physical Sciences Department that performed Phase I environmental site assessments, acoustical assessments, air pollution and odor assessments, and indoor air quality assessments, and also managed project teams preparing Environmental Impact Reports. Managed a smog trend study of the Livermore-Amador Valley and carbon monoxide monitoring, both conducted for the Hacienda Business Park, Pleasanton, CA. Services of the Physical Sciences Department supported the programs of cities, school districts and utility districts and also assisted private-sector developers.

1981-1982 Earth Metrics Incorporated (Houston, TX)
Mr. Papineau managed and implemented a community scale carbon monoxide monitoring study in Houston, TX, for a joint venture enterprise providing consulting services to the City of Houston and Urban Mass Transit Administration (UMTA) in regard to the “Spine Corridor,” a commuter rail concept. He applied results of the monitoring to validate a microscale carbon monoxide model, which then was applied to predict future CO levels in transit station locations and feeder roads thereto.

1979-1981 Graduate Studies (Berkeley, CA)
During a leave of absence for one quarter, Mr. Papineau participated in environmental assessments for the Multnomah and Sunset light rail corridor alternatives in Portland, OR, including air quality and transportation noise measurements and analysis for METRO.

1978-1979 Earth Metrics Incorporated (Palo Alto, CA)
Mr. Papineau was an environmental scientist and technical writer for environmental impact statement (EIS) and report (EIR) documentation pursuant to the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). He performed air quality and transportation noise modeling using proprietary and Federal Highway Administration (FHWA) models. Conducted a statistical analysis ozone transport for the Butte County Air Pollution Control District. The study showed patterns consistent with ozone transport from outside Butte County.

1977-1978 Environmental Research & Technology (Westlake Village, CA)
Mr. Papineau performed statistical evaluations of basin-wide “CHAMPS” air pollution monitoring data for Dr. George Hidy, whose Los Angeles basin smog research was funded by the American Petroleum Institute.

MARC PAPINEAU

CLIENTS

Allied Housing
Eden Housing
EPA Can Do
Ford Street Project
JSM Enterprises, Inc.
Resources for Community Development
Rubicon Programs
Rural Communities Housing Development Corporation
Satellite Affordable Housing Associates
Transitional Living and Community Support
Tri-Cities Homeless Coalition

Blacksmith Homes, LLC
Claremont Homes, Inc.
D.R. Horton
Granite Construction
Pinn Brothers Construction, Inc.
Ponderosa Homes II, Inc.
Swinerton Builders
W.L. Butler, Inc.

County of Alameda, Housing Authority
County of Alameda, Planning Department
City of Novato, Engineering Department
City of Pittsburg, Planning Department
City of San Jose, Housing Department
City of Turlock, Planning Department

AutoZone, Inc.
CW Capital
Davis Realty, Inc.
Eastmont Town Center, LLC
Kenel, Inc.
Korman & Ng
Liqua-Tech Corporation
Paramount
Prana Investments
St. Vincent Properties
World Pac

Borel Bank & Trust
Cupertino National Bank
Great Bay Bank
Mid-Peninsula Bank
The Summit National Bank (formerly, California Security Bank)
Washington Mutual Bank

PROFESSIONAL REGISTRATION

Mr. Papineau was a registered with Cal/EPA as a Registered Environmental Assessor from program inception in 1987 through program cessation in 2012.

PHASE I
ENVIRONMENTAL SITE ASSESSMENT
OF
3801-07 MARTIN LUTHER KING JR. WAY
ASSESSOR PARCEL NUMBERS
APN 012-0964-006
AND
APN 012-0964-007
IN
OAKLAND, CALIFORNIA

August 2, 2017

Prepared for:

Resources for Community Development
2220 Oxford Street
Berkeley, CA 94704

Prepared by:

20 Years 1995-2015

environmental service

by Papineau

TABLE OF CONTENTS

TABLE OF CONTENTS
(CONTINUED)

1.0 EXECUTIVE SUMMARY

This report presents the results of a Phase I Environmental Site Assessment for improved and undeveloped lots (3801-07 Martin Luther King Jr. Way), in Oakland, California, the "Property" (Figure 1). The Phase I Environmental Site Assessment was conducted by Environmental Service, during June 2017. The work was conducted under the authorization of Mr. Dan Hardy, in general accordance with Proposal Number 2017-028 dated June 8, 2017.

Property Description The Property is located in the City of Oakland, north of I-580 and west of State Highway 24, along the west side of M.L.K. Jr. Way (formerly, Grove Street) and north side MacArthur Boulevard (formerly, 38th Street). By compass direction and convention in this report, the orientation of M.L.K. Jr. Way is north-south, and the orientation of MacArthur Boulevard is east-west.

The two parcels comprising the Property, APN 012-0964-006 and APN 012-0964-007, combined contain approximately 0.28 acre of land (see Figure 2). The overall lot dimension along M.L.K. Jr. Way is approximately 95 feet and the MacArthur Boulevard frontage, or lot depth from M.L.K. Jr. Way, is approximately 125 feet. The existing buildings include a former store, house, and garage, all of wood-framed construction. The buildings currently are vacant.

The City of Oakland's General Plan designates the Property for Neighborhood Center Mixed Use, and the Property is zoned Neighborhood Center (CN-3) with a 45-foot building height limit. The current buildings on the Property are over 100 years old, except for the small garage which is newer.

Neighborhood At the time of the reconnaissance on June 14, 2017, the Property was observed to be located in a mixed residential and commercial area with houses west and north of the Property, and some commercial uses to the east and south. Automotive repair was apparent on the adjoining parcel to the east. Dry cleaning was not apparent in any adjoining or nearby neighborhood shops.

Historical Uses Based upon review of historical Oakland City Directories (Appendix C) and Sanborn Fire Insurance Rate Maps (Appendix D), the first developed use of the Property was for a single house in 1902 and likely the years before. The current buildings since 1911 have been used for a drug store, Pacific Telephone and Telegraph, barber shop, hair salon, stereo store, hat store, and residences.

The Property has had many uses which can be classified generally as office, retail, and residential. The Property has no history of use for automotive repair, auto fuel service, dry cleaning, electronics manufacturing, metal plating, row crops or orchards, waste disposal or other uses recognized as being associated with potential uses of hazardous substances including petroleum products.

Property Reconnaissance The assessor looked for visible signs of potential environmental impairment such as oil staining or machinery leaks, staining or etching of the concrete floor by chemicals, bulk storage of hazardous materials or waste, past or current underground or above-ground storage tanks, and stressed or dead landscape. These conditions were looked for but were not observed.

No quantity of hazardous material was observed on June 14, 2017. Soil stockpiles were not observed. Solid waste is disposed by the municipal collection and landfill service. Drinking water is provided through the municipal water delivery system by East Bay Municipal Utility District (EBMUD). EBMUD's water currently meets federal Safe Drinking Water Standards (EBMUD, 2016).

Sites Adjoining the Property The Property is adjoined on the south by former gas stations. However, these sites are no longer used as gas stations. One has been completely rebuilt with a church. See Figures 2 and 3 for locations. In view of the location and direction of groundwater movement generally toward the west, west-southwest, or southwest, these adjoining sites do not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

National Priority List (NPL) and Other Selected Federal Databases U.S. Brownfields and Comprehensive Environmental Response and Compensation Liability Act (CERCLA) sites were identified within the ASTM search distances from the Property. The nature and locations of the identified sites is such that they pose neither an obvious likelihood nor an apparent risk of environmental impairment for the owner of the Property. No federal Superfund site, proposed or de-listed Superfund site, Resource Conservation and Recovery Act (RCRA) Corrective Actions (CORRACTS) or Treatment-Storage-Disposal (TSD) site was reported within the ASTM standard distance from the Property. The above list is incomplete, and search results for additional federal databases are presented in Section 5.2 and Appendix B.

Selected State of California Databases According to ERS's search of the public agency databases, the following leaking underground storage tank sites are located close to the Property:

- J&H Auto Repair (3701 M.L.K. Jr. Way), 0.0.7 mile south of the Property;
- Grove Street Wash Rack (3884 M.L.K. Jr. Way), 0.11 mile northeast of the Property; and,
- ARCO/Westco Gas Food (731 W. MacArthur Boulevard), 0.12 mile west).

In view of their distance or location west or south of the Property, none poses an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Toxic Pit sites and solid waste landfill (WMUD/SWAT, SWF/LF) sites were not identified by ERS as being located within the ASTM standard distances from the Property. The above list is incomplete, and search results for additional State of California databases are presented in Section 5.2 and Appendix B.

Conclusions and Recommendations This assessment has made the following conclusions and recommendations:

- This assessment confirms presence of lead residues in near-surface soil on the Property which likely will necessitate remedial action.

- This assessment has not revealed evidence of any obvious Recognized Environmental Condition (REC), historic REC, or controlled REC in connection with the Property.

- The adjoining auto repair use and former gas station uses do not pose any obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Business Environmental Risk The contemplated use of the Property for a residential CN-3 use will entail demolition of the existing improvements. Demolition sometimes requires removal of regulated asbestos-containing materials (RACMs). Costs for removal would depend on additional information such as, for example, the locations and quantities of confirmed ACMs. Estimates could be prepared by local qualified contractors based on results of an asbestos survey. However, in view of the expected small areas of vinyl asbestos floor tile (VAT) or sheet linoleum, the cost for removal of ACM is expected to be low.

Subsequent Phase II Investigation Preliminary Phase II screening identified near-surface lead residues which substantially exceed the local applicable ESL and SL. Additional Phase II delineation is recommended to assess the areal extent and depth of lead-affected soil. Pre-demolition asbestos survey and removal of regulated ACMs (RACMs) is recommended to comply with local BAAQMD regulation.

Costs for Corrective Action Corrective action tentatively is recommended to remove lead-affected soil for off-site disposal in appropriate landfills. A cost at this time is based on assumption about the volume of soil to be disposed and waste soil classification. For 6,500 square feet of surface area and 1-foot excavation depth,—all classified as California, non-RCRA hazardous waste,—the cost for transport and disposal of 320 cubic yards of stockpiled soil at Class I Kettleman Hills Landfill is approximately $60,000 (complete with transport, fees, local and State BOE taxes). Additional costs would accrue for sampling, testing, excavating, waste profiling, and loading.

Certification This Phase I Environmental Site Assessment was performed by an environmental assessor, Marc Papineau, in general conformance with the scope and limitations of ASTM Practice E 1527-13, for the property located at 3801-07 Martin Luther King Jr. Way, 3813-3819 Martin Luther King Jr. Way, and 652-656 MacArthur Boulevard in Oakland, California. Any exceptions to, or deletions from, this practice are described in Section 2.2 of this report. Resources for Community Development, its affiliates and lender, their successors or assigns, can rely upon the information presented herein as factual, true and accurate, and in general accordance with the ASTM E 1527-13 Standard for Practice.

2.0 INTRODUCTION

This report presents the results of Phase I Environmental Site Assessment for the Property located at 3801-07 Martin Luther King Jr. Way[1] in Oakland, the Property (Figure 1). The Phase I environmental site assessment was conducted by the environmental assessor during June and July 2017 in connection with purchase and redevelopment of the Property with an affordable housing use. Environmental Service was retained by Mr. Dan Hardy to conduct the Phase I Environmental Site Assessment in general accordance with the agreement and Proposal Number 2017-028 dated June 8, 2017.

2.1 Purpose

The purpose of this Phase I Environmental Site Assessment is to provide an environmental assessment that meets ASTM Standards and which:

- Evaluates and describes the presence of any RECs in connection with the Property.
- Where RECs are assessed present, if reasonably possible, presents estimates for the cost of remedial actions to a prudent owner of the Property.
- If necessary, recommends the scope of any subsequent study to assess the existence of an actual release of any hazardous substance or petroleum product, or to estimate the cost of any needed remedial actions.

2.2 Definitions of Terms and Limitations

Definitions of Terms

Controlled REC—A Controlled REC (CREC) is an REC resulting from "*a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a NFA letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls).*" *CRECs are listed in the Findings Section of the Phase I ESA report, and as RECs in the Conclusions Section of the report.*

Data gap—A "data gap" means missing or unattainable information. See also "significant data gap."

***De minimis* conditions—**Hazardous substances or petroleum products may be present on a property without being an REC. If 1) the condition does not represent a threat to human health or the environment and if 2) the condition would not be subject to an enforcement action if brought to the attention of a regulatory agency, the condition is termed "de minimis" and is not an REC. For a condition to be

---

[1] Martin Luther King Jr. Way was previously known as Grove Street, and 38th Street also was renamed to MacArthiur Boulevard.

classified as “de minimis” or “less-than-significant,” the condition cannot represent a threat to either human health or the environment AND the condition would not be subject to an enforcement action if brought to the attention of a regulatory agency.

Environment—The environment can be viewed as the ground, groundwater, surface water, or soil vapor of a property. Under CERCLA, the term “environment” includes precisely (A) navigable waters, the waters of the contiguous zone, and the ocean waters…and (B) any other surface water, groundwater, drinking water supply, land surface or subsurface strata…”

Impairment—The words "impair" and "impairment" are used to mean the result of a release of a hazardous substance or petroleum product assessed to be a REC.

Hazardous Substance—The term "hazardous substance" is used here in general accordance with its usage as defined in the following documents:

- Comprehensive Environmental Responsibility, Compensation, and Liability Act (CERCLA) of 1980, as amended; and
- Resource Conservation and Recovery Act (RCRA) of 1976, as amended.

The terms “hazardous substance,” “hazardous material,” and “hazardous waste” are used interchangeably in this report, and no legal distinction is implied among the terms as used herein.

Historical REC—An HREC is an REC resulting from “*a past release of any hazardous substances or petroleum products that has occurred in connection with a property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls).*” *Before calling a past release an HREC, the environmental assessor must determine whether the past release is an REC at the time the Phase I ESA is conducted (e.g., if there has been a change in the regulatory criteria). If the environmental assessor considers this past release to be an REC at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as an REC.*

Limiting condition—a constraint imposed by obstruction or barrier, ground cover, weather or access. Examples: Intervening buildings or walls might block the view of an adjoining auto repair shop. Pavement precludes viewing of surface soil. A box sump cover may preclude viewing of the inside of the box.

Migration—Migration, movement, or chemical trespass refers to the “*movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface*.”

Recognized Environmental Condition (REC)—The term Recognized Environmental Condition (REC) is used to describe an environmental condition or impairment assessed to warrant further inquiry. This includes the interpreted “presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment."

Release—A "release" means "*any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discharging of barrels, containers, and other closed receptacles containing any hazardous substances or pollutant or contaminant*." Presence of hazardous substances at a property "due to any release to the environment" encompasses the potential scenario in which an on-site or off-site release occurs and, if the release occurs off site, migration results in "chemical trespass" on the property.

Significant data gap—A significant data gap, as defined in §312.10 of the AAI final rule and §12.7 of ASTM E1527-13, is one which actually has the effect of limiting the assessor's ability to identify or evaluate RECs. A data gap is significant only if it may preclude identification of conditions indicative of a past release, a present release or imminent threatened release of hazardous substances, hazardous waste or petroleum products, or reduce the ability of the assessor to interpret the degree of risk. A Phase I environmental site assessment must identify and comment on significant data gaps.

Non-Scope Items and Limitations
Known or suspected RECs, CRECs, and HRECs are listed in Section 6.0, the findings of RECs. However, in Section 7.0, "Conclusions," known or suspected RECs and CRECs are the focus. HRECs are not a focus of Section 7.0 because HRECs warrant awareness by the Report User but normally would not warrant further investigation or a corrective action.

Certain information contained in this report may have been rightfully provided to the environmental assessor by third parties or other outside sources. The environmental assessor does not make any warranties or representations, whether expressed or implied, regarding the accuracy of such information, and shall not be held accountable or responsible in the event that any such inaccuracies are present.

Sampling and testing assessments of naturally-occurring radon; polychlorinated biphenyls (*e.g.*, in transformers, other electrical equipment, joint compound); asbestos and lead in building materials, and lead-based paint are not within the scope of ASTM E 1527-13 unless made so by agreement with the client for whom the Phase I report is prepared. Only one such agreement was made for supplemental screening of near-surface soil for lead and organo-chlorine pesticide residues (see Tables 1 and 2 and Figure 4).

Local and/or federal regulations and laws require pre-demolition surveys of structures by a qualified California Asbestos Consultant and certified Lead-Based Paint Inspector. This or any Phase I Environmental Site Assessment does not constitute an asbestos or lead-based paint survey and is insufficient for compliance with federal, state, or local regulations governing asbestos and lead during construction, demolition or removal operations. Radon survey; asbestos or lead inspection are non-scope items which were not specifically requested by the client.

Deletions and deviations from the ASTM Standard E 1527-13 standard practice: none.

2.3 Methods and Limiting Conditions

The following readily available information resources were utilized during the course of this assessment.

- Interviews of knowledgeable parties. The individuals interviewed, and the dates and kinds of communications are as follows:
  - Mr. Dan Hardy, RCD project manager, June 8, 2017, telephone communication.
- Reconnaissance to observe Property and neighborhood, and to look for evidence of current operations that use or have used hazardous materials or petroleum products. Reconnaissance of the Property was conducted by Marc Papineau on June 14, 2017.
- Review of historical records:
  - Alameda County Local Oversight Program for information regarding historical geological/hydrogeological conditions and hazardous/toxic waste investigations or remedial actions
  - Federal/State/County/City information regarding hazardous waste compliance/violations
  - Aerial photographs at U.S.G.S. in Menlo Park
  - City of Oakland Planning Department records
  - Review of City of Oakland Building Department records
  - Haines and Polk's Reverse Directories, and Sanborn Fire Insurance Rate Maps
- Agency databases
  - Federal and State lists regarding Superfund Sites
  - State or County information regarding landfills
  - State/County/City information regarding underground storage tanks
  - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)
  - Federal Resource Conservation and Recovery Act (RCRA) Facilities and Generators List
  - Federal Emergency Response Notification System (ERNS) List
  - Historical CORTESE
  - Toxic Pits and Hazardous Waste Sites (Deed Restrictions)
  - Landfills (SWLF), Toxic Pits, and Hazardous Waste Sites (Deed Restrictions)
  - RWQCB North Bay Toxics List
  - EnviroStor database
  - Other databases listed in Appendix B but not listed above

Limiting Conditions -- Limiting conditions were not encountered during preparation of this Phase I Environmental Site Assessment. Files relevant to the Property were readily accessible and available for review. Access to the exterior of the Property was not constrained by fences, vegetation, other features, or coverings other than asphalt or concrete pavement, which is considered common for commercial land in an urban setting. Building interiors were not observed except through windows or gaps in closed openings.

3.0 PROPERTY DESCRIPTION

3.1 Location and Legal Description

The Property is located in the City of Oakland, north of I-580 and west of State Highway 24, along the west side of Martin Luther King Jr. Way (M.L.K. Jr. Way) and north side of West MacArthur Boulevard. M.L.K. Jr. Way was formerly Grove Street and MacArthur Boulevard was formerly 38th Street. By compass direction and convention in this report, the orientation of M.L.K. Jr. Way is north-south, and the orientation of MacArthur Boulevard is east-west.

The Property consists of two parcels designated by the Alameda County Assessor's Office as Assessor Parcel Numbers (APNs) 012-0964-006 and 012-0964-007. In aggregate, the combined land area in both parcels is about 0.28 acre in two narrow rectangular-shaped lots. The combined lot dimension along M.L.K. Jr. Way is approximately 100 feet, and the lot depth from M.L.K. Jr. Way is approximately 125 feet. Photographs of the Property are presented in Appendix A.

3.2 Nature of Property

The City of Oakland's General Plan designates the Property for Neighborhood Center Mixed Use (Oakland, City of, 2017). The City of Oakland Zoning is Neighborhood Center (CN-3) (Oakland, City of, 2017). The current store building and house on the Property are at least 106 years old.

The parcels do not appear to carry a Potential Designated Historic (PDH) property status. The PDH status, if applicable, could affect allowed and conditionally permitted uses of the Property. Details are available from the City of Oakland Planning Department which should be consulted in regard to proposed land uses.

The Property and adjoining neighbors were viewed by the assessor on June 14, 2017. The assessor looked for visible signs of potential environmental impairment such as oil staining or machinery leaks, staining or etching of the concrete floor by chemicals, bulk storage of hazardous materials or waste, past or current underground or above-ground storage tanks, and stressed or dead landscape. These conditions were looked for but were not observed.

No quantity of hazardous material was observed on June 14, 2017. Soil stockpiles were not observed. The contents of the garage were viewed through windows or gaps in the siding. Dry storage boxes, and furniture was apparent in the garage.

The Property does not have a hydraulic elevator. Pole-mounted transformers were not observed over the Property and none was noted around the Property perimeter.

Liquid or solid hazardous wastes are not routinely generated by the Property which is vacant. Search on DTSC's Hazardous Waste Tracking System (HWTS) found no record of hazardous waste shipment from the Property. See Section 5.2, Chart A, page 24. A permanent or one-time EPA waste generator number has not been assigned to the Property based on the search of the HWTS and database search prepared by ERS (see Appendix B).

Solid waste is collected by Oakland Scavenger or Waste Management of Alameda County. The East Bay Municipal Utility District water pollution control plant provides treatment and disposal of municipal waste water. Treated effluent is discharged to the San Francisco Bay from the public-owned treatment facility northwest of the Property in Oakland near the I580/I880 interchange. The East Bay Municipal Utility District delivers potable water. The water supply and production facilities themselves are owned and operated by the East Bay Municipal Utility District. Annual water quality testing has shown compliance with federal Safe Drinking Water Standards.

Environmental land use restrictions, other than CN-3 zoning district requirements and 45-foot building height limitation, are not known to exist for the Property. Regulatory guidelines (*e.g.*, for storage of hazardous materials or wastes), hazardous waste, hazardous materials, and storm water pollution prevention discharge regulations apply in general. The Report User should independently ascertain Potential Designated Historic (PDH) property status.

3.3 Nature of Vicinity

The Property is located in a mixed use neighborhood with commercial uses. For the purpose of theses descriptions, by convention, the compass orientation of Martin Luther King Jr. Way (formerly, Grove Street) is taken as north-south, and the compass orientation of MacArther Boulevard, Apgar Street and 39th Street is taken as east-west. The vicinity of the Property was observed to consist of the following:

To the north: Vacant lots (APN 012-964-5 and 012-964-4) at 3823 and 3829 M.L.K. Jr. Way;

To the northeast and east: HK Auto Repair (3806 M.L.K. Jr. Way), a small house (3810-12 M.L.K. Jr. Way), and a warehouse (3820 M.L.K. Jr. Way);

To the southeast: Good Samaritan Cathedral Church of God (625 MacArthur Boulevard);

To the south: a former car wash and service station at 657 MacArthur Boulevard;

To the southwest: Houses at 663-65 and 669 MacArthur Boulevard; and,

To the west: A house at 668 MacArthur Boulevard (APN 012-964-8).

Figures 2 and 3 illustrate the neighborhood with addresses and parcel numbers shown for the Property and nearby parcels. There are no nearby active service stations or dry cleaners; however, 657 MacArthur Boulevard and 625 MacArthur Boulevard (also known as 3740 M.L.K. Jr. Way) were formerly service stations. In 1969, these service stations were ENCO (657 MacArthur Boulevard) and Kimbrough Chevron (3740 M.L.K. Jr. Way).

Additional past service stations were located at 3701, 3881 and 3884 M.L.K. Jr. Way (or, Grove Street), as discussed in Section 4.2

There is no indication that dry cleaning ever was performed on the Property. A past cleaner or water laundry was located at 3829 Grove Street during 1935–1940. This was Jacob Pearlman clothes cleaner & presser. At 3833 Grove Street in 1969 a dry cleaners called UC Cleaners was present. The address 3829 Grove Street (or, M.L.K. Jr. Way) is designated as APN 012-964-4 and is located approximately 50 feet north of the Property's northern property line.

3.4 Topography and Hydrogeology

The Property is located on a broad alluvial plain of Temescal Creek and Glen Echo Creek that extends from the base of the Oakland Hills north and east of the Property to the Oakland Estuary west of the Property. The Property is an elevation of approximately 65 feet above mean sea level (National Geodetic Vertical Datum of 1929). See Figure 1.

The area including the Property is mapped as being underlain by Holocene-age alluvial fan or fluvial deposits (see Figure 5). Alluvial fan deposits (Qhaf) are illustrated on the Property. The Property is expected to be underlain by inter-bedded layers of silty and sandy clays, clayey sands and clayey gravels. (Radbruch, 1957; URS, 2004).

Throughout most of the Alameda County portion of the East Bay Plain, from Hayward north to Albany, well gauging and water level contours show that the general direction of groundwater flow is from east to west. The local direction of groundwater movement generally correlates well with local topography. Flow direction and velocity are also influenced by buried stream channels, which tend generally to be oriented in an east-to-west direction. Historical groundwater flow direction at the Property is expected to be predominantly towards the west or west-southwest. The nearest natural drainages are Glen Echo Creek, located south of the Property, and Temescal Creek, located north of the Property (Impact Environmental Services, 2009).

Review of groundwater flow direction at nearby sites having groundwater monitoring wells shows that the groundwater flow direction at 3701 Martin Luther King Jr. Way is toward the northwest, west and west-southwest. At 3884 M.L.K. Jr. Way, the groundwater flow direction historically has been toward the west-southwest or west. The shallow groundwater surface has sloped down consistently toward the west-southwest, west or northwest depending on location. See Figure 2 or 3.

3.5 Interviews of Knowledgeable Parties

The Property is vacant and has not had any tenants since 2006 owing to its condition and pending development status for 19 units of mixed-income housing as proposed by A.F. Evans Co., Inc. (AFE). AFE gave up ownership of the Property in 2011.

4.0 PROPERTY HISTORY

4.1 Prior Owners

Current and past owners are not known from chain-of-title research, which was not part of the agreed scope of service for this Phase I environmental site assessment. From other information sources, the most recent partnership or owner was Grove Park LLC[2] and, subsequently, U.S. Bank.

In 2010, "Grove Park" became a 60-unit residential project concept on four combined lots which include the Property. However, during 2006-2008, the lots of “Grove Park” controlled by A.F. Evans Co., Inc. (AFE) were only the two corner lots on which 19 mixed income housing units were proposed. AFE was sole member of Grove Park LLC and gave up ownership of the two AFE parcels as approved in Chapter 11 bankruptcy on July 25, 2011.

Circa 2006, AFE/Grove Park LLC borrowed $741,000 from Washington Mutual Bank (now U.S. Bank) for site acquisition of the two parcels which comprise the Property.[3] AFE/Grove Park LLC also obtained an $800,000 loan from the City's Redevelopment Agency under the Vacant Housing Acquisition and Rehab Program (VHARP). VHARP use included recorded restrictions requiring that 25 percent of the units of any development would be affordable at 80 percent of annual median income. The deed of trust for the VHARP loan was subordinated to the WAMU/U.S. Bank loan.

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[2] Deed instrument number 2006408891 recorded in Alameda County on November 1, 2006.

[3] The fair market value of the Property in 2006 was $1.23 million but fell sharply by 2008 (Oakland, City of, 2008).

As of 2010, periodic abatement work on the Grove Park site was performed through the City of Oakland's Code Compliance Department. This resulted in accumulated liens over $25,000 on the four parcels making up the Grove Park site.

Circa October 2010, AMCAL-LANDIS asked the City of Oakland to apply NSP3 funds to acquire the two (2) AFE parcels—then still owned by AFE/Grove Park LLC. At that point in time, the City or its Redevelopment Agency had major loans on all four Mac-MLK parcels, including the $800,000 loan on the two (2) parcels comprising the Property (*i.e*., the AFE parcels). According to City internal memorandum, in 2010 the acquisition cost for the AFE parcels would have been approximately $500,000.

The four Mac-MLK parcels are 3801-3807, 3813-3819, 3823 and 3829 M.L.K. Jr. Way. As of 2010, the parcel located at 3823 M.L.K. Jr. Way was city-owned. The parcel at 3829 M.L.K. Jr. Way was in receivership and the trustee had told City staff it would not pursue the parcel.

4.2 Prior Uses

Overview

The subject Property has been developed since before 1911. The area is believed by the assessor to have been part of Tract No. 37 and is further believed to have been developed circa 1890-1905. Lots for sale on the adjacent Montgomery Tract, north of 40th Street and west of Telegraph Avenue were advertised for sale by Richard J. Montgomery in 1905.[4] On the basis of the advertisement, it is reasonable to expect the land south of 40th Street, which is more central to Oakland, was developing at an even earlier date before 1905.

During 1868-1883, in Oakland's industrial boom, factories were started along the lower stretches of 23rd Avenue. The first factories prompted construction of the city's sewer system, which was essential infrastructure integral to the city's growth. During 1874-1884, three terra-cotta pipe and pottery companies started on or near 23rd Avenue, to provide the terra cotta sewer pipes of the period (Urban Ecology, 2005).

There were no fuel islands or "Oil & Gas" labels on the Property in any of the Sanborn maps viewed by the assessor. The nearest historical service stations were located north and south of the Property along Grove Street, 38th Street which was renamed MacArthur Boulevard, and 39th Street. Two service stations across the street on the south side of 38th Street (today, MacArthur Boulevard) adjoined the Property.

There were no indications in the Oakland City Directory research that dry cleaning, automotive fuel service or auto repair, metal plating, or printing has ever been performed on the Property. Past uses of the Property included two residential flats at 654 and 656 38th Street (same as MacArthur Boulevard), a corner drug store at 3801 Grove Street, (M.L.K. Jr. Way),

[4] http://servlet1.lib.berkeley.edu:8080/mapviewer/searchcoll.execute.logic?coll=eartmaps&catno=b22254205

ground-level retail stores or services at 3807, 3813, and 3819 Grove Street (M.L.K. Jr. Way), apartments at 3817 Grove Street (see Appendices C and D).

Aerial Photograph Review
Aerial photographic images of the Property were viewed on-line on Google Earth and also were downloaded from U.S. Geological Survey's Earth Explorer. Aerial photographic images from Earth Explorer and Google Earth are reproduced in Appendix E for years 1946, 1958, 1968, 1974, 1980, 1991, 2002, 2007 and 2012. Additional aerial photographic images were viewed on-line on Google Earth for additional years during 2000-2017.

1946—The Property was improved with three buildings plus a small garage. The northern building fronting on M.L.K. Jr. Way appeared to be divided into two long portions. There was no obvious vacant lot on the Property. There were no discernible conditions such as excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property.

Off site, the corner parcels in the southeast and southwest corners of two intersections at M.L.K. Jr. Way/MacArthur and M.L.K. Jr. Way/39th Street were improved with service stations.

1958—There were no obvious changes on the Property from 1946. There were no discernible conditions such as excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property. The four off-site service stations remained on the corner parcels located in the southeast and southwest corners of two intersections at M.L.K. Jr. Way/MacArthur and M.L.K. Jr. Way/39th Street.

1968— The Property was improved with three buildings plus a small garage. The northern building fronting on M.L.K. Jr. Way appeared to be divided into two long portions. There was no obvious vacant lot on the Property. Off site, the corner parcels in the southeast and southwest corners of M.L.K. Jr. Way/MacArthur Boulevard appeared to be service stations.

1974—The 1974 aerial photographic image shows the same buildings on the Property as in 1968. There were no discernible conditions such as excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property. Off site, the parcels located in the southeast and southwest corners of M.L.K. Jr. Way/MacArthur Boulevard appeared to be service stations.

1980—By October 1980, the former building at 3813-3819 M.L.K. Jr. Way had been demolished, leaving a vacant lot. There were no discernible conditions such as excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property. Off site, the parcel located in the southeast corner of M.L.K. Jr. Way/MacArthur Boulevard appeared to have been redeveloped with the existing church building. The parcel located in the southwest corner of M.L.K. Jr. Way/MacArthur Boulevard appeared to remain a service station.

1991—The resolution was so limited that information was not generally discernible. There were no obvious changes on the Property from 1980.

2002—There were no discernible differences from 1991 and no visible conditions such as open excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property.

2007—There were no discernible differences since 2002 and no visible conditions such as open excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property.

2012—In August 2012 the lot at 3813-3819 M.L.K. Jr. Way appeared to be used for gardening and composting. There were no discernible conditions such as excavations, soil stockpiles, impoundments of liquids, drum storage or other potential indications of environmental impairment of the Property.

Sanborn Fire Insurance Rate Maps
In view of the length of historical use of the Property and urban setting, Sanborn Fire Insurance Rate Maps dated 1911, 1952-54, 1967, and 1969-70 were reviewed. Thumbnails are provided in Appendix D.

Based on the Sanborn Maps and aerial photographic images, the three buildings were present in 1911 or before. The original building was a single house, which was present in 1902 and likely for years before 1902. In an unspecified year during 1902-1911, the two retail buildings on M.L.K. Jr. Way and a new or relocated house at 656-658 W. MacArthur Boulevard were added. The auto garage was added during 1911-1946, being apparent in the aerial photographic image dated 1946 and in the Sanborn Map dated 1951.

The northeastern retail building at 3813-3819 Martin Luther King Jr. Way was demolished *circa* 1970-1974. The northeastern building was always labeled as a pair of stores ("S") in the Sanborn maps reviewed. Addresses associated with the northeastern building were 3813-15 and 3817-19 Grove Street. The northeastern retail building was present there through 1970 and was no longer present in the aerial photographic image dated October 1974.

Review of Sanborn maps indicates that the westernmost building was residential and was used for two flats, having 38th Street (same as MacArthur Boulevard) addresses of 654 or 656 38th Street. The residential building had no commercial element.

The corner building at 3801-3807 M.L.K. Jr. Way was simply labelled as a store ("S") in 1911, and was labelled specifically as a drug store ("Drugs") in 1951. Addresses associated with the corner building included 652 38th Street (MacArthur Boulevard), 3801, 3805 and 3807 Grove Street (M.L.K. Jr. Way). This corner building may have had upstairs apartments.

Truck rental, dry cleaning, rug cleaning, auto or truck repair, and service station uses were not obviously apparent on the Sanborn map images for the Property. Research of directories, therefore, was conducted to ascertain the nature of past occupants on the Property.

Directory Research

Directory research is summarized in Appendix C. Various residents were listed at 652, 654 and 656 38th Street (MacArthur Boulevard) during 1946-2005. At 3801 Grove Street (M.L.K Jr. Way) Rose-Waterman Drug Co. drug store was listed since 1930. The store at 3801 Grove Street was a drug store continuously during 1930-1961. Later, during 1980-2005, 3801 Grove Street (M.L.K. Jr. Way) was used by Terry's Sound House.

There were few directory listings for 3805 or 3807 Grove Street (M.L.K. Jr. Way). Three directory listings were Bush's Barber Shop (1956), Louise's Well Groomed (1961-1970), and Ishmallah's Hats (1990-2000). Bush's Barber Shop move to 3819 Grove Street and remained there until during 1966.

According to the directory research 3813 Grove Street was occupied by Newbridge Inn from 1946 to 1961. The store at 3819 Grove Street was occupied by barber shops from 1961 to 1970. There were no directory listings for 3813-3819 Grove Street after 1970. The building was present there at 3813-3819 M.L.K. Jr. Way through 1970 and was no longer present in the aerial photographic image dated October 1974.

In the directory research, listings of dry cleaners, printers, or manufacturing on the Property were not encountered. Off-site, adjoining the Property, the corner parcel at 657 MacArthur Boulevard was a Signal or ENCO service station during 1946-1970. This parcel, located at 657 MacArthur Boulevard, in the southwestern corner of M.L.K. Jr. Way/MacArthur Boulevard, was later used by Burley's Auto Detail Center. The corner parcel at 625 MacArthur Boulevard (same as 3740 Grove Street) was a Standard Oil service station during 1951-1961. This parcel, located at 3740 Grove Street, in the southeastern corner of M.L.K. Jr. Way/MacArthur Boulevard, was redeveloped with the existing church building at an unspecified time during 1975-1979.

Farther off site, north of the Property, D.R. Hart's gas station or successor stations (*e.g.*, Gowan's Mobil Service, Luckett's Phillip 66) were located at 3884 Grove Street, north of the Property, during 1928-1970. Also off site, north of the Property, at 3701 Grove Street, A.F. McAllen or Portz Bros. service station and, later, Halls Service Station and Hammond's Service were present during 1930-1996.

5.0 REVIEW OF ENVIRONMENTAL AGENCY RECORDS

5.1 Environmental Records Maintained at the Property

No such records are maintained and none would be expected in view of the vacant status of the buildings.

5.2 Public Agency Databases

The services of Environmental Record Search, ("ERS"), were used to conduct a search of public agency databases in general accordance with the ASTM E 1527-13 Standard for Practice, for potential facilities in the vicinity of the Property with reported releases that may have the potential to impact the Property. The following databases were searched by ERS and the following information was noted (ERS, Appendix B).

Federal NPL Superfund Site List: Distance Searched–1.0 mile

Superfund sites are sites that contain hazardous materials for which there is no responsible party for cleanup or for which Federal government oversight and management will be involved. According to ERS's search of this database, no federal Superfund site, de-listed Superfund site or proposed Superfund site is located within one mile of the Property.

Federal Liens (LIENS-US): Distance Searched–Target Property

This database contains sites that have had Federal Liens filed on them as reported by the U.S. EPA. According to ERS's search of the U.S. EPA database, there is no NPL lien on the Property.

U.S. Brownfields (BF-US): Distance Searched–0.5 mile

This database contains a listing of Brownfields sites listed under the "Cleanups in My Community" program maintained by the U.S. EPA. The Property is not identified as a U.S. Brownfields site. ERS identified one (1) U.S. Brownfields site which is located 0.1 mile northeast of the Property: Lucky Auto Body (3860/3884 M.L.K. Jr. Way). The Lucky Auto Body (3860/3884 M.L.K. Jr. Way) site does not pose any obvious risk or an apparent likelihood of environmental impairment for the Property.

Federal CERCLIS and CERC-NFRAP Lists: Distance Searched–0.5 mile

The Comprehensive Environmental Response and Compensation Liability Act Information System (CERCLIS) database is maintained by the U.S. Environmental Protection Agency (U.S. EPA) of potential hazardous waste sites that have come to the attention of the U.S. EPA. Sites on the CERC-NFRAP list are not necessarily hazardous waste sites, but rather sites that the U.S. EPA has already investigated and determined that "No Further Action is Planned" (NFRAP). According to ERS's search of this database, there is no CERCLIS or CERC-NFRAP site located within a 0.5-mile radius of the Property

Federal RCRA Corrective Actions (RCRA-COR-US): Distance Searched–1.0 mile

The Resource Conservation and Recovery Act (RCRA) Corrective Actions (CORRACTS) database is maintained by the U.S EPA for facilities having been cited under RCRA Section 3008(h) for release of hazardous waste to the environment from a RCRA facility. According to ERS's search of this database, there is no RCRA CORRACTS facility within approximately one mile of the Property.

Federal RCRIS-TSD Facilities: Distance Searched–0.5 mile

The Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and Disposal (TSD) facilities database is maintained by the U.S EPA for facilities at which treatment, storage and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA. According to ERS's search of this database, there is no RCRA TSD facility within 0.5 mile of the Property.

Federal RCRA-Hazardous Waste Generators (LQG and SQG): Distance Searched –0.25 mile

The RCRA-hazardous waste generators database is maintained by the U.S. EPA of those facilities, entities, or persons that generate hazardous waste as defined and regulated by RCRA. According to ERS's search of the database, there are not any large-quantity or small-quantity generators of RCRA-hazardous waste located within 0.25 mile of the Property.

Federal TRIS List: Distance Searched – Target Property

The federal Toxic Release Inventory System (TRIS) List is the U.S. EPA list generated by facilities which complete FORM R Toxic Chemical Release. The inventory is required by SARA Title III, the Community Right-to Know Act of 1986. The Property is not listed on the TRIS database, according to ERS's search of this database.

Federal ERNS List: Distance Searched–Target Property

The ERNS List is the U.S. EPA Emergency Response Notification Systems List of reported CERCLA hazardous substance releases or spills in quantities greater than the minimum reportable quantity, as maintained at the National Response Center. According to ERS's search of the ERNS database, the Property is not listed.

California DTSC Response: Distance Searched–1.0 mile

The "DTSC Response" database is from California DTSC and identifies sites having confirmed hazardous materials or waste releases for which DTSC provides oversight in a remedial response. Three (3) DTSC jurisdictional sites are located within 1 mile of the Property. The DTSC Response sites are:

- Harris Dry Cleaners (2801 M.L.K. Jr. Way), 0.66 mile south of the Property

- Lane Metal Finishers (2942 San Pablo Avenue), 0.62 mile southwest of the Property
- Cal Tech Metals (825-29-41 31st Street), 0.54 mile southwest of the Property

In view of their distances and locations, the DTSC Response sites do not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Cal/EPA Department of Toxic Substances Control Historical Cal-Sites (Hist-CALSITES-CA): Distance Searched–0.25 mile

According to ERS's search of the historical Cal-Sites databases, no historical Cal-Site site is located within a 0.25-mile radius of the Property.

California Annual Workplan Sites (Hist-AWS-CA): Distance Searched–0.25 mile

The State of California equivalent programs are administered by the California Environmental Protection Agency (Cal/EPA). According to ERS's search of the Cal/EPA databases, a historical Annual Workplan Site is not located within a 0.25-mile radius of the Property.

Toxic Pits (Hist-Toxic Pits-CA): Distance Searched–0.25 mile

No site of a Toxic Pit was reported as being located within 0.25 mile of the Property.

Waste Landfills (SWIS-CA, Hist-SWIS-CA, Hist-SWF-CA and Hist-WMUDS-CA): Distances Searched–0.5 mile (SWIS-CA, SWLF-US) and 0.25 mile (Hist-SWIS-CA, Hist-WMUDS-CA)

The California Department of Resources Recycling and Recovery (CalRecycle) was formerly known as the California Integrated Waste Management Board (CIWMB). CalRecycle maintains a Solid Waste Information System database of active and inactive landfills in California. The California Water Resources Control Board maintains the Waste Management Unit Database System (WMUDS). SWLF-US is a federal database of municipal waste disposal sites currently permitted and active.

According to ERS's search of the landfill databases, no active or inactive landfill is located within 0.5 or 0.25 mile of the Property. For SWIS-CA and SWLF-US the search distance was 0.5 mile, and for Hist-SWIS-CA and Hist-WMUDS-CA the search distance was 0.25 mile.

Deed Restrictions (Controls-CA, Deed-CA): Distance Searched–0.5 mile

The Controls-CA database is maintained by California Department of Toxic Substances Control. A deed restricted site is a parcel where DTSC has placed limits or requirements on future use of the property due to varying levels of cleanup possible, practical, or necessary at the site. The deed restriction Deed-CA database includes sites reported by the State Water

Resource Control Board as having a deed restriction/land use restriction and or covenant.

According to ERS's search of these databases, the Property does not have recorded restrictions for buried wastes or other recognized hazardous condition. A Deeds or Controls listed site is not located within 0.5 mile of the Property.

Waste Discharge Requirements (WDR-CA): Distance Searched–0.25 mile

The database is maintained by the California Regional Water Quality Control Board for sites having waste discharge requirements, generally for treated wastewater discharge to a sewer. ERS reported that the target Property does not have discharge requirements issued by the RWQCB. Also, no site located within 0.25 mile of the target Property is listed as a WDR site.

North Bay Toxics (SLIC-Open-CA, SLIC-Closed-CA) List: Distance Searched–0.5 mile

The California Water Resources Control Boards maintain databases of Spills, Leaks, and Contamination Incidents (SLIC). This North Bay Toxics database is maintained by RWQCB-San Francisco separately from the Leaking Underground Fuel Tank database. Two (2) open-case North Bay Toxics sites are reported by ERS as being located within 0.5 mile of the Property. The open-case SLIC sites are:

- MacArthur BART Transit Village (Telegraph/MacArthur), 0.27 mile northeast of the Property
- 411 MacArthur Redevelopment (411 W. MacArthur Boulevard), 0.43 mile southeast of the Property

The nearest closed-case SLIC site is:

- Shattuck Avenue Parcel (4501 Shattuck Avenue), 0.5 mile northeast

None of these sites adjoins the Property. Listed open-case SLIC sites are located either downgradient from the Property or else at such distance 0.25 mile or farther from the Property as not to pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

CORTESE and Historical Cortese List (Cortese-CA, Hist-Cort-CA, Hist-HWS-CA): Distance Searched–0.25 mile

According to ERS, there is no Cortese or Hist-Cortese site located within a 0.25-mile radius of the Property.

Leaking Underground Storage Tank (LUST) Database: Distance Searched–0.5 mile

The State of California Water Resources Control Board (SWRCB) maintains a database for sites that are currently involved in site assessment/mitigation resulting from reported unauthorized spills or releases from leaking underground storage tanks (LUSTs). ERS reports approximately sixteen (16) open-status or closed-status LUST cases involving unauthorized fuel releases from USTs on sites located within 0.5 mile of the Property.

None of the LUST sites adjoins the Property. With some exceptions, many of the LUST cases have been resolved and closed. Sites located within 0.5 mile of the Property which have open-status cases include:

- J&H Auto Repair (3701 M.L.K. Jr. Way), 0.0.7 mile south of the Property;
- Grove Street Wash Rack (3884 M.L.K. Jr. Way), 0.11 mile northeast of the Property;
- ARCO/Westco Gas Food (731 W. MacArthur Boulevard), 0.12 mile west;
- CHP (3601 Telegraph Avenue), 0.25 mile southeast;
- Chevron #9-2029 (890 MacArthur Boulevard), 0.28 mile west of the Property;
- San Francisco French Bread (3924 Market Street), 0.3 mile northwest;
- Former FG Gasoline (3314 San Pablo Avenue), 0.49 mile southwest.

Sites located within 0.25 mile of the Property which have closed-status cases include:

- Neighborhood Laundromat (3838 West Street), 0.11 mile northwest of the Property;
- RD Miner Company (750 37th Street), 0.12 mile southwest of the Property;
- BART parcel (3924 M.L.K. Jr. Way), 0.15 mile northeast;
- Regal station #120 (3875 Telegraph Avenue), 0.24 mile east.

None of the open-status or closed-status LUST sites adjoins the Property. None of the open-case or closed-case LUST sites poses an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

State Registered Underground Storage Tanks (UST-CA, UST-CRSP, UST-Priority, County-UST-CA, Hist-CalFID, HIST-UST, and SWEEPS): Distance Searched–0.25 mile

According to ERS's search of these databases, eight (8) sites have registered USTs or have had past USTs within a 0.25-mile radius of the Property. The Property is not listed in the UST, FID, Hist-UST and SWEEPS databases.

UST sites include:

- Hammond Service (3701 M.L.K. Jr. Way), 0.07 mile south of the Property
- ARCO/Westco Gas Food (731 W. MacArthur Boulevard), 0.12 mile west of the Property
- Grove Street Wash Rack (3884 M.L.K. Jr. Way), 0.11 mile northeast

- Frank's Auto Repair (3924 M.L.K. Jr. Way), 0.15 mile northeast
- Apostolic Church (4006 M.L.K. Jr. Way), 0.18 mile north
- Apartment (544 37th Street), 0.19 mile southeast
- Regal Station #102 (3875 Telegraph Avenue), 0.24 mile east
- CHP (3601 Telegraph Avenue), 0.25 mile southeast

Numerous past UST sites were reported by ERS as being listed in the historical Fuel Inventory Database (Hist-CalFID-CA). Thirteen (13) CalFID sites were listed by ERS as being located within 0.25 mile of the Property, including four UST sites co-listed above. The co-listed CalFID sites are:

- Hammond Service/J&H Auto Repair (3701 M.L.K. Jr. Way), 0.07 mile south of the Property
- Apartment (544 37th Street), 0.19 mile southeast
- Regal Station #102 / East Bay Surgery Center / DiGiorgio & Sons (3875 Telegraph Avenue, 0.24 mile east of the Property
- CHP (3601 Telegraph Avenue), 0.25 mile southeast of the Property

Nine (9) additional CalFID sites, which are not listed above, include:

- Quality Tune-Up #35 (640 W. MacArthur Boulevard), 0.03 mile east of the Property
- Insta Lube (736 W. MacArthur Boulevard), 0.11 mile west of the Property
- Neighborhood Laundromat (3838 West Street), 11 mile northwest
- Johnny's Automotive (3901 M.L.K. Jr. Way), 0.12 mile north
- Tune Dynamics / Best Auto Repair (801 W. MacArthur Boulevard), 0.15 west of the Property
- Big O Tire (810 W. MacArthur Boulevard), 0.16 mile west
- Sacred Heart (675 41st Street), 0.21 mile north
- Telegraph Avenue Limited Partnership (3833 Telegraph Avenue), 0.22 mile east of the Property
- Lithographic Reproduction (4120 M.L.K. Jr. Way), 0.25 mile north

None of the UST sites adjoins the Property. The former Quality Tune-Up #35 (640 W. MacArthur Boulevard), which is currently used for U-Haul Truck Rentals, is located east of the adjoining parcel at 3806 M.L.K. Jr. Way. None of the UST sites poses an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Above-Ground Storage Tanks (AST-CRST, City-AST, County-AST): Distance Searched – 0.25 mile

The Property and adjoining parcels are not listed in a database searched by ERS as having above-ground storage tanks (ASTs) used for storing hazardous substances. Water tanks are excluded. The nearest listed AST site is CHP (3601 Telegraph Avenue), which is located 0.25 mile southeast of the Property. In view of its distance this AST site does not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Dry Cleaners (DryCleaners-CA, DCF2-CA, Hist-AFS-US, Hist-AFS2-US): Distance Searched–0.25 mile

Hist-AFS-US and Hist-AFS2-US are databases created by U.S. EPA of air pollutant emissions from regulated sources including dry cleaners and other emitters. According to ERS's search of these databases, dry cleaning sites located within a 0.25-mile radius of the Property are not listed.

The DryCleaners-CA database is a list of dry cleaners maintained by California DTSC. According to ERS's search of this database, Neighborhood Laundromat (3838 West Street) is a dry cleaning site located approximately 0.11 mile northwest of the Property. The DCF2-CA database of dry cleaning facilities also was searched by ERS and identifies one dry cleaning site which is located at the same address as above, 3838 West Street. G & J Whirl Laundromat is the name of the business.

Harris Dry Cleaners is listed in California's Response database. Harris Dry Cleaners (2801 M.L.K. Jr. Way) is located 0.66 mile south of the Property. In view of their distances from the Property, or locations northwest or south of the Property, the dry cleaning sites do not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Historical Dry Cleaners (Hist-Cleaners): Distance Searched - 0.25 mile

The historical dry cleaners database is a proprietary database created by ERS. Hist-Cleaners is a created database built by ERS using historical information sources such as telephone directories or Polk's Reverse Directories, for example. Dry cleaning facilities listed on created databases may include some facilities which did not perform dry cleaning or did not perform dry cleaning on the premises. Two (2) sites identified by ERS as potential historical dry cleaning sites are Yupi Building Services (3715 West Street) and Uniclean (705 37th Street). In view of their locations 0.11-0.15 mile west or southwest of the Property, neither poses an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Historical Auto Dealers and Auto Repair (Hist-AutoDealers, Hist-AutoRepair): Distance Searched–0.25 mile

The historical auto repair and auto dealers databases are proprietary databases created by ERS from sources such as Polk's Reverse Directories. Six (6) Auto Dealer or Auto Repair sites identified by ERS potentially include some sites that have also been used in the past for fuel service.

Auto Dealer or Auto Repair sites located nearest the Property include:

- Quality Tune Up /U-Haul (640 W. MacArthur Blvd.), 0.03 mile east of the Property
- It's About Cars / Discount Auto (622 W. MacArthur Blvd.), 0.06 mile east of the Property

- Insta Lube (736 W. MacArthur Blvd.), 0.11 mile west of the Property
- Yem Honda (3909 M.L.K. Jr. Way), 0.13 mile north of the Property
- Big O Tires (810 W. MacArthur Blvd.) 0.16 mile west
- Al Manning Body Shop (4101 M.L.K. Jr. Way), 0.23 mile north

None of the above-listed sites is a LUST site with open-case or closed-case status. Quality Tune-Up #35 (640 W. MacArthur Boulevard), Insta Lube (736 W. MacArthur Boulevard), and Big O Tire (810 W. MacArthur Boulevard), are also listed on the CalFID database for past motor fuel inventory. These three listed sites, therefore, had engaged in auto fuel storage in addition to tune-up and repair.

Border Zone or Hazardous Waste Property (Cal-BZ-HazWaste-CA): Distance Searched–0.5 mile

This database identifies parcels that went through the Border Zone Property or Hazardous Waste Property process of evaluation as reported by California Department of Toxic and Substance Control. Potential Border Zone properties are located within 2,000 feet of a significant disposal of hazardous waste; Hazardous Waste Property facilities/sites have a significant disposal of hazardous waste. According to ERS's search of the database, there is no border zone parcel located within 0.5 mile of the Property.

Hazardous Waste Sites Database: Distance Searched–0.25 mile

DTSC maintains databases of hazardous waste sites and site generating hazardous waste. The Hazardous Waste Tracking System is the name of the database for manifested waste shipments. The Property is not listed in the HWTS database. Independent search for sites listed on HWTS found several listings for waste generator sites located near the Property. [5]

Quality Tune–Up (640 W. MacArthur Blvd.) generated water with organic residues in the approximate amount of 1–6.5 tons per year during 1996-2000. It's About Cars (622 W. MacArthur Blvd.) generated approximately 0.1 tons of oil/water separator sludge which was shipped for disposal in 1997.

ARCO Products Co. (731 W. MacArthur Blvd.) generated water mixed with organic residues in the approximate amount of 0.04–1.26 tons per year during 1995-2001. K& H Gas City (731 W. MacArthur Blvd.) generated water mixed with organic residues in the approximate amount of 0.32 ton per year during 2008. BP West Coast Products (731 W. MacArthur Blvd.) generated water with organic residues in the approximate amount of 0.13 - 1.9 tons per year during 2002-2004. In 1995, Big O Tires (810 W. MacArthur Blvd.) manifested 0.08 ton of unspecified solvent mixture.

[5] California DSTSC HWTS, http://hwts.dtsc.ca.gov/report_search.cfm?id=5

Chart A
HWTS Waste Generation Database

EPA ID	GENERATOR SITE ADDRESS	GENERATOR NAME	YEAR
CAL000116066	622 W. MacArthur Blvd	IT'S ABOUT CARS	1997
CAL000278915	640 W. MacArthur Blvd	SIDE B CORP dba QUALITY TUNE-UP #35	NR
CAL000287650		LARRY LOPEZ dba QUALITY TUNE-UP #35	NR
CAL000329277		SIDE B CORP dba QUALITY TUNE-UP #35	NR
CAL000074673		QUALITY TUNE UP #35	'96-'00
CAL000334097		AS TUNE-UP SHOP	NR
CAL000344862		DISCOUNT SMOG CHECK CENTERS #5	NR
CAL000361616	657 W. MacArthur Blvd	ANGEL CASTILLEJOS	NR
CAL000048687	731 W. MacArthur Blvd	ARCO PRODUCTS COMPANY	'95-'01
CAL000244269		BP WEST COAST PRODUCTS	'02-'04
CAL000332355		K & H GAS CITY INC	'08
CAL000281500		MANUS GAS CITY	NR
CAL000336267		WESTCO GAS	NR
CAX000048736		1X ARCO SERVICE STATION	NR
CAL000171415	736 W. MacArthur Blvd	INSTA LUBE	NR
CAL000366948	801 W. MacArthur Blvd	AUTOMECHS	NR
CAL921533467		TUNE DYNAMICS	NR
CAL000075868	810 W. MacArthur Blvd	BIG O TIRE	1995
CAL912524974		BIG O TIRE	NR
SOURCE: California DSTSC HWTS, http://hwts.dtsc.ca.gov/report_search.cfm?id=5			

Of these sites, only 657 W. MacArthur Boulevard adjoins the Property. For 657 W. MacArthur Boulevard, record of waste manifesting or shipment was not found.

Proposition 65 (Hist-Prop65-CA): Distance Searched–0.25 mile

The Proposition 65 database is from the State Water Resources Control Board's Proposition 65 database. The database contains information based on notices to facilities about any hazardous materials, hazardous waste, or other release that could impact drinking water. A Proposition 65 site was not identified as being located within 0.25 mile of the Property.

EnviroStor Voluntary Clean-Up Program (Cal-VCP-Active, Cal-VCP-NFA, Cal-VCP-Other): Distance Searched– 0.5 mile

DTSC's Site Mitigation and Brownfields Reuse Program EnviroStor database identifies sites having known hazardous materials or waste releases or reasons for further investigation. Some of the sites having known contamination have been approved for reuse with recorded deed restrictions to prevent inappropriate land uses for which DTSC provides oversight in a remedial response. In the Voluntary Clean-up Program (VCP), project proponents have requested that DTSC oversee evaluations, investigations, and/or clean-up activities and have agreed to reimburse for DTSC's staff labor costs. According to ERS's search of the VCP database there is no VCP site located within 0.5 mile of the Property.

EnviroStor School Site Evaluation (Cal-School-Active, Cal-School-NFA, Cal-School-Other): Distance Searched– 0.5 mile

DTSC's School Site Evaluation database identifies proposed and existing school sites which are being evaluated or else have been evaluated by DTSC for possible contamination issues. According to ERS's search of the School Site Evaluation database there is no Cal-School Site Evaluation site located within 0.5 mile of the Property.

5.3 Regulatory Status

The listed Leaking Underground Storage Tank (LUST) sites are within the current local jurisdiction of the Alameda County Department of Environmental Health Services (ACDEHS) and/or Regional Water Quality Control Board, San Francisco Bay Region. California Department of Toxic Substances Control (DTSC) oversees school site evaluations.

3884 Martin Luther King Jr. Way Street
The Grove Street Wash Rack site (3884 Martin Luther King Jr. Way) is located along in the southeastern corner of 39th Street and M.L.K. Jr. Way. The location is approximately 600 feet north-northeast from the Property. The site previously was a D.R. Hart gas station and Luckett's Phillips 66 gas station in the during 1928–1969 and H & L Luckett vehicle repair facility during 1995–2004. Underground storage tanks were removed in 1995. The LUST case remains open.

A 500-gallon gasoline underground storage tank (UST) and two (2) 650 gallon gasoline USTs were removed on January 5, 1995. Confirmation soil samples collected from 7.5–9 feet below ground surface (fbgs) beneath each UST detected up to 140 milligrams per kilogram (mg/kg) Total Petroleum Hydrocarbons as gasoline (TPHg), 0.61 mg/kg benzene 0.96 mg/kg toluene, 1.3 mg/kg ethylbenzene, and 9.7 xylenes. In 2004 and 2006, soil and groundwater investigations were performed which detected elevated concentrations of TPHg and BTEX in soil and groundwater. In November 2006, a CAP was submitted and approved but it was not implemented.

Wells MW-2, MW-3, and MW-7 are located along the southern perimeter of 3884 M.L.K. and, therefore, are the groundwater monitoring wells located closest to the Property. Concentrations of gasoline, benzene, ethylbenzene and toluene were below reporting limits in groundwater samples collected from these perimeter wells except for well MW-2 which had 26 μg/L as benzene, 1.1 μg/L as ethylbenzene and 0.59 μg/L as toluene (ERM, 2017).

Monitoring wells MW-2, MW-3, and MW-7 and five additional wells, both on-and off-site, were installed in 2013-2014. The depth to the shallow groundwater surface is generally in the range from 11–15 feet below grade surface and wells are screened in the intervals 11-18, 11-19, 12-19, 13-20 or 15-21 fbgs. The prevailing slope of the shallow groundwater surface is slope down toward the west or west-southwest (ERM, 2017).

In view of the 600 foot separation distance from the Property and prevailing direction of groundwater flow toward the west-southwest, and in view of the low measured concentrations of TPHg and volatile aromatic hydrocarbons in groundwater, the Grove Street Wash Rack site does not pose an obvious likelihood or an apparent risk of environmental impairment of soil, soil gas, or groundwater for the owner of the Property.

5.4 Other

The Lucky Auto Body site consists of two parcels located at 3884 and 3860 M.L.K. Jr. Way and therefore contains the Grove Street Wash Rack. The combined site was investigated by URS on behalf of California DTSC in 2004. Work included soil borings and collected of grab groundwater samples. Locations of G13, G17 and G19 for groundwater sampling were located on 3860 M.L.K. Jr. Way south of 3884 3860 M.L.K. Jr. Way. Therefore, these sample locations were located G13, G17 and G19 toward the Property.

TPH gasoline was not detected at or above reporting limits in samples G13, G17, and G19. Benzene and toluene where reported in samples G13, G17 and G19 were less than 0.7 μg/L (URS, 2004). Based upon results of grab groundwater sampling and testing, the combined site poses no obvious likelihood or apparent risk of environmental impairment for the owner of the Property.

6.0 RECOGNIZED ENVIRONMENTAL CONDITIONS

Hazardous materials or petroleum products were not noted on the Property which is currently vacant.

6.1 Use of Hazardous Substances

Current or Recent Uses
Paint spray booths, above-ground tanks and parts cleaners were not seen during the current reconnaissance in June 2017. On June 14 2017, the premises was observed by the assessor to be vacant. No quantity of hazardous material or petroleum product was observe in storage on the Property. The environmental assessor,

therefore, considers that current or recent uses of hazardous substances does not constitute an REC for the Property.

Historical Uses
Before 2006, the Property had been used for a stereo store, drug store, hair salon, barber shop, apartments and single-family house (see Appendix C). Past stereo, drug store and hair styling business uses of the Property are not commonly associated with the use of hazardous substances. The environmental assessor, therefore, considers that past use of hazardous substances is unlikely and does not constitute an REC for the Property.

6.2 Solid and Liquid Waste Handling

Hazardous Waste Solids
The Property is not reported to be a small- or large-quantity generator of RCRA-hazardous waste (ERS, 2017; DTSC, 2017). The non-hazardous solid wastes or recyclable materials likely to have been generated at the Property by stores and residences include spray containers, paper, cardboard and card stock, paint, and other domestic solid waste. The above kinds of waste and disposal do not constitute RECs for the Property.

Hazardous Waste Liquids
Hazardous waste liquids are not generated by the Property. DTSC's Hazardous Waste Tracking System (HWTS) was checked, and the Property was not listed. HWTS indicates hazardous waste liquids were shipped from the following sites:

622 W. MacArthur Blvd
640 W. MacArthur Blvd
731 W. MacArthur Blvd
810 W. MacArthur Blvd

Liquid wastes shipped were varied and included waste oil, water with organic residues, oil/water separator sludge, and unspecified solvent.
There were no signs on the Property of on-site plating or degreasing, drum rings, soil stockpiles, surface impoundments of liquids, or above-ground or underground storage tanks. There has been no apparent commercial-scale agriculture on the Property. Sanitary wastewater is conveyed through the municipal collection system to EBMUD's wastewater treatment plant. Storm water runoff from the lot and runs overland to W. MacArthur Boulevard and M.L.K. Jr. Way.

6.3 On-Site and Off-Site Contamination

On-Site Sources
Evidence of on-site contamination on the Property was not observed during the reconnaissance performed on June 14 2017. Based upon reconnaissance and review of historical information, weathering of lead-based paint and past applications of lead-based paint or pest control chemicals are potential source of lead or organo-chlorine pesticide (OCP) residues in the near-surface soil; therefore, several soil samples were collected and were tested by a certified environmental laboratory for

lead and OCPs. Results, presented in Tables 1 and 2 or shown in Figure 4, indicate that elevated lead in soil will require special handling and off-site landfill disposal.

Off-Site Sources
Current land uses adjoining the Property do not generally appear to engage in use of hazardous materials and do not generate hazardous waste. Past dry cleaners or water laundries are not located so close to the Property as to pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property. There is no evidence of proximate, upgradient hazardous liquids or hazardous solids storage, past or present, which poses a risk of current release or past release and environmental impairment which would constitute an REC for the Property.

6.4 Aboveground/Underground Storage Tanks (ASTs/USTs)

Evidence of past or present ASTs or USTs was not observed at the Property during the assessor's recent reconnaissance of the Property on June 14, 2017. Fuel islands or above-ground tanks on the Property were not apparent in the Sanborn maps (Appendix D) or aerial photographs (Appendix E) viewed for this assessment. Several former gas stations were located in the area, including two stations located on adjoining off-site parcels south of the Property and two other former gas stations located north of the Property (see Figure 3 and Appendix E).

In view of their locations and direction of groundwater flow toward the west-northwest, west, west-southwest and southwest, the former service stations do not pose an obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

6.5 Polychlorinated Biphenyls (PCBs)

Pole-mounted transformers were not noted on the Property or around the Property's perimeter. Certain older light ballasts do generally contain PCBs and these vintage light fixtures with potential PCB-containing ballasts, if present, were not observed because building interiors were not observed. If light ballasts not having the non-PCB label are encountered in the subject buildings, they should be safely removed and containerized for proper disposal.

6.6 Asbestos-Containing Materials (ACMs)

ACMs were not observed due to lack of access into the buildings. Small areas of ACMs the form of vinyl asbestos tiles (VAT), in general, could be expected in the former stores and in the kitchen of bathrooms of the former residences. VAT in floor coverings or in the roofing felt or is categorized herein as a business environmental risk but not an REC. Survey of potential asbestos-containing materials by means of sampling and laboratory testing is not within the scope of ASTM E 1527-13 or of this particular assignment.

The general regulatory framework addresses demolition/renovation, asbestos waste disposal, and worker safety. The regulations are contained in the California Code of Regulations, Title 8, Section 1529, Construction Safety Orders, and also in local regulations of the Bay Area Air Quality Management District (BAAQMD).

Building demolition or partial demolition "gutting" generally requires asbestos survey and notification of the BAAQMD to obtain a J-number and avoid potential release of asbestos fibers during demolition. These notices are routine and removal of small quantities of ACMs before demolition is normal practice which is not an REC for the prospective buyer or owner of the Property.

6.7 Lead-Based Paint and Lead Solder

In view of the pre-1911 year of construction of the buildings currently on the Property or formerly on the Property, lead-based paint is likely on painted woodwork, window sashes, sills, door thresholds, and exterior surfaces. Lead-affected soil caused by painting drips or weathering are likely to be encountered in any exposed soil areas around the building's drip line. Lead-affected here means above background concentration or above 80 mg/Kg which is the RWQCB's 2016 Environmental Screening Level (ESL) and DTSC's Screening Level (SL).

Lead levels in near-surface soil was tested by means of sampling and laboratory testing. Results are presented in Tables 1 and 2 and are shown in Figure 4. Levels in soil at 0–6 inch depth around the building edges and along the western fence line generally exceed the RWQCB's ESL and DTSC's SL for unrestricted residential land use (80 mg/Kg). Lead levels in near-surface soil are elevated including lead levels in near-surface soil on the undeveloped parcel APN 012-964-006. This should not be a surprise in view of the former building on APN 012-964-006 and tendency for lead residues to remain in the near-surface soil.

Surveys of potential lead-based paint and lead in drinking water are not within the scope of ASTM E 1527-13 or of this particular assignment. Lead survey is not required by local, state or federal law, except in the context of demolition or renovation where determination of lead hazard may be necessary for worker protection. Cal/OSHA has written Construction Safety Orders, LEAD, Section 1532.1, amended May 6, 2014, codified in Title 8, California Code of Regulations. When originally effective (November 4, 1993), this standard was identical to the federal standard, 29 CFR 1926.62. California now has some additional revisions, which are no less stringent than their federal counterparts. For the purposes of Cal/OSHA's Construction Safety Orders, 0.06 percent lead dry weight (600 ppm) demonstrates the presence of lead surface coatings or material that constitute a health hazard to employees engaged in lead-related construction work.

6.8 Radon

In twenty (20) tests conducted in Zip Code areas 94608 and 94609, of which the Property is a part, one of the tests equaled or exceeded 4 pCi/L (California DHS, 2010). Based upon California EPA's radon survey of the state, therefore, the Property is not expected to be in an area having airborne or soil gas radon concentrations above the standard 4 pCi/L. Holocene alluvial fan deposits mapped in the area, including the Property, are not prone to have radon levels at or above 4 pCi/L (Figure 5). Radon is not, therefore, an expected or obvious REC for the Property.

7.0 CONCLUSIONS

The environmental assessor has performed a Phase I Environmental Site Assessment, in general conformance with the scope and limitations of ASTM Standard Practice E 1527-13, for 3801-07 and 3813-3819 Martin Luther King Jr. Way, and 652-656 W. MacArthur Boulevard in Oakland, California, the Property. Any exception to, or deletions from, the Standard Practice are described in Section 2.2 of this report. This assessment confirms presence of lead residues in near-surface soil on the Property. This assessment has revealed no other evidence of a Recognized Environmental Condition (REC), that is, a past release, a current release, or an imminent threatened release of a hazardous substance, petroleum product or waste, in connection with the Property.

Based on the information obtained during this investigation by the environmental assessor, professional experience, and current regulatory guidelines, the following conclusions have been made:

- This assessment confirms presence of lead residues in near-surface soil on the Property which likely will necessitate remedial action.
- This assessment has not revealed evidence of any obvious Recognized Environmental Condition (REC), historic REC, or controlled REC in connection with the Property.
- The adjoining auto repair use and former gas station uses do not pose any obvious likelihood or an apparent risk of environmental impairment for the owner of the Property.

Business Environmental Risk The contemplated use of the Property for a residential CN-3 use will entail demolition of the existing improvements. Demolition sometimes requires removal of regulated asbestos-containing materials (RACMs). Costs for removal would depend on additional information such as, for example, the locations and quantities of confirmed ACMs. Estimates could be prepared by local qualified contractors based on results of an asbestos survey. However, in view of the expected small areas of vinyl asbestos floor tile (VAT) or sheet linoleum, the cost for removal of ACM is expected to be low.

8.0 RECOMMENDATIONS

8.1 Corrective & Regulatory Compliance Actions

Corrective actions are not recommended as none is warranted.

8.2 Subsequent Phase II Study

Preliminary Phase II screening identified near-surface lead residues which substantially exceed the local applicable ESL and SL. Additional Phase II delineation is recommended to assess the areal extent and depth of lead-affected soil. Pre-demolition asbestos survey and removal of regulated ACMs (RACMs) is recommended to comply with local BAAQMD regulation.

8.3 Projected Costs of Corrective & Regulatory Compliance Actions

Corrective action tentatively is recommended to remove lead-affected soil for off-site disposal in appropriate landfills. A cost at this time is based on assumption about the volume of soil to be disposed and waste soil classification. For 6,500 square feet of surface area and 1-foot excavation depth,—all classified as California, non-RCRA hazardous waste,—the cost for transport and disposal of 320 cubic yards of stockpiled soil at Class I Kettleman Hills Landfill is approximately $60,000 (complete with transport, fees, local and State BOE taxes). Additional costs would accrue for sampling, testing, excavating, waste profiling, and loading.

Before demolition, an asbestos consultant should be retained. Building demolition in the jurisdiction of the City of Oakland and BAAQMD requires a pre-demolition asbestos survey to obtain a "J-Number" before the City of Oakland will issue a demolition or building permit. Cal/OSHA Construction Safety Orders will apply during demolition.

9.0 CERTIFICATION

This Phase I Environmental Site Assessment was performed by the undersigned, who is a qualified environmental professional, in general conformance with the scope and limitations of ASTM Practice E 1527-13 the Property at 3801-07 Martin Luther King Jr. Way, in Oakland, California. Any exceptions to, or deletions from, this practice are described in Section 2.2 of this report.

The undersigned assessor meets the qualifications requirements of the U.S. EPA All Appropriate Inquiries standard, Final Rule (40 CFR 312.10). All appropriate inquiries (AAI) were conducted in accordance with the requirements of the Final Rule (40 CFR 312.20 *et seq*.) except as noted in Section 2.2.

The prospective buyer, Resources for Community Development, its affiliates and lender, their successors or assigns, can rely upon the information presented herein as factual, true and accurate, and in general accordance with the ASTM E 1527-13 Standard for Practice.

Marc R Papineau

Marc Papineau

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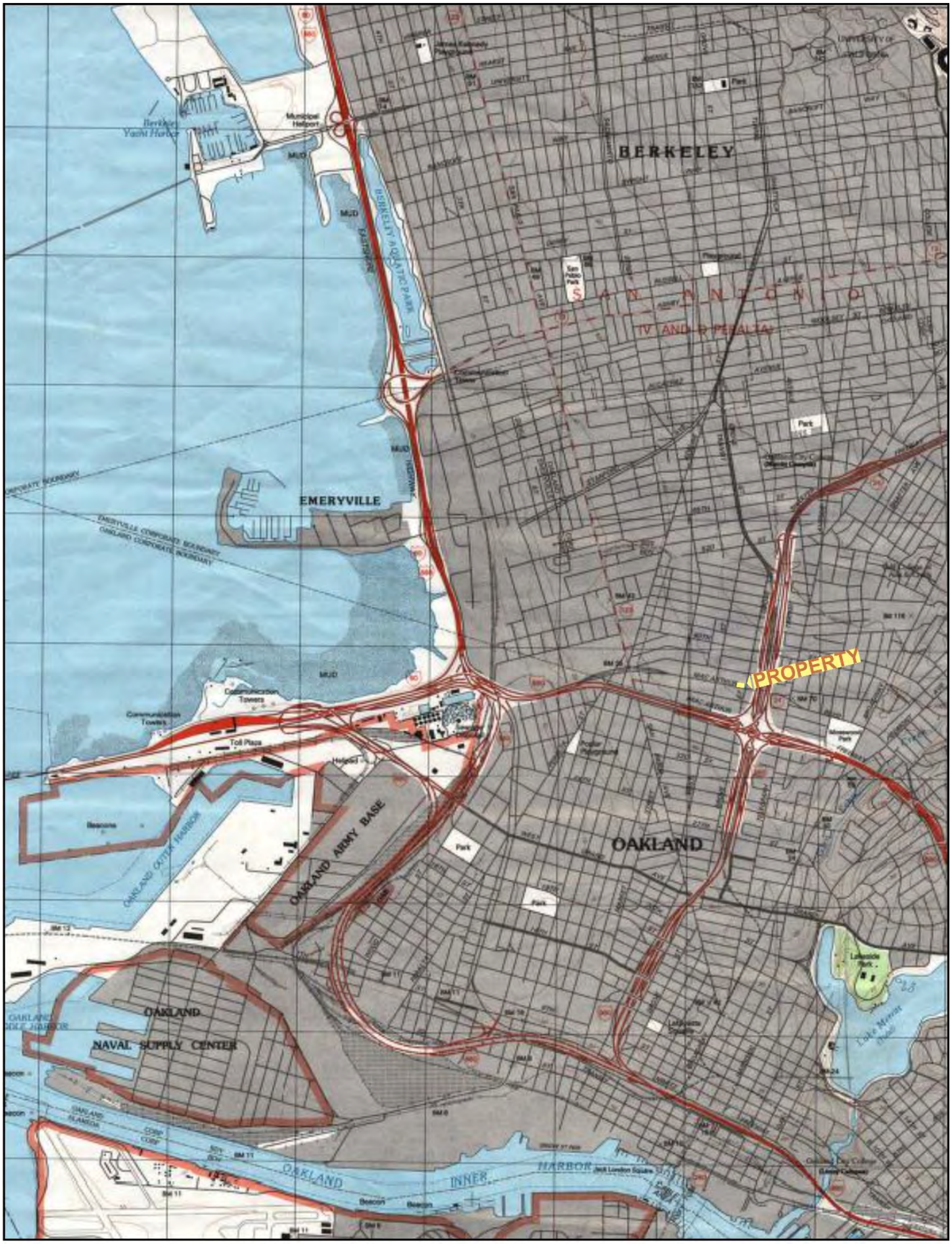


20 Years
1995-2015
environmental service
by Papineau

N
0 2000
FEET

Figure 1
Property Location Map
3801-07 Martin Luther King Jr. Way
Oakland, California

environmental service
by Papineau

20 Years 1995-2015

N

0 40 80
FEET

Figure 2
Neighborhood Map
M.L.K./MacArthur Blvd.
Oakland, California

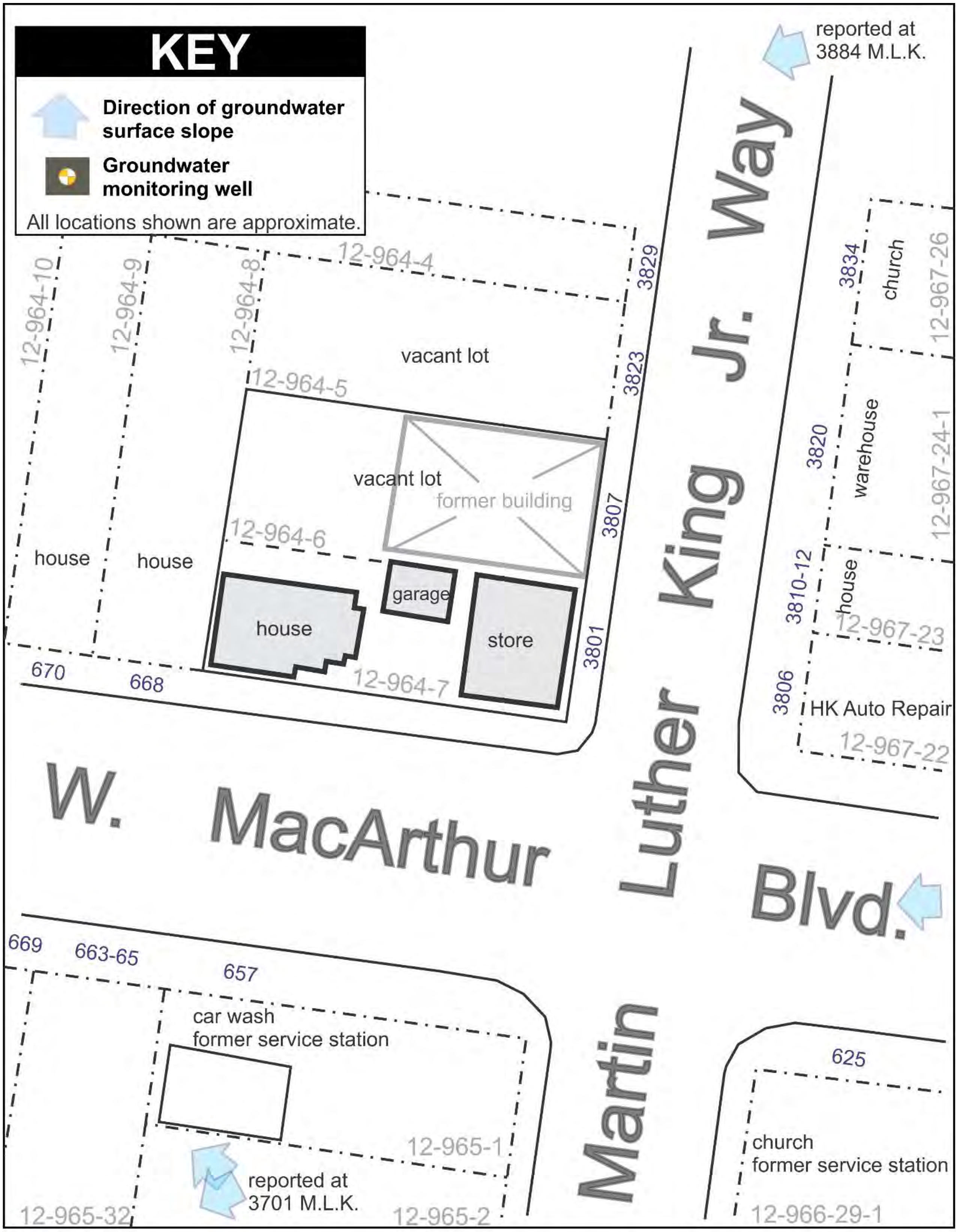
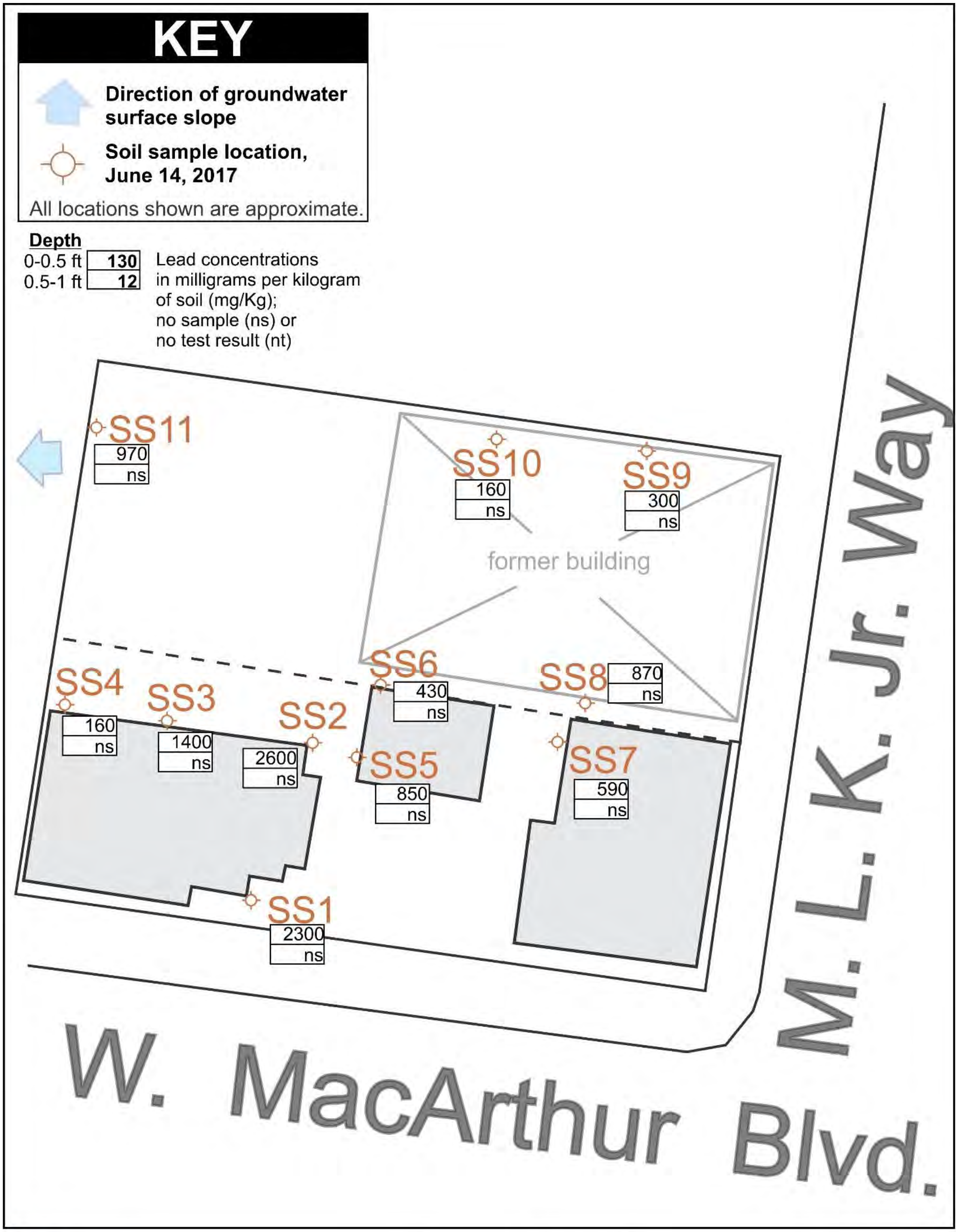


Figure 3

Neighborhood Detail
1233-49 23rd Avenue
Oakland, California



20 Years 1995-2015

environmental service
by Papineau

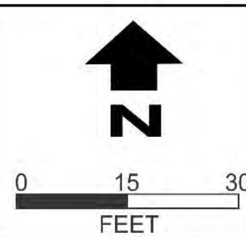


Figure 4

Sample Location Map
3801-07 M. L. K. Jr. Way
Oakland, California

20 Years
1995-2015

environmental service
by Papineau

N

0 1000 2000
FEET

Figure 5
Geologic Map
M.L.K. Jr. Way
& MacArthur Blvd.
Oakland, California

TABLE 1

Summary of Lead & Organo-Chlorine Pesticide Test Results
3801-07 M.L.K. Jr. Way in Oakland, California
Sampling Performed on June 14, 2017

Organo-Chlorine Pesticide	RWQCB 2016 Residential ESLs			Evaluation		
	Resident exposure (mg/Kg)	Construction Worker exposure (mg/Kg)	Leaching to groundwater (mg/Kg)	Number of "hits"	Maximum Level (mg/Kg)	Field Point/ Sample ID (see Figure 4)
SAMPLES SS1 THROUGH SS11						
Lead	80	320	----	11 / 11	**2600**	SS2
Technical chlordane	0.48	14	15	10 / 11	**1.2**	SS3
α-Chlordane	0.48	14	15	11 / 11	0.19	SS3
γ-Chlordane	0.48	14	15	11 / 11	0.16	SS3
DDD	2.7	81	750	10 / 11	0.091	SS3
DDE	1.9	57	1100	11 / 11	0.048	SS3
DDT	1.9	57	4.3	11 / 11	0.84	SS3
Dieldrin	0.038	1.1	0.00017	11 / 11	**0.16**	SS10
Endrin	21	71	0.00065	2 / 11	0.0022	SS10
Heptachlor	0.14	3.8	0.00077	3 / 11	0.0025	SS1
Heptachlor epoxide	0.067	1.9	0.00042	6 / 11	0.0063	SS3
Hexachlorobenzene	0.34	9.5	790	3 / 11	0.00076J	SS10
Methoxychlor	350	1200	19	2 / 11	0.012	SS4
EVALUATION OF INITIAL RESULTS						
Do test results exceed residential ESL for direct exposure?						YES (a)
Do test results exceed construction worker ESL for direct exposure?						YES (b)
Do test results indicate a widespread or site-wide soil leaching issue?						NO

NOTES:

- J Result is lower than the reporting limit but more than the Method Detection Limit (MDL). Numbers reported with a "J flag" appended are best estimates.
- a Lead concentration exceeds the residential direct exposure ESL in all eleven samples and also exceeds the construction worker ESL in eight of eleven samples. Dieldrin concentration exceeds the residential direct exposure ESL in two of eleven samples. Technical chlordane concentration exceeds the residential direct exposure ESL in only one of eleven samples (see Table 2).
- b Lead concentration exceeds the construction worker ESL in eight of eleven samples.

SOURCES: McCampbell Analytical, Inc., June 23, 2017, amended July 13, 2017; RWQCB, 2016.

TABLE 2

Soil Screening Test Results (mg/Kg)

3701-07 M.L.K. Jr. Way in Oakland, California

Sampling Performed on June 14, 2017

Parameter	Field Point / Soil Sample ID						
	SS1-0.5	SS2-0.5	SS3-0.5	SS4-0.5	SS5-0.5	SS6-0.5	SS7-0.5
Sample depth (in)	0”–6”	0”–6”	0”–6”	0”–6”	0”–6”	0”–6”	0”–6”
Lead	**2300**	**2600**	**1400**	**160**	**850**	**430**	**590**
Technical chlordane	0.083	0.21	**1.2**	0.035	0.28	0.10	0.074
α-Chlordane	0.012	0.035	0.19	0.0051	0.046	0.019	0.0066
γ-Chlordane	0.0097	0.027	0.16	0.0029	0.041	0.018	0.0075
DDD	0.015	0.041	0.091	0.0013	0.028	0.0030	0.0019
DDE	0.014	0.016	0.048	0.0041	0.0092	0.010	0.0038
DDT	0.11	0.36	0.84	0.048	0.42	0.040	0.052
Dieldrin	0.014	0.019 P	0.031 P	**0.041**	0.010 P	0.016	0.0021
Endrin	ND	ND	ND	0.0020	ND	ND	ND
Heptachlor	0.0025	ND	0.0021	ND	0.00044	ND	ND
Heptachlor epoxide	0.00080 JP	0.0019 P	0.0063 P	ND	0.0022 P	ND	ND
Hexachlorobenzene	0.00036 J	ND	ND	ND	0.00040 J	ND	ND
Methoxychlor	ND	ND	ND	0.012	ND	ND	ND
SCREENING RESULTS							
Do test results exceed residential ESL for direct exposure (see ESLs below)?							YES
Do test results exceed construction worker ESL for direct exposure (see ESLs below)?							NO
Do test results indicate a substantial soil leaching issue?							NO

Parameter	Field Point / Soil Sample ID				RWQCB 2016 ESLs (mg/Kg)		
	SS8-0.5	SS9-0.5	SS10-0.5	SS11-0.5	Resident exposure	Trench worker	Soil leaching
Sample depth (in)	0”–6”	0”–6”	0”–6”	0”–6”			
Lead	**870**	**300**	**160**	**970**	80	320	---
Technical chlordane	0.25	ND	0.10	0.051	0.48	14	15
α-Chlordane	0.040	0.0022	0.019	0.0049	0.48	14	15
γ-Chlordane	0.029	0.0014	0.0096	0.0041	0.48	14	15
DDD	0.011	ND	0.0011	0.00054 J	2.7	81	750
DDE	0.016	0.0024	0.020	0.0059	1.9	57	1,100
DDT	0.065	0.0073	0.040	0.039	1.9	57	4.3
Dieldrin	0.0091	0.015	**0.16**	0.0020	0.038	1.1	0.00017
Endrin	ND	ND	0.0022	ND	21	71	0.00065
Heptachlor	ND	ND	ND	ND	0.14	3.8	0.00077
Heptachlor epoxide	0.0025	ND	0.0028	ND	0.067	1.9	0.00042
Hexachlorobenzene	ND	ND	0.00076 J	ND	0.34	9.5	790
Methoxychlor	ND	ND	ND	0.0024	350	1200	19
SCREENING RESULTS							
Do test results exceed residential ESL for direct exposure (see ESLs above)?							YES
Do test results exceed construction worker ESL for direct exposure (see ESLs above)?							NO
Do test results indicate a substantial soil leaching issue?							NO

NOTES:

1. Field Point locations are as shown in Figure 4.
2. Concentrations are in parts per million (mg/Kg).
3. “<” means concentration of chemical was less than the stated reporting limit.
4. “J” means an estimated concentration above detection limit but less than the reporting limit.

SOURCE: McCampbell Analytical Inc., June 23, 2017, amended July 13, 2017

APPENDIX A
PHOTOGRAPHS

Plate 1. View Looking Northwest across W. MacArthur Boulevard to the Property (3801-07 Martin Luther King Jr. Way), in Oakland, California (June 14, 2017)

Plate 2. View Looking North along Martin Luther King Jr. Way to the Property, in Oakland, California (June 14, 2017)

Plate 4. View Looking South at the Eastern Portion of the Property in Oakland, California (June 14, 2017)

Plate 3. View Looking West across Martin Luther King Jr. Way to the Property (3801-07 Martin Luther King Jr. Way), Oakland, California (June 14, 2017)

Plate 5. View Looking Southeast from the Property, 3801-07 Martin Luther King Jr. Way, in Oakland, California (June 14, 2017) ***NOTE: Garage in FOREGROUND.***

Plate 6. View Looking South from the Property, 3801-07 Martin Luther King Jr. Way in Oakland, California (June 14, 2017)

Plate 7. View Looking East along the Back Side of the House at 3801-07 Martin Luther King Jr. Way in Oakland, California (June 14, 2017)

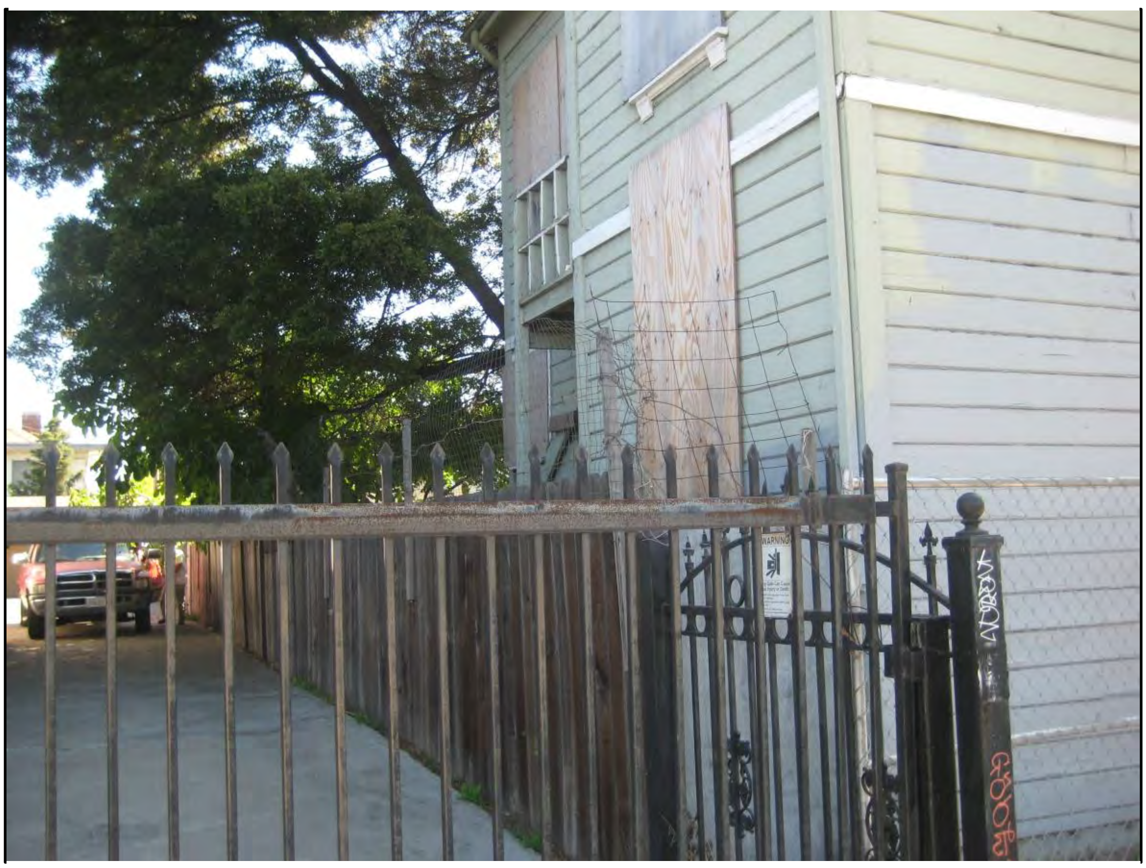


Plate 8. View Looking North between Lots at 668 W. MacArthur Boulevard and the Property, 3801-07 Martin Luther King Jr. Way, in Oakland, California

Plate 9. View Looking Southwest across the Lot at 3801-07 Martin Luther King Jr. Way in Oakland, California (June 14, 2017)

Plate 10. View Looking West along the Back Side of the Commercial Building at 3801-07 Martin Luther King Jr. Way in Oakland, California (June 14, 2017)

APPENDIX B
DATABASE SEARCH REPORT

RecCheck

The Standard for ASTM/AAI Radius Searches

(One Mile Environmental Records Search, Exceeds ASTM 1527/1528 and EPA All Appropriate Inquiry)

Report Results

REPORT RESULTS

Site Location:

3801-21 Martin Luther King Jr. Way
Oakland, CA 94609
(N 37-49-39, W 122-16-10) NAD83

Client:

Environmental Service

TABLE OF CONTENTS

EXECUTIVE SUMMARY

INFORMATION ON THE REQUESTED LOCATION

Site Address:	3801-21 Martin Luther King Jr. Way Oakland, CA 94609
Client Project Name/Number:	3801-07 MLK 2017-028
Coordinates:	N 37-49-39, W 122-16-10 (NAD 83) 37.827513, -122.269349
Date of Report	June 15, 2017
ERS Project Number:	2104684031
Subject Site Listed on the following lists:	Not Listed
Subject Site Listed as Map ID#:	N/A
USGS 7.5 Minute Quad Map:	Oakland West (2015-03-11)
Subject Site Located within a Potential Area of Concern:	No
Township, Section and Range:	Township: 01S Range: 04W Section: 23 Baseline: Mt. Diablo
Site Elevation: **(feet above or below (-) mean sea level)**	67
Flood Zone: **(FEMA Q3 Digital Data)**	Panel: 06001C0059G, Effective Date: 8/3/2009 Zone X - Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level.
Fire Insurance Map Coverage:	Coverage Likely Exists in Volume 1-1A of Oakland. Years: 1882, 1888, 1889, 1901, 1902, 1903, 1908, 1910, 1911, 1912, 1913, 1917, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1940, 1943, 1944, 1945, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1964, 1965, 1966, 1967, 1968, 1969, 1970. Sources: ERS; Oakland Public Library ; California State Univ., Northridge,Univ. of California, Berkeley photocopy ; California State Univ., Northridge,Univ. of California, Berkeley microform ; Huntington Library ; Oakland Public Library,Univ. of California, Berkeley ; ; California State Univ., Northridge ; Univ. of California, Berkeley ; California State Univ., Northridge,Univ. of California, Berkeley ; Formerly US Census Bureau, Jeffersonville, IN ; Oakland Public Library,California State Univ., Northridge

Radon Information:	EPA Radon Zone: 2 (Predicted avg for county: 2 to 4 pCi/L)For zip code 94609: Number of tests per zip code: 3 Number of tests where radon is > 4 pCi/L: 0 Percentage of test where radon is > 4 pCi/L: 0.00% Other Information: Not Reported
Search Radius Expansion Size: (In Miles)	0
Soil Type: (USDA Soil Survey Geographic Database) (SSURGO)	Urban land-Danville complex Map Unit Type: Complex Hydric: No Drainage Class: Well drained General Information: Fine, montmorillonitic, thermic Pachic Argixerolls
Zip Codes Searched for "Un-Mappable" Sites:	Not Researched
Occurrence Count:	165

SUMMARY OF OCCURRENCES

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
22 Maps: 1, 2, 3	BAY AQMD-BA-22703 BAY AREA RAPID TRANSIT	550 W MACARTHUR BLVD OAKLAND	Air-CA	Listed	0.16 E	4
31 Maps: 1, 2, 3	BAY AQMD-BA-14572 CALIFORNIA HIGHWAY PATROL-TELECOMMUNICATIONS	3601 TELEGRAPH AVE OAKLAND	Air-CA	Listed	0.25 SE	-1
31 Maps: 1, 2, 3	389927 CHP Oakland Area/370	3601 TELEGRAPH AVE OAKLAND	AST-CRSP-CA	Listed	0.25 SE	-1
8 Maps: 1, 2, 3	60701 Lucky's Auto Body Shop	3860/3884 Martin Lurther King, Jr. Way Oakland	BF-US	Listed	0.1 NE	6
8 Maps: 1, 2, 3	01990026 LUCKY'S AUTO BODY	3860/3884 MARTIN LUTHER KING JR. WAY OAKLAND	Cal-Eval-Hist	Listed	0.1 NE	6
53 Maps: 1, 3	01340118 CAL TECH METALS	825, 829, 841 31ST STREET OAKLAND	Cal-State-Response-Active	Listed	0.54 SW	-32
54 Maps: 1, 3	60000594 Lane Metal Finishers	2942 San Pablo Avenue Oakland	Cal-State-Response-Active	Listed	0.62 SW	-37
55 Maps: 1, 3	01720109 HARRIS DRY CLEANERS	2801 MARTIN LUTHER KING JR. WAY OAKLAND	Cal-State-Response-Active	Listed	0.66 S	-34
32 Maps: 1, 3	T10000000406 MacArthur BART Transit Village	NONE 40TH STREET AND TELEGRAPH AVENUE (APNS 012-0969-053-03, 012-0968-055-01, 012-0967-049-01) Oakland	CBF-CA	Listed	0.27 NE	17
35 Maps: 1, 3	RO0003090-ALA Site Name Not Reported	0 TELEGRAPH AVE OAKLAND	County-LUST-CA	Listed	0.29 SE	-4

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
11 Maps: 1, 2, 3	RO0000242-ALA NEIGHBORHOOD LAUNDROMAT	3838 WEST ST Oakland	County-LUST-Closed-CA	Closed	0.11 NW	-1
14 Maps: 1, 2, 3	RO0003064-ALA RD MINER COMPANY	750 37th ST OAKLAND	County-LUST-Closed-CA	Closed	0.12 SW	-9
17 Maps: 1, 2, 3	RO0000650-ALA BART PROPERTY	3924 MARTIN LUTHER KING JR WAY Oakland	County-LUST-Closed-CA	Closed	0.15 NE	8
34 Maps: 1, 3	RO0000264-ALA SHELL #12-9452	500 40TH ST Oakland	County-LUST-Closed-CA	Closed	0.29 NE	20
37 Maps: 1, 3	RO0000991-ALA SUMMIT MEDICAL CENTER	3420 TELEGRAPH AVE Oakland	County-LUST-Closed-CA	Closed	0.36 SE	-9
38 Maps: 1, 3	RO0001041-ALA CITY OF OAKLAND FIRE STATION #5	934 34TH ST Oakland	County-LUST-Closed-CA	Closed	0.4 SW	-29
40 Maps: 1, 3	RO0000270-ALA SIMPSON, RONN	489 43RD ST Oakland	County-LUST-Closed-CA	Closed	0.44 NE	29
42 Maps: 1, 3	RO0000272-ALA WALTER BLUMERT COMPANY	490 43RD ST Oakland	County-LUST-Closed-CA	Closed	0.45 NE	30
43 Maps: 1, 3	RO0000337-ALA CALIFORNIA LINEN SUPPLY CO	989 41ST ST Oakland	County-LUST-Closed-CA	Closed	0.46 NW	-10
44 Maps: 1, 3	RO0000985-ALA BLAZIC INDUSTRIAL BALANCING	1016 MACARTHUR BLVD Oakland	County-LUST-Closed-CA	Closed	0.46 W	-26
45 Maps: 1, 3	RO0000006-ALA SHELL #13-9619	3420 SAN PABLO AVE Oakland	County-LUST-Closed-CA	Closed	0.47 W	-31
46 Maps: 1, 3	RO0001099-ALA LOOMIS ARMORED INC	936 BROCKHURST ST Oakland	County-LUST-Closed-CA	Closed	0.48 SW	-33
47 Maps: 1, 3	RO0000004-ALA THRIFTY OIL #49	3400 SAN PABLO AVE Oakland	County-LUST-Closed-CA	Closed	0.48 W	-33

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
48 Maps: 1, 3	RO0000881-ALA KELLY AUTO PARTS	4400 TELEGRAPH AVE Oakland	County-LUST-Closed-CA	Closed	0.48 NE	33
50 Maps: 1, 3	RO0000186-ALA FIDELITY ROOF COMPANY	1075 40TH ST Oakland	County-LUST-Closed-CA	Closed	0.5 NW	-16
52 Maps: 1, 3	RO0000132-ALA ARCO	4401 MARKET ST Oakland	County-LUST-Closed-CA	Closed	0.5 NW	9
6 Maps: 1, 2, 3	RO0002910-ALA J&H AUTO REPAIR AND GAS STATION	3701 MARTIN LUTHER KING JR WAY OAKLAND	County-LUST-Open-CA	Open	0.07 S	-2
9 Maps: 1, 2, 3	RO0000027-ALA GROVE STREET WASH RACK	3884 MARTIN LUTHER KING JR WAY Oakland	County-LUST-Open-CA	Open	0.11 NE	6
11 Maps: 1, 2, 3	RO0000242-ALA NEIGHBORHOOD LAUNDROMAT	3838 WEST ST Oakland	County-LUST-Open-CA	Open	0.11 NW	-1
13 Maps: 1, 2, 3	RO0000076-ALA ARCO #04931	731 MACARTHUR BLVD Oakland	County-LUST-Open-CA	Open	0.12 W	-7
14 Maps: 1, 2, 3	RO0003064-ALA RD MINER COMPANY	750 37th ST OAKLAND	County-LUST-Open-CA	Open	0.12 SW	-9
33 Maps: 1, 3	RO0002438-ALA CHEVRON #9-2029	890 MACARTHUR BLVD OAKLAND	County-LUST-Open-CA	Open	0.28 W	-15
34 Maps: 1, 3	RO0000264-ALA SHELL #12-9452	500 40TH ST Oakland	County-LUST-Open-CA	Open	0.29 NE	20
35 Maps: 1, 3	RO0003090-ALA CALTRANS TELEGRAPH & HWY 24	0 TELEGRAPH AVE OAKLAND	County-LUST-Open-CA	Open	0.29 SE	-4
36 Maps: 1, 3	RO0000490-ALA SAN FRANCISCO FRENCH BREAD	3924 MARKET ST Oakland	County-LUST-Open-CA	Open	0.3 NW	-7
41 Maps: 1, 3	RO0003054-ALA TONG PROPERTY	3133 MARTIN LUTHER KING JR WAY OAKLAND	County-LUST-Open-CA	Open	0.45 S	-21

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
43 Maps: 1, 3	RO0000337-ALA CALIFORNIA LINEN SUPPLY CO	989 41ST ST Oakland	County-LUST-Open-CA	Open	0.46 NW	-10
45 Maps: 1, 3	RO0000006-ALA SHELL #13-9619	3420 SAN PABLO AVE Oakland	County-LUST-Open-CA	Open	0.47 W	-31
47 Maps: 1, 3	RO0000004-ALA THRIFTY OIL #49	3400 SAN PABLO AVE Oakland	County-LUST-Open-CA	Open	0.48 W	-33
49 Maps: 1, 3	RO0000131-ALA FG GASOLINE	3314 SAN PABLO AVE Oakland	County-LUST-Open-CA	Open	0.49 SW	-33
50 Maps: 1, 3	RO0000186-ALA FIDELITY ROOF COMPANY	1075 40TH ST Oakland	County-LUST-Open-CA	Open	0.5 NW	-16
52 Maps: 1, 3	RO0000132-ALA ARCO	4401 MARKET ST Oakland	County-LUST-Open-CA	Open	0.5 NW	9
13 Maps: 1, 2, 3	FA0321486-ALA Westco Gas Food	731 W MacArthur Blvd Oakland	County-UST-CA	Listed	0.12 W	-7
11 Maps: 1, 2, 3	56225 G & J Whirl & Twirl Laundry Mt	3838 West St Emeryville	DCF2-CA	Listed	0.11 NW	-1
12 Maps: 1, 2, 3	63170 Uni Clean	705 37th St Oakland	DCF2-CA	Listed	0.11 SW	-8
20 Maps: 1, 2, 3	64059 Yupi Building Svc	3715 West St Oakland	DCF2-CA	Listed	0.15 W	-8
11 Maps: 1, 2, 3	CAC000701240 1X NEIGHBORHOOD LAUNDRYMAT	3838 WEST STREET OAKLAND	DryCleaners-CA	Listed	0.11 NW	-1
6 Maps: 1, 2, 3	T06019709592 J&H AUTO REPAIR AND GAS STATION	3701 MARTIN LUTHER KING JR WAY OAKLAND	ENF-CA	Listed	0.07 S	-2
9 Maps: 1, 2, 3	T0600102106 GROVE STREET WASH RACK	3884 MARTIN LUTHER KING JR Oakland	ENF-CA	Listed	0.11 NE	6

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
13 Maps: 1, 2, 3	T0600100110 ARCO #04931	731 W MACARTHUR BLVD Oakland	ENF-CA	Listed	0.12 W	-7
14 Maps: 1, 2, 3	T0600101123 RD MINER COMPANY	750 37TH ST OAKLAND	ENF-CA	Listed	0.12 SW	-9
28 Maps: 1, 2, 3	T06019716388 REGAL #120 / EAST BAY SURGERY CENTER	3875 TELEGRAPH OAKLAND	ENF-CA	Listed	0.24 E	13
31 Maps: 1, 2, 3	T0619763665 CHP - OAKLAND	3601 TELEGRAPH AVENUE OAKLAND	ENF-CA	Listed	0.25 SE	-1
2 Maps: 1, 2, 3	1650025 Alex and Angel's Tires	657 W MacArthur Blvd Oakland	Haulers-CA	Listed	0.04 S	0
4 Maps: 1, 2, 3	215038 It's About Cars	622 W Macarthur Blvd Oakland	Hist-Auto Dealers	Listed	0.06 E	3
4 Maps: 1, 2, 3	157926 Its About Cars	622 W Macarthur Blvd Oakland	Hist-Auto Dealers	Listed	0.06 E	3
4 Maps: 1, 2, 3	1580504-PD DISCOUNT AUTO CTR	622 W MACARTHUR BLVD OAKLAND	Hist-Auto Dealers	Listed	0.06 E	3
1 Maps: 1, 2, 3	546965-PD QUALITY TUNE-UP	640 W MACARTHUR BLVD OAKLAND	Hist-Auto Repair	Listed	0.03 E	1
10 Maps: 1, 2, 3	464852-PD INSTA LUBE	736 W MACARTHUR BLVD OAKLAND	Hist-Auto Repair	Listed	0.11 W	-6
16 Maps: 1, 2, 3	611986-PD YEM HONDA HYUNDAI AUTO SVC	3909 MARTIN LUTHER KING JR WAY OAKLAND	Hist-Auto Repair	Listed	0.13 N	8
21 Maps: 1, 2, 3	39310 Big O Tires	810 W Macarthur Blvd Oakland	Hist-Auto Repair	Listed	0.16 W	-6
21 Maps: 1, 2, 3	10156 BIG O TIRES	810 W MACARTHUR BLVD Emeryville	Hist-Auto Repair	Listed	0.16 W	-6

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
27 Maps: 1, 2, 3	373049-PD AL MANNING BODY SHOP	4101 MARTIN LUTHER KING JR WAY OAKLAND	Hist-Auto Repair	Listed	0.23 N	13
1 Maps: 1, 2, 3	7816513 QUALITY TUNE UP #35	640 W. MACARTHUR BLVD OAKLAND	Hist-CalFID-CA	Listed	0.03 E	1
6 Maps: 1, 2, 3	4034840 HAMMOND SERVICE	3701 MARTIN LUTHER KING OAKLAND	Hist-CalFID-CA	Listed	0.07 S	-2
10 Maps: 1, 2, 3	7815213 INSTA LUBE	736 W. MACARTHUR BLVD OAKLAND	Hist-CalFID-CA	Listed	0.11 W	-6
11 Maps: 1, 2, 3	7434979 1X NEIGHBORHOOD LAUNDRYMAT	3838 WEST ST OAKLAND	Hist-CalFID-CA	Listed	0.11 NW	-1
15 Maps: 1, 2, 3	7810607 1X JOHNNYS AUTOMOTIVE	3901 MARTIN LUTHER KING JR. DR OAKLAND	Hist-CalFID-CA	Listed	0.12 N	6
18 Maps: 1, 2, 3	7817872 TUNE DYNAMICS	801 W. MACARTHUR BLVD OAKLAND	Hist-CalFID-CA	Listed	0.15 W	-7
18 Maps: 1, 2, 3	7814157 BEST AUTO REPAIR	801 W. MAC ARTHUR BLVD OAKLAND	Hist-CalFID-CA	Listed	0.15 W	-7
21 Maps: 1, 2, 3	7732863 BIG O TIRE	810 W. MACARTHUR BLVD OAKLAND	Hist-CalFID-CA	Listed	0.16 W	-6
24 Maps: 1, 2, 3	7812368 1X 544 37TH ST.	544 37TH ST OAKLAND	Hist-CalFID-CA	Listed	0.19 SE	1
25 Maps: 1, 2, 3	7808433 1X SACRED HEART	675 41ST ST OAKLAND	Hist-CalFID-CA	Listed	0.21 N	10
26 Maps: 1, 2, 3	7808270 1X OAKLAND TELEGRAPH AVE LTD PARTNERSHIP	3833 TELEGRAPH AVE OAKLAND	Hist-CalFID-CA	Listed	0.22 E	8
28 Maps: 1, 2, 3	3203829 REGAL STATION #102	3875 TELEGRAPH AVE OAKLAND	Hist-CalFID-CA	Listed	0.24 E	13

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
28 Maps: 1, 2, 3	7817042 EAST BAY SURGERY CENTER LP	3875 TELEGRAPH AVE OAKLAND	Hist-CalFID-CA	Listed	0.24 E	13
28 Maps: 1, 2, 3	7817041 1X JOSEPH DI GIORGIO & SONS INC	3875 TELEGRAPH AVE OAKLAND	Hist-CalFID-CA	Listed	0.24 E	13
30 Maps: 1, 2, 3	7817253 LITHOGRAPH REPRODUCTION INC	4120 MARTIN LUTHER KING JR. WA OAKLAND	Hist-CalFID-CA	Listed	0.25 N	14
31 Maps: 1, 2, 3	3779102 OAKLAND CHP	3601 TELEGRAPH AVE OAKLAND	Hist-CalFID-CA	Listed	0.25 SE	-1
6 Maps: 1, 2, 3	7851803 HAMMOND SERVICE	3701 MARTIN L KING WAY OAKLAND	Hist-City-UST-CA	Listed	0.07 S	-2
12 Maps: 1, 2, 3	43 Uniclean	705 37th St Oakland	Hist-Cleaners	Listed	0.11 SW	-8
20 Maps: 1, 2, 3	75671 Yupi Building Services	3715 West St Emeryville	Hist-Cleaners	Listed	0.15 W	-8
3 Maps: 1, 2, 3	200109052 UNK	3820 MARTIN LUTHER KING JR BLVD OAKLAND	Hist-ERNS-US	Listed	0.04 E	2
7 Maps: 1, 2, 3	200249125 UNKNOWN	699 APGAR ST OAKLAND	Hist-ERNS-US	Listed	0.07 NW	0
7 Maps: 1, 2, 3	200221353 UNKNOWN	699 APGAR ST OAKLAND	Hist-ERNS-US	Listed	0.07 NW	0
29 Maps: 1, 2, 3	200005664 M&J TRANSMISSION	845 36TH STREET OAKLAND	Hist-ERNS-US	Listed	0.25 SW	-16
11 Maps: 1, 2, 3	7434979 NEIGHBORHOOD LAUNDROMAT	3838 WEST OAKLAND	Hist-HWS-CA	Listed	0.11 NW	-1
13 Maps: 1, 2, 3	930246 ARCO	731 MACARTHUR OAKLAND	Hist-HWS-CA	Listed	0.12 W	-7

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
31 Maps: 1, 2, 3	1231858 CALIFORNIA HIGHWAY PATROL	3601 TELEGRAPH OAKLAND	Hist-HWS-CA	Listed	0.25 SE	-1
9 Maps: 1, 2, 3	7433498 GROVE STREET WASH RACK	3884 MARTIN LUTHER KING OAKLAND	Hist-LUSTIS-CA	Listed	0.11 NE	6
11 Maps: 1, 2, 3	4223133 NEIGHBORHOOD LAUNDROMAT	3838 WEST ST OAKLAND	Hist-LUSTIS-CA	Listed	0.11 NW	-1
13 Maps: 1, 2, 3	930246 ARCO	731 MACARTHUR BLVD W OAKLAND	Hist-LUSTIS-CA	Listed	0.12 W	-7
14 Maps: 1, 2, 3	930122 RD MINER COMPANY	750 37TH ST OAKLAND	Hist-LUSTIS-CA	Listed	0.12 SW	-9
17 Maps: 1, 2, 3	5356196 BART	3924 MARTIN LUTHER KING OAKLAND	Hist-LUSTIS-CA	Listed	0.15 NE	8
31 Maps: 1, 2, 3	1231858 CALIFORNIA HIGHWAY PATROL	3601 TELEGRAPH AVE OAKLAND	Hist-LUSTIS-CA	Listed	0.25 SE	-1
11 Maps: 1, 2, 3	8461-R2 NEIGHBORHOOD LAUNDROMAT	3838 WEST ST OAKLAND	HIST-MTBE-CA	Listed	0.11 NW	-1
13 Maps: 1, 2, 3	8049-R2 ARCO # 04931	731 MACARTHUR BLVD W OAKLAND	HIST-MTBE-CA	Listed	0.12 W	-7
5 Maps: 1, 2, 3	1171282-PD LEONG GRAPHICS	679 APGAR ST OAKLAND	Hist-Printers	Listed	0.06 N	0
9 Maps: 1, 2, 3	7433498 GROVE STREET WASH RACK	3884 MARTIN LUTHER KING OAKLAND	Hist-Regional-SLIC-CA	Listed	0.11 NE	6
11 Maps: 1, 2, 3	4223133 NEIGHBORHOOD LAUNDROMAT	3838 WEST ST OAKLAND	Hist-Regional-SLIC-CA	Listed	0.11 NW	-1
13 Maps: 1, 2, 3	930246 ARCO	731 MACARTHUR BLVD W OAKLAND	Hist-Regional-SLIC-CA	Listed	0.12 W	-7

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
14 Maps: 1, 2, 3	930122 RD MINER COMPANY	750 37TH ST OAKLAND	Hist-Regional-SLIC-CA	Listed	0.12 SW	-9
17 Maps: 1, 2, 3	5356196 BART	3924 MARTIN LUTHER KING OAKLAND	Hist-Regional-SLIC-CA	Listed	0.15 NE	8
31 Maps: 1, 2, 3	1231858 CALIFORNIA HIGHWAY PATROL	3601 TELEGRAPH AVE OAKLAND	Hist-Regional-SLIC-CA	Listed	0.25 SE	-1
6 Maps: 1, 2, 3	4034840 HAMMOND SERVICE	3701 MARTIN L KING WAY OAKLAND	Hist-Regional-UST-CA	Listed	0.07 S	-2
9 Maps: 1, 2, 3	7433498 GROVE STREET WASH RACK	3884 MARTIN L KING WAY OAKLAND	Hist-Regional-UST-CA	Listed	0.11 NE	6
13 Maps: 1, 2, 3	930246 ARCO STATION #04931	731W MACARTHUR BLVD OAKLAND	Hist-Regional-UST-CA	Listed	0.12 W	-7
17 Maps: 1, 2, 3	8586302 FRANK'S AUTO REPAIR	3924 MARTIN L KING WAY OAKLAND	Hist-Regional-UST-CA	Listed	0.15 NE	8
23 Maps: 1, 2, 3	7006093 APOSTOLIC CHURCH OF DELIVERY	4006 MARTIN L KING WAY OAKLAND	Hist-Regional-UST-CA	Listed	0.18 N	10
24 Maps: 1, 2, 3	8568735 APARTMENT BUILDING	544 37TH ST OAKLAND	Hist-Regional-UST-CA	Listed	0.19 SE	1
28 Maps: 1, 2, 3	3203829 REGAL STATION #102	3875 TELEGRAPH AVE OAKLAND	Hist-Regional-UST-CA	Listed	0.24 E	13
31 Maps: 1, 2, 3	1231858 CALIFORNIA HIGHWAY PATROL	3601 TELEGRAPH AVE OAKLAND	Hist-Regional-UST-CA	Listed	0.25 SE	-1
13 Maps: 1, 2, 3	154399 K&H City Gas Beacon	731 W Macarthur Blvd Oakland	Hist-Service Stations	Listed	0.12 W	-7
13 Maps: 1, 2, 3	131851 GAS CITY	731 W MACARTHUR BLVD Oakland	Hist-Service Stations	Listed	0.12 W	-7

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
13 Maps: 1, 2, 3	200860 ARCO STATION #04931	731 WEST MACARTHUR BOULEVARD OAKLAND	Hist-Service Stations	Listed	0.12 W	-7
13 Maps: 1, 2, 3	34126-PD MANUS ARCO	731 W MACARTHUR BLVD OAKLAND	Hist-Service Stations	Listed	0.12 W	-7
13 Maps: 1, 2, 3	45869 Manu's Arco	731 W Macarthur Blvd Oakland	Hist-Service Stations	Listed	0.12 W	-7
31 Maps: 1, 2, 3	200872 CALIFORNIA HIGHWAY PATROL	3601 TELEGRAPH AVENUE OAKLAND	Hist-Service Stations	Listed	0.25 SE	-1
13 Maps: 1, 2, 3	258353 RAJINDER K GOYAL	731 W MACARTHUR BLVD OAKLAND	Hist-UST-CA	Listed	0.12 W	-7
28 Maps: 1, 2, 3	259478 REGAL STATION 102	3875 TELEGRAPH AVE OAKLAND	Hist-UST-CA	Listed	0.24 E	13
31 Maps: 1, 2, 3	219350 CALIFORNIA HIGHWAY PATROL	3601 TELEGRAPH AVE OAKLAND	Hist-UST-CA	Listed	0.25 SE	-1
31 Maps: 1, 2, 3	219351 CALIFORNIA HIGHWAY PATROL	3601 TELEGRAPH AVE OAKLAND	Hist-UST-CA	Listed	0.25 SE	-1
43 Maps: 1, 3	T0600100249 Site Name Not Reported	989 41ST ST OAKLAND	Hist-UST-Cleanup-CA	Listed	0.46 NW	-10
47 Maps: 1, 3	T0600101365 Site Name Not Reported	3400 SAN PABLO AVE OAKLAND	Hist-UST-Cleanup-CA	Listed	0.48 W	-33
50 Maps: 1, 3	T0600102117 Site Name Not Reported	1075 40TH ST OAKLAND	Hist-UST-Cleanup-CA	Listed	0.5 NW	-16
2 Maps: 1, 2, 3	342311-PD BURLEYS DETAIL	657 W MACARTHUR BLVD OAKLAND	Hist-Vehicle-Washing	Listed	0.04 S	0
1 Maps: 1, 2, 3	CAL000074673 QUALITY TUNE UP #35	640 W MACARTHUR BLVD OAKLAND	HWIS-CA	Listed	0.03 E	1

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
4 Maps: 1, 2, 3	CAL000116066 DISCOUNT AUTO CENTER	622 WEST MACARTHUR BLVD OAKLAND	HWIS-CA	Listed	0.06 E	3
11 Maps: 1, 2, 3	T0600101597 NEIGHBORHOOD LAUNDROMAT	3838 WEST Oakland	LUST-Closed-CA	Completed - Case Closed	0.11 NW	-1
14 Maps: 1, 2, 3	T0600101123 RD MINER COMPANY	750 37TH ST OAKLAND	LUST-Closed-CA	Completed - Case Closed	0.12 SW	-9
17 Maps: 1, 2, 3	T0600101979 BART PROPERTY	3924 MARTIN LUTHER KING JR Oakland	LUST-Closed-CA	Completed - Case Closed	0.15 NE	8
28 Maps: 1, 2, 3	T06019716388 REGAL #120 / EAST BAY SURGERY CENTER	3875 TELEGRAPH OAKLAND	LUST-Closed-CA	Completed - Case Closed	0.24 E	13
34 Maps: 1, 3	T0600101265 SHELL #12-9452	500 40TH Oakland	LUST-Closed-CA	Completed - Case Closed	0.29 NE	20
37 Maps: 1, 3	T0600100952 SUMMIT MEDICAL CENTER	3420 TELEGRAPH Oakland	LUST-Closed-CA	Completed - Case Closed	0.36 SE	-9
39 Maps: 1, 3	T0600101472 UNOCAL #3538	411 WEST MACARTHUR BOULEVARD Oakland	LUST-Closed-CA	Completed - Case Closed	0.43 SE	8
40 Maps: 1, 3	T0600102120 SIMPSON, RONN	489 43RD Oakland	LUST-Closed-CA	Completed - Case Closed	0.44 NE	29
42 Maps: 1, 3	T0600100822 WALTER BLUMERT COMPANY	490 43RD Oakland	LUST-Closed-CA	Completed - Case Closed	0.45 NE	30
43 Maps: 1, 3	T0600100249 CALIFORNIA LINEN SUPPLY CO	989 41ST Oakland	LUST-Closed-CA	Completed - Case Closed	0.46 NW	-10
44 Maps: 1, 3	T0600101618 BLAZIC INDUSTRIAL BALANCING	1016 MACARTHUR Oakland	LUST-Closed-CA	Completed - Case Closed	0.46 W	-26
45 Maps: 1, 3	T0600101253 SHELL #13-9619	3420 SAN PABLO Oakland	LUST-Closed-CA	Completed - Case Closed	0.47 W	-31

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
46 Maps: 1, 3	T0600100849 LOOMIS ARMORED INC	936 BROCKHURST Oakland	LUST-Closed-CA	Completed - Case Closed	0.48 SW	-33
47 Maps: 1, 3	T0600101365 THRIFTY OIL #49	3400 SAN PABLO Oakland	LUST-Closed-CA	Completed - Case Closed	0.48 W	-33
48 Maps: 1, 3	T0600100790 KELLY AUTO PARTS	4400 TELEGRAPH Oakland	LUST-Closed-CA	Completed - Case Closed	0.48 NE	33
50 Maps: 1, 3	T0600102117 FIDELITY ROOF COMPANY	1075 40TH STREET Oakland	LUST-Closed-CA	Completed - Case Closed	0.5 NW	-16
52 Maps: 1, 3	T0600100430 ARCO	4401 MARKET Oakland	LUST-Closed-CA	Completed - Case Closed	0.5 NW	9
6 Maps: 1, 2, 3	T06019709592 J&H AUTO REPAIR AND GAS STATION	3701 MARTIN LUTHER KING JR WAY OAKLAND	LUST-Open-CA	Open - Site Assessment	0.07 S	-2
9 Maps: 1, 2, 3	T0600102106 GROVE STREET WASH RACK	3884 MARTIN LUTHER KING JR Oakland	LUST-Open-CA	Open - Assessment & Interim Remedial Action	0.11 NE	6
13 Maps: 1, 2, 3	T0600100110 ARCO #04931	731 W MACARTHUR BLVD Oakland	LUST-Open-CA	Open - Site Assessment	0.12 W	-7
31 Maps: 1, 2, 3	T0619763665 CHP - OAKLAND	3601 TELEGRAPH AVENUE OAKLAND	LUST-Open-CA	Open - Inactive	0.25 SE	-1
33 Maps: 1, 3	T0600173887 CHEVRON #9-2029	890 MACARTHUR BLVD OAKLAND	LUST-Open-CA	Open - Assessment & Interim Remedial Action	0.28 W	-15
36 Maps: 1, 3	T0600101187 SAN FRANCISCO FRENCH BREAD	3924 MARKET ST. Oakland	LUST-Open-CA	Open - Site Assessment	0.3 NW	-7
49 Maps: 1, 3	T0600102132 FORMER FG GASOLINE	3314 SAN PABLO AVE. Oakland	LUST-Open-CA	Open - Eligible for Closure	0.49 SW	-33

MAP ID	ID/SITE NAME	ADDRESS	DATABASE	STATUS	DISTANCE (MILES)	ELEV DIFF (FEET)
53 Maps: 1, 3	1340118 CAL TECH METALS	825, 829, 841 31ST STREET OAKLAND	Response-CA	ACTIVE	0.54 SW	-32
54 Maps: 1, 3	60000594 LANE METAL FINISHERS	2942 SAN PABLO AVENUE OAKLAND	Response-CA	ACTIVE	0.62 SW	-37
55 Maps: 1, 3	1720109 HARRIS DRY CLEANERS	2801 MARTIN LUTHER KING JR. WAY OAKLAND	Response-CA	ACTIVE	0.66 S	-34
51 Maps: 1, 3	T06019777882 SHATTUCK AVE PROPERTY	4501 SHATTUCK OAKLAND	SLIC-Closed-CA	Completed - Case Closed	0.5 NE	36
32 Maps: 1, 3	T10000000406 MacArthur BART Transit Village	None 40th Street and Telegraph Avenue (APNs 012-0969-053-03, 012-0968-055-01, 012-0967-049-01) Oakland	SLIC-Open-CA	Open - Remediation	0.27 NE	17
39 Maps: 1, 3	T10000007937 411 MACARTHUR REDEVELOPMENT	411 WEST MACARTHUR BLVD OAKLAND	SLIC-Open-CA	Open - Site Assessment	0.43 SE	8
19 Maps: 1, 2, 3	761464 37th St and West MacArthur Blvd	Not Reported by Agency	Spills-SSO-CA	Listed	0.15 E	4
13 Maps: 1, 2, 3	13133 Westco Gas Food	731 W MacArthur Blvd Oakland	UST-CA	Listed	0.12 W	-7
13 Maps: 1, 2, 3	85423 Westco Gas Food	731 W MACARTHUR BLVD OAKLAND	UST-CRSP-CA	Listed	0.12 W	-7
33 Maps: 1, 3	19167 CHEVRON STATION #9-2029	890 MACARTHUR BLVD OAKLAND	UST-Priority-CA	Listed	0.28 W	-15
34 Maps: 1, 3	19548 FORMER SHELL STATION #129452	500 40TH ST OAKLAND	UST-Priority-CA	Listed	0.29 NE	20
45 Maps: 1, 3	19158 FORMER SHELL #139619	3420 SAN PABLO AVE OAKLAND	UST-Priority-CA	Listed	0.47 W	-31
13 Maps: 1, 2, 3	124 Arco Station #04931	731 West MacArthur Boulevard Oakland	UST-Proposed-CA	Listed	0.12 W	-7

POTENTIAL AREAS OF CONCERN/CONTAMINATION SUMMARY

DATABASE SEARCHED	SUBJECT SITE WITHIN POTENTIAL AREA OF CONCERN	AREAS FOUND WITHIN 1-MILE RADIUS
NPL-R9-US	No	0
MethaneLF-CA	No	0
LA-LF-CA	No	0
Military-Bases-US	No	0
SGV-Deep-Plumes-CA	No	0
SGV-Shallow-Plumes-Puente-Valley-CA	No	0
SGV-Shallow-Plumes-CA	No	0

DATABASE OCCURRENCE SUMMARY

HIGH RISK* OCCURRENCES IDENTIFIED IN REQUESTED SEARCH RADIUS		
DATABASE SEARCHED	DISTANCE SEARCHED (MILES)	HIGH RISK OCCURRENCES FOUND
Cal-CorAct-Open-CA	0.5	0
Cal-Military-Active	1	0
Cal-School-Active	0.5	0
Cal-State-Response-Active	1	3
Cal-Superfund-Active	1	0
Cal-VCP-Active	0.5	0
CERCLIS-US	0.5	0
County-LUST-Open-CA	0.5	16
County-SLIC-Open-CA	0.5	0
Hist-UST-Cleanup-CA	0.5	3
LUST-Open-CA	0.5	7
NPL-US	1	0
Proposed-NPL-US	1	0
Response-CA	1	3
Response-CA	1	3
SAA-Agreements-US	1	0
SLIC-Open-CA	0.5	2
Tribal-LUST-Open-Reg9	0.5	0

* For the purposes of this report, "high risk" occurrences are those that have known contamination and have not received a "case closed" or "no further action" status from the agency that maintains the records.

ASTM/AAI STANDARD RECORD SOURCES SUMMARY				
STANDARD ENVIRONMENTAL RECORD SOURCES	ASTM MIN. SEARCH DIST. / ERS SEARCH DIST. (MILES)	ERS DATABASE NAME	TOTAL LISTINGS	MAP ID #'S
Federal NPL site list	1.0 / 1.0	NPL-US	0	None Listed
		Proposed-NPL-US	0	None Listed

Federal Delisted NPL site list	0.5 / 1.0	Delisted-NPL-US	0	None Listed
Federal CERCLIS list	0.5 / 0.5	CERCLIS-US	0	None Listed
Federal CERCLIS NFRAP site list	0.5 / 0.5	CERCLIS-Archived-US	0	None Listed
Federal RCRA CORRACTS facilities list	1.0 / 1.0	RCRA-COR-US	0	None Listed
Federal RCRA non-CORRACTS TSD facilities list	0.5 / 0.5	RCRA-TSDF-US	0	None Listed
Federal RCRA generators list	Property and adjoining properties / 0.25	RCRA-CESQG-US	0	None Listed
		RCRA-LQG-US	0	None Listed
		RCRA-NON-US	0	None Listed
		RCRA-SQG-US	0	None Listed
Federal Inst/Eng control registries	Property Only / 0.25	Controls-RCRA-US	0	None Listed
		Controls-US	0	None Listed
		Hist-US-EC	0	None Listed
		Hist-US-IC	0	None Listed
		LIENS-US	0	None Listed
Federal ERNS list	Property Only / 0.0625	ERNS-US	0	None Listed
State and Tribal-Equivalent NPL	1.0 / 1.0	Cal-State-Response-Active	3	53, 54, 55
		Cal-State-Response-NFA	0	None Listed
		Cal-State-Response-Other	0	None Listed
		Response-CA	3	53, 54, 55
State and Tribal-Equivalent CERCLIS	0.5 / 0.5	Cal-Superfund-Active	0	None Listed
		Cal-Superfund-NFA	0	None Listed
		Cal-Superfund-Other	0	None Listed
State and Tribal landfill and/or solid waste disposal sites	0.5 / 0.5	County-SWF-CA	0	None Listed
		Debris-US	0	None Listed
		Hist-Dumps-US	0	None Listed
		Hist-SWF-CA	0	None Listed
		Land-Disposal-CA	0	None Listed
		SWIS-CA	0	None Listed
		SWLF-US	0	None Listed
		Tribal-ODI-US	0	None Listed
State and Tribal Leaking Storage Tank Lists	0.5 / 0.5	County-LUST-CA	1	35
		County-LUST-Closed-CA	16	11, 14, 17, 34, 37, 38, 40, 42, 43, 44, 45, 46, 47, 48, 50, 52
		County-LUST-Open-CA	16	6, 9, 11, 13, 14, 33, 34, 35, 36, 41, 43, 45,

				47, 49, 50, 52
		Hist-UST-Cleanup-CA	3	43, 47, 50
		LUST-Closed-CA	17	11, 14, 17, 28, 34, 37, 39, 40, 42, 43, 44, 45, 46, 47, 48, 50, 52
		LUST-Open-CA	7	6, 9, 13, 31, 33, 36, 49
		Tribal-LUST-Closed-Reg9	0	None Listed
		Tribal-LUST-Open-Reg9	0	None Listed
State and Tribal Registered Storage Tank Lists	Property and adjoining properties / 0.25	AST-CA	0	None Listed
		AST-CRSP-CA	1	31
		City-AST-CA	0	None Listed
		City-UST-CA	0	None Listed
		County-AST-CA	0	None Listed
		County-UST-CA	1	13
		FEMA-UST-US	0	None Listed
		Hist-UST-CA	4	13, 28, 31, 31
		Tribal-UST-Reg9	0	None Listed
		UST-Abandoned-CA	0	None Listed
		UST-CA	1	13
		UST-Closed-CA	0	None Listed
		USTComp-CA	0	None Listed
		UST-CRSP-CA	1	13
		UST-Priority-CA	3	33, 34, 45
		UST-Proposed-CA	1	13
State and Tribal Inst/Eng Control Registries	Property Only / 0.5	Controls-CA	0	None Listed
		Deed-CA	0	None Listed
		Hist-Controls-CA	0	None Listed
		Liens-CA	0	None Listed
State and Tribal Voluntary Cleanup Sites	0.5 / 0.5	Cal-Eval-Hist	1	8
		Cal-Eval-Hist-NFA	0	None Listed
		Cal-Military-Active	0	None Listed
		Cal-Military-NFA	0	None Listed
		Cal-Military-Other	0	None Listed
		Cal-School-Active	0	None Listed
		Cal-School-NFA	0	None Listed
		Cal-School-Other	0	None Listed
		Cal-VCP-Active	0	None Listed
		Cal-VCP-NFA	0	None Listed
		Cal-VCP-Other	0	None Listed
		Tribal-VCP-US	0	None Listed
State and Tribal Brownfield Sites	0.5 / 0.5	BF-US	1	8

		Tribal-BF-US	0	None Listed

FEDERAL ASTM/AAI DATABASES							
DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
BF-US	0.5	0	1	0	0	-	1
CERCLIS-Archived-US	0.5	0	0	0	0	-	0
CERCLIS-US	0.5	0	0	0	0	-	0
Controls-RCRA-US	0.5	0	0	0	0	-	0
Controls-US	0.5	0	0	0	0	-	0
Debris-US	0.5	0	0	0	0	-	0
Delisted-NPL-US	1	0	0	0	0	0	0
ERNS-US	0.0625	0	0	-	-	-	0
FEMA-UST-US	0.25	0	0	0	-	-	0
FTTS-ENF-US	0.25	0	0	0	-	-	0
Hist-Dumps-US	0.5	0	0	0	0	-	0
Hist-US-EC	0.5	0	0	0	0	-	0
Hist-US-IC	0.5	0	0	0	0	-	0
HMIS-US	0.0625	0	0	-	-	-	0
LIENS-US	0.0625	0	0	-	-	-	0
NPL-US	1	0	0	0	0	0	0
PADS-US	0.0625	0	0	-	-	-	0
PCB-US	0.25	0	0	0	-	-	0
Proposed-NPL-US	1	0	0	0	0	0	0
RCRA-CESQG-US	0.25	0	0	0	-	-	0
RCRA-COR-US	1	0	0	0	0	0	0
RCRA-LQG-US	0.25	0	0	0	-	-	0
RCRA-NON-US	0.25	0	0	0	-	-	0
RCRA-SQG-US	0.25	0	0	0	-	-	0
RCRA-TSDF-US	0.5	0	0	0	0	-	0
SAA-Agreements-US	1	0	0	0	0	0	0
SWLF-US	0.5	0	0	0	0	-	0
Tribal-BF-US	0.5	0	0	0	0	-	0
Tribal-LUST-Closed-Reg9	0.5	0	0	0	0	-	0
Tribal-LUST-Open-Reg9	0.5	0	0	0	0	-	0
Tribal-ODI-US	0.5	0	0	0	0	-	0
Tribal-UST-Reg9	0.25	0	0	0	-	-	0
Tribal-VCP-US	0.5	0	0	0	0	-	0

STATE ASTM/AAI DATABASES							
DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
AST-CA	0.25	0	0	0	-	-	0
AST-CRSP-CA	0.25	0	0	1	-	-	1
Cal-BZ-HazWaste-CA	0.5	0	0	0	0	-	0
Cal-CorAct-Closed-CA	0.5	0	0	0	0	-	0
Cal-CorAct-Open-CA	0.5	0	0	0	0	-	0
Cal-Eval-Hist	0.5	0	1	0	0	-	1
Cal-Eval-Hist-NFA	0.5	0	0	0	0	-	0
Cal-Military-Active	1	0	0	0	0	0	0
Cal-Military-NFA	0.5	0	0	0	0	-	0
Cal-Military-Other	1	0	0	0	0	0	0
Cal-School-Active	0.5	0	0	0	0	-	0
Cal-School-NFA	0.5	0	0	0	0	-	0

STATE ASTM/AAI DATABASES

DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
Cal-School-Other	0.5	0	0	0	0	-	0
Cal-State-Response-Active	1	0	0	0	0	3	3
Cal-State-Response-NFA	0.5	0	0	0	0	-	0
Cal-State-Response-Other	0.5	0	0	0	0	-	0
Cal-Superfund-Active	1	0	0	0	0	0	0
Cal-Superfund-NFA	1	0	0	0	0	0	0
Cal-Superfund-Other	1	0	0	0	0	0	0
Cal-VCP-Active	0.5	0	0	0	0	-	0
Cal-VCP-NFA	0.5	0	0	0	0	-	0
Cal-VCP-Other	0.5	0	0	0	0	-	0
CBF-CA	0.5	0	0	1	0	-	1
CERS-CA	0.25	0	0	0	-	-	0
CHMIRS-CA	0.0625	0	0	-	-	-	0
City-AST-CA	0.25	0	0	0	-	-	0
City-CUPA-CA	0.25	0	0	0	-	-	0
City-Others-CA	0.25	0	0	0	-	-	0
City-UST-CA	0.25	0	0	0	-	-	0
Controls-CA	0.5	0	0	0	0	-	0
CORTESE-CA	0.25	0	0	0	-	-	0
County-AST-CA	0.25	0	0	0	-	-	0
County-Hist-CA	0.25	0	0	0	-	-	0
County-LUST-CA	0.5	0	0	0	1	-	1
County-LUST-Closed-CA	0.5	0	3	0	13	-	16
County-LUST-Open-CA	0.5	0	5	0	11	-	16
County-Others-CA	0.25	0	0	0	-	-	0
County-SLIC-Closed-CA	0.25	0	0	0	-	-	0
County-SLIC-Open-CA	0.5	0	0	0	0	-	0
County-SML-CA	0.5	0	0	0	0	-	0
County-SWF-CA	0.5	0	0	0	0	-	0
County-UST-CA	0.25	0	1	0	-	-	1
CUPA-CA	0.25	0	0	0	-	-	0
Deed-CA	0.5	0	0	0	0	-	0
ENF-CA	0.25	0	4	2	-	-	6
ENF-SMARTS-CA	0.25	0	0	0	-	-	0
ENF-Wastewater-CA	0.25	0	0	0	-	-	0
HazWaste-CA	0.25	0	0	0	-	-	0
Hist-Controls-CA	0.5	0	0	0	0	-	0
Hist-Cort-CA	0.25	0	0	0	-	-	0
HIST-R4-CA	0.25	0	0	0	-	-	0
Hist-SWF-CA	0.5	0	0	0	0	-	0
Hist-UST-CA	0.25	0	1	3	-	-	4
Hist-UST-Cleanup-CA	0.5	0	0	0	3	-	3
Hist-WIP-Active-CA	0.5	0	0	0	0	-	0
Hist-WIP-Backlog-CA	0.5	0	0	0	0	-	0
Hist-WIP-Historical-CA	0.5	0	0	0	0	-	0
HWIS-CA	0.0625	0	2	-	-	-	2
ICE-CA	0.25	0	0	0	-	-	0
Land-Disposal-CA	0.5	0	0	0	0	-	0
Liens-CA	0.0625	0	0	-	-	-	0
LUST-Closed-CA	0.5	0	3	1	13	-	17
LUST-Open-CA	0.5	0	3	1	3	-	7
Manifest2-RI	0.0625	0	0	-	-	-	0
PR-MOA-CA	0.25	0	0	0	-	-	0
Response-CA	1	0	0	0	0	3	3
Response-CA	1	0	0	0	0	3	3

STATE ASTM/AAI DATABASES							
DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
SLIC-Closed-CA	0.5	0	0	0	1	-	1
SLIC-CV-CLOSED-CA	0.5	0	0	0	0	-	0
SLIC-CV-OPEN-CA	0.5	0	0	0	0	-	0
SLIC-Open-CA	0.5	0	0	1	1	-	2
SML-CA	0.5	0	0	0	0	-	0
SWIS-CA	0.5	0	0	0	0	-	0
SWRCY-CA	0.5	0	0	0	0	-	0
UST-Abandoned-CA	0.25	0	0	0	-	-	0
UST-CA	0.25	0	1	0	-	-	1
UST-Closed-CA	0.25	0	0	0	-	-	0
USTComp-CA	0.25	0	0	0	-	-	0
UST-CRSP-CA	0.25	0	1	0	-	-	1
UST-Priority-CA	0.5	0	0	0	3	-	3
UST-Proposed-CA	0.25	0	1	0	-	-	1

SUPPLEMENTAL DATABASES							
DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
Air-CA	0.25	0	0	2	-	-	2
AIR-DIST-CA	0.25	0	0	0	-	-	0
BioFuel-US	0.25	0	0	0	-	-	0
Cal-Mortgage-CA	0.25	0	0	0	-	-	0
Cal-TierPer-CA	0.25	0	0	0	-	-	0
CDL-CA	0.0625	0	0	-	-	-	0
CDL-US	0.0625	0	0	-	-	-	0
CHWF-CA	0.5	0	0	0	0	-	0
Coal-Ash-Dams-US	0.5	0	0	0	0	-	0
County-BI-CA	0.25	0	0	0	-	-	0
Dams-CA	0.25	0	0	0	-	-	0
DCF2-CA	0.25	0	3	0	-	-	3
DPR-CA	0.25	0	0	0	-	-	0
DryCleaners-CA	0.25	0	1	0	-	-	1
EGRID-US	0.5	0	0	0	0	-	0
EPA-Watch-List-US	0.25	0	0	0	-	-	0
FA-HW-CA	0.0625	0	0	-	-	-	0
FA-HW-US	0.0625	0	0	-	-	-	0
FA-SWF-CA	0.0625	0	0	-	-	-	0
FRS-US	0.0625	0	0	-	-	-	0
FTTS-INSP-US	0.0625	0	0	-	-	-	0
FUDS-US	1	0	0	0	0	0	0
FUSRAP-US	0.25	0	0	0	-	-	0
Haulers-CA	0.0625	0	1	-	-	-	1
Hist-AFS2-US	0.25	0	0	0	-	-	0
Hist-AFS-US	0.25	0	0	0	-	-	0
Hist-AST-CA	0.25	0	0	0	-	-	0
Hist-AWS-CA	0.25	0	0	0	-	-	0
Hist-CA	0.0625	0	0	-	-	-	0
Hist-CalFID-CA	0.25	0	7	9	-	-	16
Hist-CALSITES-CA	0.25	0	0	0	-	-	0
Hist-CERCLIS-NFRAP-US	0.25	0	0	0	-	-	0
Hist-CERCLIS-US	0.25	0	0	0	-	-	0
Hist-City-UST-CA	0.25	0	1	0	-	-	1
Hist-Deed-CA	0.25	0	0	0	-	-	0

SUPPLEMENTAL DATABASES

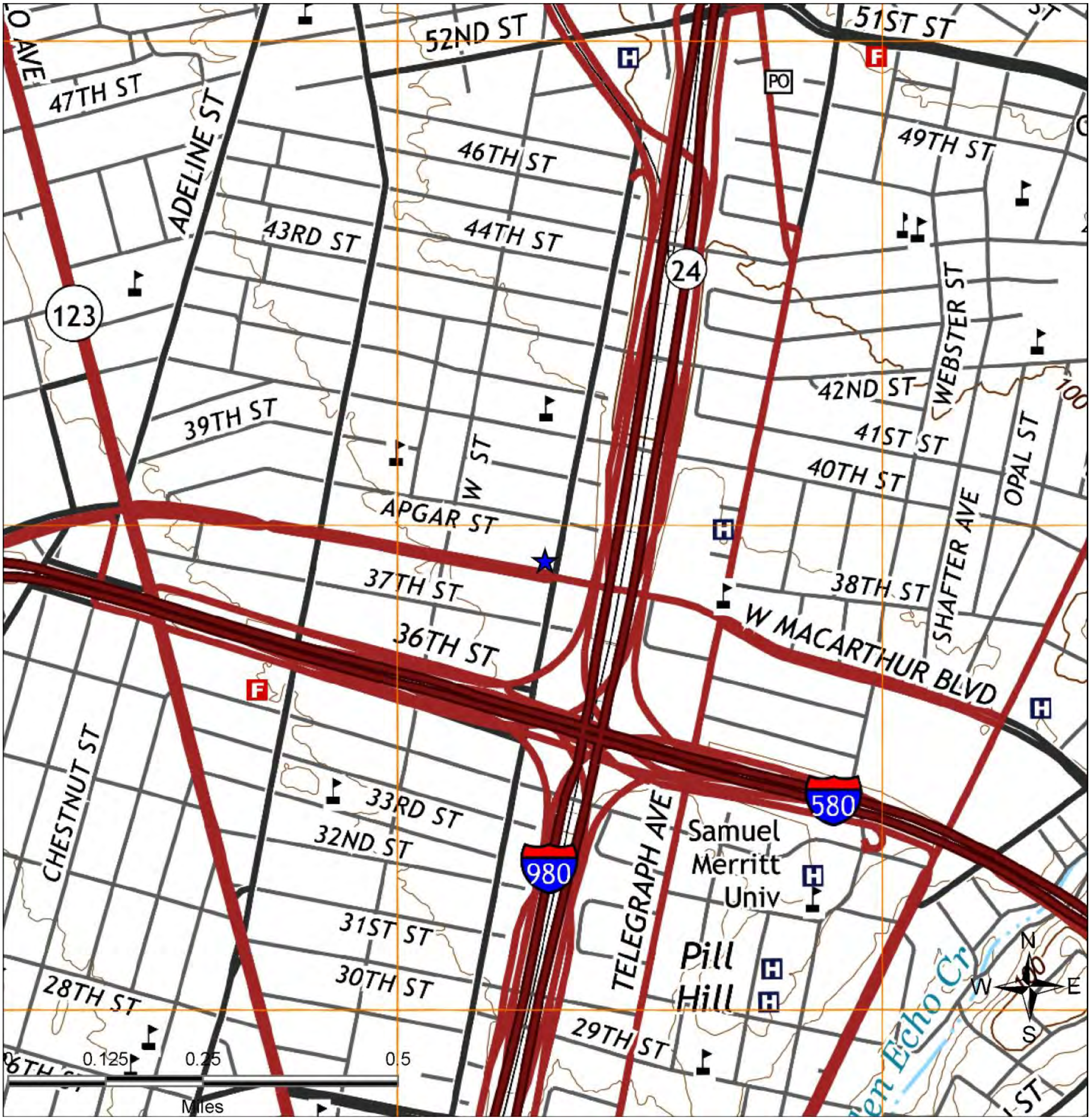
DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
Hist-DTG-CA	0.25	0	0	0	-	-	0
Hist-ERNS-US	0.25	0	3	1	-	-	4
Hist-FIFRA-US	0.25	0	0	0	-	-	0
Hist-FINDS-US	0.0625	0	0	-	-	-	0
Hist-HWS-CA	0.25	0	2	1	-	-	3
Hist-LUSTIS-CA	0.25	0	5	1	-	-	6
HIST-MLTS-US	0.25	0	0	0	-	-	0
HIST-MTBE-CA	0.25	0	2	0	-	-	2
Hist-NPL-US	0.25	0	0	0	-	-	0
Hist-Orange-County-LF-CA	0.25	0	0	0	-	-	0
Historical-CA	0.5	0	0	0	0	-	0
Hist-Prop65-CA	0.25	0	0	0	-	-	0
Hist-RCRIS-US	0.25	0	0	0	-	-	0
Hist-Regional-LUST-CA	0.25	0	0	0	-	-	0
Hist-Regional-Other-CA	0.25	0	0	0	-	-	0
Hist-Regional-SLIC-CA	0.25	0	5	1	-	-	6
Hist-Regional-Spills-CA	0.25	0	0	0	-	-	0
Hist-Regional-SWLF-CA	0.25	0	0	0	-	-	0
Hist-Regional-UST-CA	0.25	0	4	4	-	-	8
Hist-SCL-CA	0.25	0	0	0	-	-	0
Hist-SWIS-CA	0.25	0	0	0	-	-	0
Hist-ToxicPits-CA	0.25	0	0	0	-	-	0
Hist-TRIS-US	0.25	0	0	0	-	-	0
Hist-US	0.0625	0	0	-	-	-	0
Hist-USGS-WaterWells-CA	0.0625	0	0	-	-	-	0
Hist-USTReg-CA	0.25	0	0	0	-	-	0
Hist-WaterWells-US	0.0625	0	0	-	-	-	0
Hist-WMUDS-CA	0.25	0	0	0	-	-	0
HWT-CA	0.25	0	0	0	-	-	0
ICIS-Air-US	0.0625	0	0	-	-	-	0
ICIS-NPDES-US	0.0625	0	0	-	-	-	0
LA-Waste-Haulers-CA	0.0625	0	0	-	-	-	0
Lead-Smelter-2-US	0.25	0	0	0	-	-	0
Lead-US	0.25	0	0	0	-	-	0
LMOP-US	0.5	0	0	0	0	-	0
Mines2-CA	0.0625	0	0	-	-	-	0
Mines-CA	0.0625	0	0	-	-	-	0
MINES-US	0.0625	0	0	-	-	-	0
MLTS-US	0.0625	0	0	-	-	-	0
MRDS-US	0.25	0	0	0	-	-	0
MWMP-CA	0.25	0	0	0	-	-	0
NEI-LF-CA	0.25	0	0	0	-	-	0
NPDES-CA	0.0625	0	0	-	-	-	0
NPDES-SW-CA	0.0625	0	0	-	-	-	0
OGM-CA	0.0625	0	0	-	-	-	0
OGW-CA	0.0625	0	0	-	-	-	0
OSCF-CA	0.5	0	0	0	0	-	0
PCS-US	0.25	0	0	0	-	-	0
Perch1-CA	0.25	0	0	0	-	-	0
Perch2-CA	0.25	0	0	0	-	-	0
RADINFO-US	0.0625	0	0	-	-	-	0
RFG-Lab-US	0.25	0	0	0	-	-	0
RMP-US	0.0625	0	0	-	-	-	0
ROD-US	0.5	0	0	0	0	-	0
SDWIS-US	0.25	0	0	0	-	-	0

SUPPLEMENTAL DATABASES

DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
Spills-SSO-CA	0.25	0	1	0	-	-	1
SSTS-US	0.0625	0	0	-	-	-	0
Tribal-Air-US	0.25	0	0	0	-	-	0
TRIS2000-US	0.0625	0	0	-	-	-	0
TRIS2010-US	0.0625	0	0	-	-	-	0
TRIS80-US	0.0625	0	0	-	-	-	0
TRIS90-US	0.0625	0	0	-	-	-	0
TSCA-US	0.0625	0	0	-	-	-	0
UIC2-CA	0.0625	0	0	-	-	-	0
UIC-CA	0.0625	0	0	-	-	-	0
UMTRA-US	0.0625	0	0	-	-	-	0
USGS-Waterwells-US	0.0625	0	0	-	-	-	0
Vapor-Intrusions-US	0.5	0	0	0	0	-	0
WDR-CA	0.25	0	0	0	-	-	0
Wells-CA	0.0625	0	0	-	-	-	0

PROPRIETARY HISTORIC DATABASES

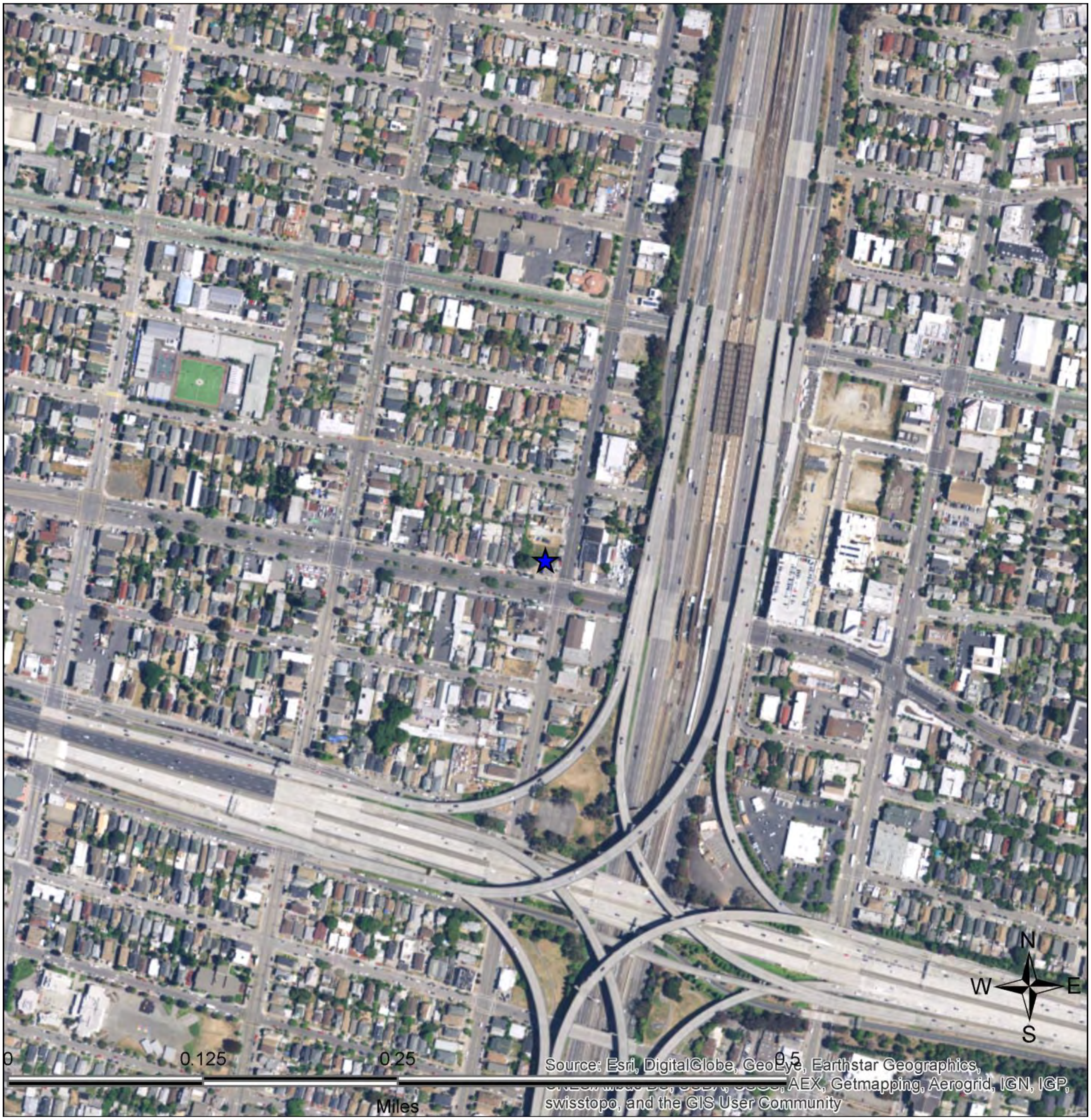
DATABASE SEARCHED	DISTANCE SEARCHED	SUBJECT SITE	0.125 MILES	0.25 MILES	0.5 MILES	1.0 MILES	TOTAL
Hist-Agriculture	0.0625	0	0	-	-	-	0
Hist-Auto Dealers	0.0625	0	3	-	-	-	3
Hist-Auto Repair	0.25	0	3	3	-	-	6
Hist-Chemical Manufacturing	0.0625	0	0	-	-	-	0
Hist-Chemical-Storage	0.0625	0	0	-	-	-	0
Hist-Cleaners	0.25	0	2	0	-	-	2
Hist-Convenience	0.0625	0	0	-	-	-	0
Hist-Disposal-Recycle	0.0625	0	0	-	-	-	0
Hist-Food-Processors	0.0625	0	0	-	-	-	0
Hist-Gun-Ranges	0.0625	0	0	-	-	-	0
Hist-Machine Shop	0.0625	0	0	-	-	-	0
Hist-Manufacturing	0.0625	0	0	-	-	-	0
Hist-Metal Plating	0.0625	0	0	-	-	-	0
Hist-Mining	0.0625	0	0	-	-	-	0
Hist-Mortuaries	0.0625	0	0	-	-	-	0
Hist-Oil-Gas	0.0625	0	0	-	-	-	0
Hist-OilGas-Refiners	0.0625	0	0	-	-	-	0
Hist-Other	0.0625	0	0	-	-	-	0
Hist-Paint-Stores	0.0625	0	0	-	-	-	0
Hist-Petroleum	0.0625	0	0	-	-	-	0
Hist-Post-Offices	0.0625	0	0	-	-	-	0
Hist-Printers	0.0625	0	1	-	-	-	1
Hist-Rental	0.0625	0	0	-	-	-	0
Hist-RV-Dealers	0.0625	0	0	-	-	-	0
Hist-Salvage	0.0625	0	0	-	-	-	0
Hist-Service Stations	0.25	0	5	1	-	-	6
Hist-Steel-Metals	0.0625	0	0	-	-	-	0
Hist-Textile	0.0625	0	0	-	-	-	0
Hist-Transportation	0.0625	0	0	-	-	-	0
Hist-Trucking	0.0625	0	0	-	-	-	0
Hist-Vehicle-Parts	0.0625	0	0	-	-	-	0
Hist-Vehicle-Washing	0.0625	0	1	-	-	-	1



SITE LOCATION TOPOGRAPHIC MAP

U.S. Geological Survey. Oakland West (2015-03-11) Quadrangle, 7.5 Minute Series

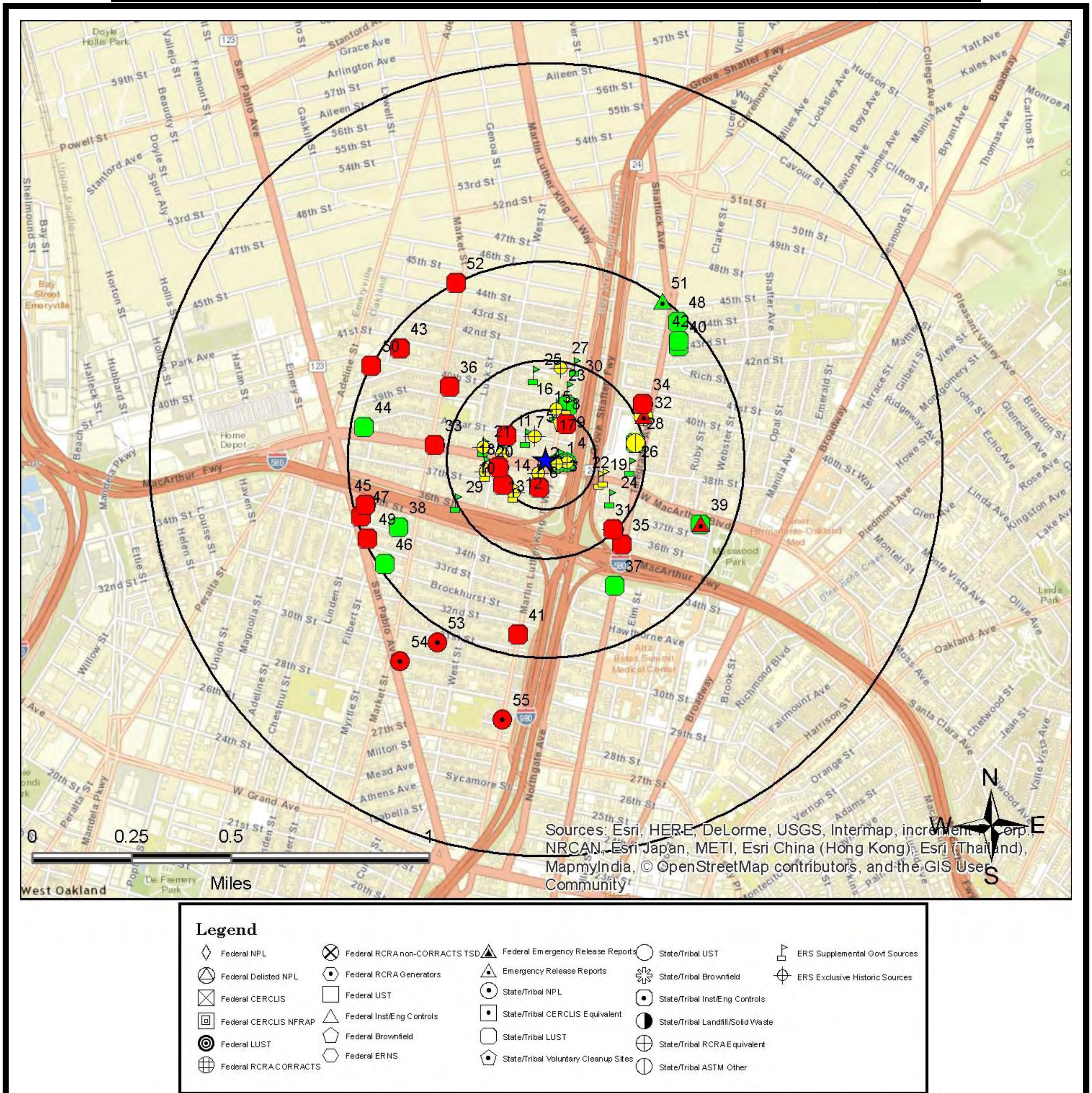
Environmental Service	3801-21 Martin Luther King Jr. Way Oakland, CA 94609	FIGURE: JOB: DATE:	1 2017-028 6/15/2017



SITE LOCATION MAP

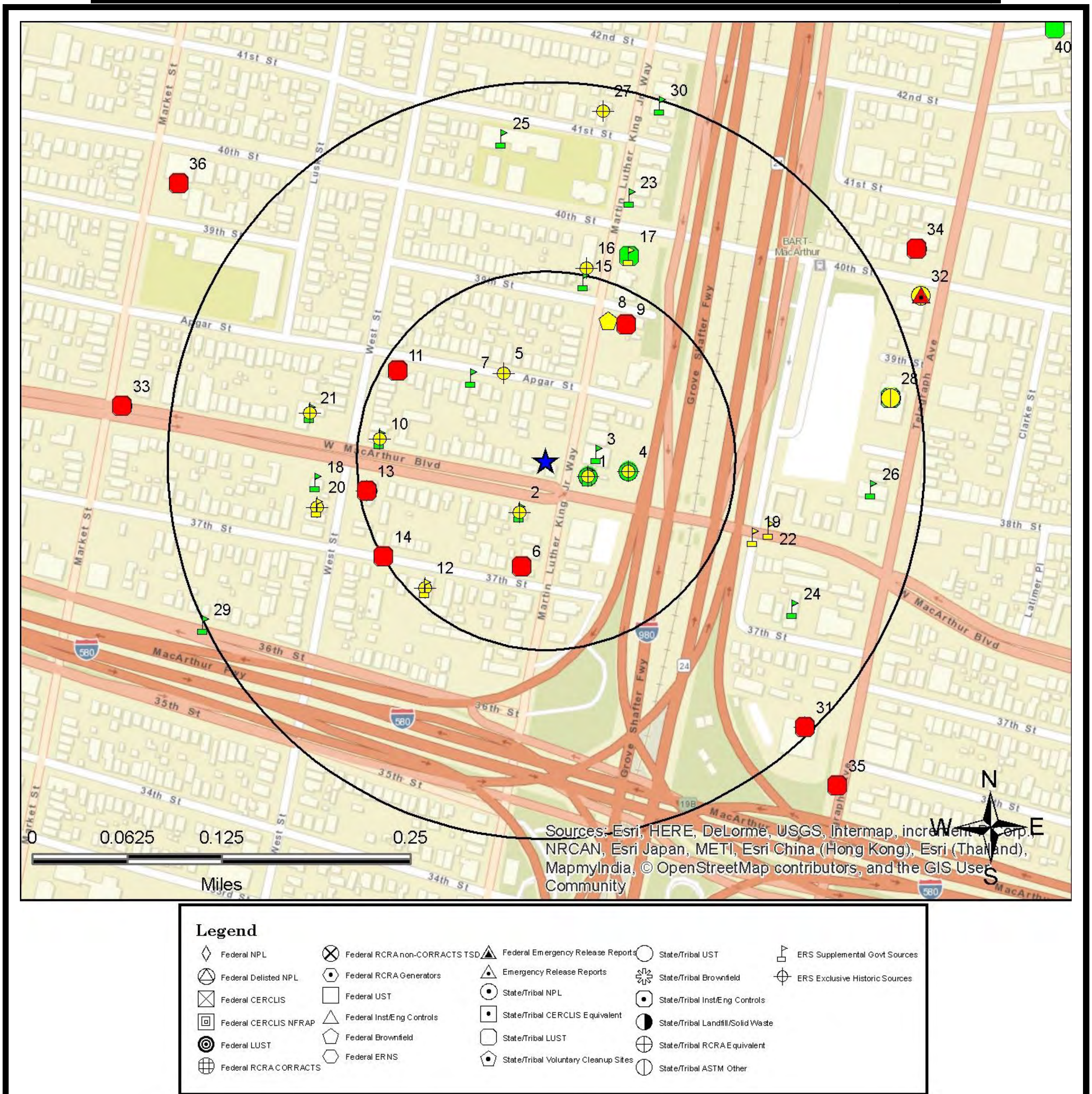
Environmental Service	3801-21 Martin Luther King Jr. Way Oakland, CA 94609	FIGURE: JOB: DATE:	2 2017-028 6/15/2017

1-MILE RADIUS STREET MAP W/OCCURRENCES (MAP1)



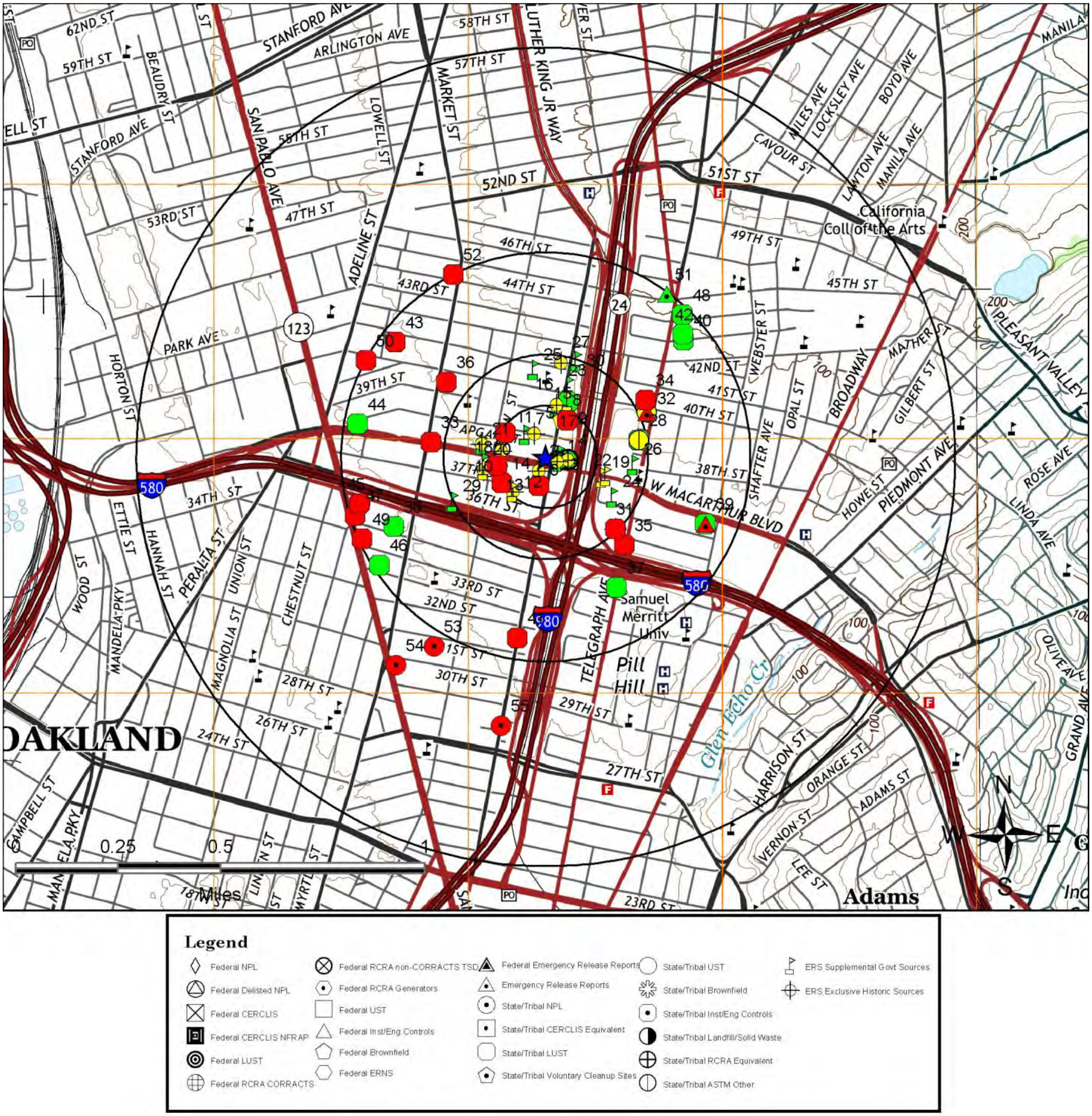
All plotted occurrences represent approximate locations based on geographic information provided by the respective agency. Actual locations may vary due to numerous reasons such as: the size of the property, accuracy of the provided location, accuracy of the software used to determine the location, etc. **Occurrences are shown in three colors** to give a visual indication of the potential risk of the listed occurrence based on the type of list and the current status of the occurrence. Occurrences shown in **RED** are locations with known contamination that have not received a "case closed" or "no further action" status. Occurrences shown in **YELLOW** have been listed by the respective agency, but do not always represent an environmental risk. The detailed status information and description of the listing should be reviewed for further information. Occurrences shown in **GREEN** are occurrences that have active permits or have had contamination in the past but have received a "case closed" or "no further action" status and therefore, do not likely present an environmental risk.

0.25-MILE RADIUS STREET MAP W/OCCURRENCES (MAP2)



All plotted occurrences represent approximate locations based on geographic information provided by the respective agency. Actual locations may vary due to numerous reasons such as: the size of the property, accuracy of the provided location, accuracy of the software used to determine the location, etc. **Occurrences are shown in three colors** to give a visual indication of the potential risk of the listed occurrence based on the type of list and the current status of the occurrence. Occurrences shown in **RED** are locations with known contamination that have not received a "case closed" or "no further action" status. Occurrences shown in **YELLOW** have been listed by the respective agency, but do not always represent an environmental risk. The detailed status information and description of the listing should be reviewed for further information. Occurrences shown in **GREEN** are occurrences that have active permits or have had contamination in the past but have received a "case closed" or "no further action" status and therefore, do not likely present an environmental risk.

1-MILE TOPOGRAPHIC MAP W/OCCURRENCES (MAP3)



All plotted occurrences represent approximate locations based on geographic information provided by the respective agency. Actual locations may vary due to numerous reasons such as: the size of the property, accuracy of the provided location, accuracy of the software used to determine the location, etc. **Occurrences are shown in three colors** to give a visual indication of the potential risk of the listed occurrence based on the type of list and the current status of the occurrence. Occurrences shown in **RED** are locations with known contamination that have not received a "case closed" or "no further action" status. Occurrences shown in **YELLOW** have been listed by the respective agency, but do not always represent an environmental risk. The detailed status information and description of the listing should be reviewed for further information. Occurrences shown in **GREEN** are occurrences that have active permits or have had contamination in the past but have received a "case closed" or "no further action" status and therefore, do not likely present an environmental risk.

AGENCY DIFFERENCES IN MAPPED LOCATIONS (MAP4)

Note: Occurrences on this map have agency provided coordinates which differ significantly from geocoded locations.

SUMMARY OF AGENCY DIFFERENCES

MAP ID	ID / SITE NAME	ADDRESS / DATABASE	AGENCY COORDINATES	DISTANCE (MILES)	DIRECTION
45	RO0000006-ALA SHELL #13-9619	3420 SAN PABLO AVE County-LUST-Closed-CA	-122.27788, 37.8254	0.49	W
13	RO0000076-ALA ARCO #04931	731 MACARTHUR BLVD County-LUST-Open-CA	-122.2705, 37.82725	0.07	W
45	RO0000006-ALA SHELL #13-9619	3420 SAN PABLO AVE County-LUST-Open-CA	-122.27788, 37.8254	0.49	W
59	RO0000251-ALA UNOCAL #3538	411 MACARTHUR BLVD County-LUST-Open-CA	-122.26201, 37.82519	0.43	E
14	T0600101123 RD MINER COMPANY	750 37TH ST ENF-CA	-122.2704, 37.82688	0.07	SW
56	7C95C81C-T0600101123 RD MINER COMPANY	750 37TH ST Hist-CA	-122.27, 37.8269	0.06	SW
14	T0600101123 RD MINER COMPANY	750 37TH ST LUST-Closed-CA	-122.2704, 37.82688	0.07	SW
37	T0600100952 SUMMIT MEDICAL CENTER	3420 TELEGRAPH LUST-Closed-CA	-122.26556, 37.82317	0.36	SE
52	T0600100430 ARCO	4401 MARKET LUST-Closed-CA	-122.27258, 37.83411	0.49	N
58	T0600101702 CITY OF OAKLAND FIRE STATION #5	934 34TH LUST-Closed-CA	-122.27604, 37.8251	0.4	SW
61	T0600101031 PACIFIC GALVANIZING CORPORATION	715 46TH LUST-Closed-CA	-122.26906, 37.83434	0.47	N
31	T0619763665 CHP - OAKLAND	3601 TELEGRAPH AVENUE LUST-Open-CA	-122.2658, 37.8244	0.29	SE
60	T06019782176 PACIFIC GALVANIZING	715 46TH SLIC-Open-CA	-122.26908, 37.83433	0.47	N
57	11092 ARCO #4931	731 MACARTHUR BOULEVARD & WEST UST-Priority-CA	-122.27149, 37.82714	0.12	W

LISTED OCCURRENCE DETAILS

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Air-CA	Listed	0.16 miles E	71 ft (4 ft higher than site)	22

SITE NAME	MAPS	ID
BAY AREA RAPID TRANSIT	1, 2, 3	BAY AQMD-BA-22703

ADDRESS	CITY	ZIP
550 W MACARTHUR BLVD	OAKLAND	94609

DETAILS

Toxic Facility Information
Agency ID Desc: The first portion is the Air Quality District, the second portion is the County, the last is the Facility ID
Facility ID: 22703
Database Year: 2015
Air Basin: SF
County Code: 1
District Code: BA
District: BAY AREA AQMD
Facility SIC Code: 6512
COID: ALA
Prioritization Thresholds: Not Reported
Health Risk Assessment (HRA): Not Reported
Non-Cancer Chronic Hazard Index: Not Reported
Non-Cancer Acute Hazard Index: Not Reported
CHAPIS: Not Reported
CERR Code: Not Reported

Pollutant Information
TOG - Total Organic Gases (Tons/Yr): 0.002938613
ROG - Reactive Organic Gases (Tons/Yr): 0
CO - Carbon Monoxide (Tons/Yr): 0.008874001
NOx - Oxides of Nitrogen (Tons/Yr): 0.040818533
SOx - Oxides of Sulfur (Tons/Yr): 0.000018922
PM - Particulate Matter (Tons/Yr): 0.003038601
PM - Particulate Matter - 10 Micrometers or Smaller (Tons/Yr): 0.002917057

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Air-CA	Listed	0.25 miles SE	66 ft (1 ft lower than site)	31

SITE NAME	MAPS	ID
CALIFORNIA HIGHWAY PATROL-TELECOMMUNICATIONS	1, 2, 3	BAY AQMD-BA-14572

ADDRESS	CITY	ZIP
3601 TELEGRAPH AVE	OAKLAND	94609

DETAILS

Toxic Facility Information
Agency ID Desc: The first portion is the Air Quality District, the second portion is the County, the last is the Facility ID
Facility ID: 14572
Database Year: 2015
Air Basin: SF
County Code: 1
District Code: BA
District: BAY AREA AQMD
Facility SIC Code: 9221
COID: ALA
Prioritization Thresholds: Not Reported
Health Risk Assessment (HRA): Not Reported
Non-Cancer Chronic Hazard Index: Not Reported
Non-Cancer Acute Hazard Index: Not Reported
CHAPIS: Not Reported
CERR Code: Not Reported

Pollutant Information
TOG - Total Organic Gases (Tons/Yr): 0.705915314
ROG - Reactive Organic Gases (Tons/Yr): 0
CO - Carbon Monoxide (Tons/Yr): 11.683088264
NOx - Oxides of Nitrogen (Tons/Yr): 4.96423162
SOx - Oxides of Sulfur (Tons/Yr): 0.019139997
PM - Particulate Matter (Tons/Yr): 0.0206932
PM - Particulate Matter - 10 Micrometers or Smaller (Tons/Yr): 0.0206932

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
AST-CRSP-CA	Listed	0.25 miles SE	66 ft (1 ft lower than site)	31

SITE NAME	MAPS	ID
CHP Oakland Area/370	1, 2, 3	389927

ADDRESS	CITY	ZIP
3601 TELEGRAPH AVE	OAKLAND	94609

DETAILS

Site Regulated Program Information
Site ID: 389927
Site EI ID: 10423609
Agency Provided Latitude: 37.824744
Agency Provided Longitude: -122.265691

Program Description: Aboveground Petroleum Storage

Evaluation Information
Evaluation Date: 8/23/2016
Violations Found? (Y/N): Yes
Evaluation General Type: Compliance Evaluation Inspection
Evaluation Type: Routine done by local agency
Evaluation Note(s): Onsite to conduct the Aboveground Petroleum Storage Act inspection at CHP Oakland Area 370 - 3601 Telegraph Ave., Oakland, CA. Met with Administration Officer, Maria Montgomery. Facility stores over 10,000 aggregate petroleum storage, therefore is a Non-Qualified facility. Facility's SPCC Plan was completed 5/1/2012.
Evaluation Division: Alameda County Environmental Health
Evaluation Program: APSA
Evaluation Source: CERS

Evaluation Date: 8/23/2016
Violations Found? (Y/N): No
Evaluation General Type: Compliance Evaluation Inspection
Evaluation Type: Routine done by local agency
Evaluation Note(s): Onsite to conduct the Hazardous Materials Business Plan inspection at CHP Oakland Area 370 - 3601 Telegraph Ave., Oakland, CA. Met with Administration Officer, Maria Montgomery. Most recent HMBP submittal was in May 2015.
Evaluation Division: Alameda County Environmental Health
Evaluation Program: HMRRP
Evaluation Source: CERS

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
BF-US	Listed	0.1 miles NE	73 ft (6 ft higher than site)	8

SITE NAME	MAPS	ID
Lucky's Auto Body Shop	1, 2, 3	60701

ADDRESS	CITY	ZIP
3860/3884 Martin Lurther King, Jr. Way	Oakland	94609

DETAILS

ACRES Property ID: 60701
Type of Funding: N/A
Local Property Number(s): 012-0968-031, 012-0968-030-01
Ownership Entity: Government
Current Owner: Lilly and Hillary Luckett, Oakland RDA
Did Ownership Change: N
SFLLP fact into the ownership: Not Reported
Property Latitude: 37.828848
Property Longitude: -122.26852
Horizontal Collection Method: Address Matching-House Number
Source Map Scale: 1.7083333333
Reference Point: Center of a Facility or Station
Horizontal Reference Datum: World Geodetic System of 1984
Description/History: The property consists of auto repair and car wash buildings, a parking lot and a vacant lot. The vacant lot is owned by Oakland Redevelopment Authority (RDA).
Past Use: Greenspace (arces): Not Reported
Past Use: Residential (arces): Not Reported
Past Use: Commercial (arces): 0.6
Past Use: Industrial (arces): Not Reported
Past Use: Multistory (arces): Not Reported
Future Use: Multistory (arces): Not Reported
Cleanup Required: Y
Cntmnt Fnd-Ctrl Sbstncs: Not Reported
Cntmnt Fnd-Petroleum: Y
Cntmnt Fnd-Asbestos: Not Reported
Cntmnt Fnd-Lead: Not Reported
Cntmnt Fnd-PAHs: Y
Cntmnt Fnd-PCBs: Not Reported

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Cal-Eval-Hist	Listed	0.1 miles NE	73 ft (6 ft higher than site)	8

SITE NAME	MAPS	ID
LUCKY'S AUTO BODY	1, 2, 3	01990026

ADDRESS	CITY	ZIP
3860/3884 MARTIN LUTHER KING JR. WAY	OAKLAND	94609

DETAILS

URL: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=01990026
Envirostor ID: 01990026
County: ALAMEDA
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 0.6
APN: 012-0968-30-1, 012-0968-31
National Priorities List: NO
Lead Agency: CITY OF OAKLAND
Project Manager: Not Reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Berkeley
Site Code: 201538
Assembly: 15
Senate: 09
Congressional District: 13
Special Program: EPA - Target Site Investigation
Status: Refer: Other Agency
Status Date: 2004-10-01 00:00:00
Past Uses: RETAIL - SERVICE STATION, VEHICLE MAINTENANCE
Restricted Use: NO
Funding: Not Reported
Regulatory Agencies Involved: SMBRP, RWQCB 2 - San Francisco Bay, ALAMEDA COUNTY, CITY OF OAKLAND
Potential Contamination of Concern: 10009, 10199, 30003, 30013, 30025, 30272, 30550, 30593
Confirmed Contamination of Concern: 30003,30013,30025,30272,30550,30593
Potential Media Affected: OTH, SOIL
Site MGMT REQ: NONE SPECIFIED

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Cal-State-Response-Active	Listed	0.54 miles SW	35 ft (32 ft lower than site)	53

SITE NAME	MAPS	ID
CAL TECH METALS	1, 3	01340118

ADDRESS	CITY	ZIP
825, 829, 841 31ST STREET	OAKLAND	94608

DETAILS

URL: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=01340118
Envirostor ID: 01340118
County: ALAMEDA
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0.64
APN: 009 071003600, 009 071003700, 009 071003800, 009 071003900
National Priorities List: NO
Lead Agency: SMBRP
Project Manager: Henry Wong
Supervisor: Karen Toth
Division Branch: Cleanup Berkeley
Site Code: 200882
Assembly: 18
Senate: 09
Congressional District: 13
Special Program: Not Reported
Status: Active
Status Date: 2006-05-02 00:00:00
Past Uses: METAL PLATING - CHROME, METAL PLATING - OTHER
Restricted Use: NO
Funding: Orphan Funds
Regulatory Agencies Involved: SMBRP, US EPA
Potential Contamination of Concern: 30013, 30027, 30028, 30195, 30196, 30407
Confirmed Contamination of Concern: 30195,30196,30407,30028,30027,30013
Potential Media Affected: OTH, SOIL, SV
Site MGMT REQ: NONE SPECIFIED
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Cal-State-Response-Active	Listed	0.62 miles SW	30 ft (37 ft lower than site)	54

SITE NAME	MAPS	ID
Lane Metal Finishers	1, 3	60000594

ADDRESS	CITY	ZIP
2942 San Pablo Avenue	Oakland	94608

DETAILS

URL: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60000594
Envirostor ID: 60000594
County: ALAMEDA
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0.61
APN: 009 069402001, 009 069403400, 009 069403500
National Priorities List: NO
Lead Agency: SMBRP
Project Manager: Henry Wong
Supervisor: Karen Toth
Division Branch: Cleanup Berkeley
Site Code: 201736
Assembly: 18
Senate: 09
Congressional District: 13
Special Program: Not Reported
Status: Active
Status Date: 2007-03-15 00:00:00
Past Uses: FUEL - VEHICLE STORAGE/ REFUELING, METAL PLATING - CHROME, METAL PLATING - OTHER
Restricted Use: NO
Funding: Orphan Funds
Regulatory Agencies Involved: SMBRP
Potential Contamination of Concern: 30005, 30013, 30016, 30022, 30025, 30027, 30028, 30108, 30116, 30152, 30153, 30156, 30194, 30195, 30272, 30384, 30407, 30594
Confirmed Contamination of Concern: 30272,30022,30025,30108,30152,30153,30156,30195,30594,30384,30407,30116,30028,30027,30194,30005,30013,30016
Potential Media Affected: OTH, SOIL, SV
Site MGMT REQ: NONE SPECIFIED

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Cal-State-Response-Active	Listed	0.66 miles S	33 ft (34 ft lower than site)	55

SITE NAME	MAPS	ID
HARRIS DRY CLEANERS	1, 3	01720109

ADDRESS	CITY	ZIP
2801 MARTIN LUTHER KING JR. WAY	OAKLAND	94609

DETAILS

URL: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=01720109
Envirostor ID: 01720109
County: ALAMEDA
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0.3
APN: 009 069500600, 009-0695-006-00
National Priorities List: NO
Lead Agency: SMBRP
Project Manager: Henry Wong
Supervisor: Karen Toth
Division Branch: Cleanup Berkeley
Site Code: 201253
Assembly: 18
Senate: 09
Congressional District: 13
Special Program: Not Reported
Status: Active
Status Date: 2000-06-16 00:00:00
Past Uses: DRY CLEANING
Restricted Use: NO
Funding: Orphan Funds
Regulatory Agencies Involved: SMBRP, RWQCB 2 - San Francisco Bay, US EPA
Potential Contamination of Concern: 30022, 30025, 30027
Confirmed Contamination of Concern: 30022,30025,30027
Potential Media Affected: OTH, SOIL, SV
Site MGMT REQ: NONE SPECIFIED
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
CBF-CA	Listed	0.27 miles NE	84 ft (17 ft higher than site)	32

SITE NAME	MAPS	ID
MacArthur BART Transit Village	1, 3	T10000000406

ADDRESS	CITY	ZIP
NONE 40TH STREET AND TELEGRAPH AVENUE (APNS 012-0969-053-03, 012-0968-055-01, 012-0967-049-01)	Oakland	94612

DETAILS

CMS Report URL: https://geotracker.waterboards.ca.gov/csm_report?global_id=T10000000406
Global ID: T10000000406
County: Alameda
Project Type: Cleanup Program Site
Status: Open - Remediation
Status Date: 12/10/2011
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Last Correspondence Date: 6/10/2016
Release Type: Non-Point Source, Oil and Gas Operation, Unknown
Contaminant(s) of Concern: Diesel, Total Petroleum Hydrocarbons (TPH), Waste Oil / Motor / Hydraulic / Lubricating
Media of Concern: Indoor Air, Other Groundwater (uses other than drinking water), Soil Vapor
Past Use(s) that Caused Contamination: UNKNOWN
Human Health Exposure Controlled: YES
Human Health Exposure Controlled Date: 1/28/2009
Groundwater Migration Controlled: YES
Groundwater Migration Controlled Date: 2/6/2012
Primary Caseworker Name: MARK JOHNSON
Primary Caseworker Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Primary Caseworker Phone Number: 510-622-2493
Primary Caseworker Address: 1515 CLAY STREET, SUITE 1400, OAKLAND, CA
Primary Caseworker Email: mjohnson@waterboards.ca.gov
Agency Provided Longitude: -122.264742851257
Agency Provided Latitude: 37.8290735382453

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-CA	Listed	0.29 miles SE	63 ft (4 ft lower than site)	35

SITE NAME	MAPS	ID
Not Reported by Agency	1, 3	RO0003090-ALA

ADDRESS	CITY	ZIP
0 TELEGRAPH AVE	OAKLAND	94612

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health Status Code: 11 Status: Case Transferred Record ID: RO0003090 Site ID: SD0003083 Global ID: T10000003437 Assigned Name: MAINSITE Agency Provided Longitude: -122.265785001 Agency Provided Latitude: 37.8243813028

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.11 miles NW	66 ft (1 ft lower than site)	11
SITE NAME			**MAPS**	**ID**
NEIGHBORHOOD LAUNDROMAT			1, 2, 3	RO0000242-ALA
ADDRESS			**CITY**	**ZIP**
3838 WEST ST			Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000242 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 10/15/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8283420346 Agency Provided Longitude: -122.2712918244 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Underway Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: NA Organization Type: Unknown Status: Preliminary Site Assessment Underway More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.12 miles SW	58 ft (9 ft lower than site)	14

SITE NAME	MAPS	ID
RD MINER COMPANY	1, 2, 3	RO0003064-ALA
ADDRESS	**CITY**	**ZIP**
750 37th ST	OAKLAND	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0003064 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 8/10/1987 Affected Media Description: Undetermined affected Agency Provided Latitude: 37.826487011 Agency Provided Longitude: -122.271039526 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.15 miles NE	75 ft (8 ft higher than site)	17
SITE NAME			**MAPS**	**ID**
BART PROPERTY			1, 2, 3	RO0000650-ALA
ADDRESS			**CITY**	**ZIP**
3924 MARTIN LUTHER KING JR WAY			Oakland	94609
DETAILS				
No Details Available				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.29 miles NE	87 ft (20 ft higher than site)	34
SITE NAME			**MAPS**	**ID**
SHELL #12-9452			1, 3	RO0000264-ALA
ADDRESS			**CITY**	**ZIP**
500 40TH ST			Oakland	94609

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000264
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 1/2/1992
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8292875948
Agency Provided Longitude: -122.2645408709
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Leak Confirmation

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Pollution Characterization

Organization Name: J CHAN & I WONG TRUST ETAL
Organization Type: Former Fee Title Owner
Status: Pollution Characterization

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.36 miles SE	58 ft (9 ft lower than site)	37

SITE NAME	MAPS	ID
SUMMIT MEDICAL CENTER	1, 3	RO0000991-ALA

ADDRESS	CITY	ZIP
3420 TELEGRAPH AVE	Oakland	94609

DETAILS

No Details Available

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.4 miles SW	38 ft (29 ft lower than site)	38
SITE NAME			MAPS	ID
CITY OF OAKLAND FIRE STATION #5			1, 3	RO0001041-ALA
ADDRESS			CITY	ZIP
934 34TH ST			Oakland	94609
DETAILS				
No Details Available				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.44 miles NE	96 ft (29 ft higher than site)	40
SITE NAME			MAPS	ID
SIMPSON, RONN			1, 3	RO0000270-ALA
ADDRESS			CITY	ZIP
489 43RD ST			Oakland	94609
DETAILS				
No Details Available				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.45 miles NE	97 ft (30 ft higher than site)	42
SITE NAME			MAPS	ID
WALTER BLUMERT COMPANY			1, 3	RO0000272-ALA
ADDRESS			CITY	ZIP
490 43RD ST			Oakland	94609
DETAILS				
No Details Available				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.46 miles NW	57 ft (10 ft lower than site)	43

SITE NAME	MAPS	ID
CALIFORNIA LINEN SUPPLY CO	1, 3	RO0000337-ALA

ADDRESS	CITY	ZIP
989 41ST ST	Oakland	94609

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000337
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 10/13/1992
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8317987014
Agency Provided Longitude: -122.2761041516
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Preliminary Site Assessment Workplan Submitted

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Remedial Action Underway

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Preliminary Site Assessment Underway

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.46 miles W	41 ft (26 ft lower than site)	44
SITE NAME			MAPS	ID
BLAZIC INDUSTRIAL BALANCING			1, 3	RO0000985-ALA
ADDRESS			CITY	ZIP
1016 MACARTHUR BLVD			Oakland	94608
DETAILS				
No Details Available				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.47 miles W	36 ft (31 ft lower than site)	45
SITE NAME			MAPS	ID
SHELL #13-9619			1, 3	RO0000006-ALA
ADDRESS			CITY	ZIP
3420 SAN PABLO AVE			Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000006 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 7/20/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8253969933 Agency Provided Longitude: -122.2778826 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization Organization Name: PORTOLA VALLEY SHELL Organization Type: Property/Fee Title Owner Status: Pollution Characterization

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.48 miles SW	34 ft (33 ft lower than site)	46

SITE NAME	MAPS	ID
LOOMIS ARMORED INC	1, 3	RO0001099-ALA

ADDRESS	CITY	ZIP
936 BROCKHURST ST	Oakland	94608

DETAILS
No Details Available

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.48 miles W	34 ft (33 ft lower than site)	47

SITE NAME	MAPS	ID
THRIFTY OIL #49	1, 3	RO0000004-ALA

ADDRESS	CITY	ZIP
3400 SAN PABLO AVE	Oakland	94608

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000004
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 4/28/1994
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8252922125
Agency Provided Longitude: -122.2778500658
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Remediation Plan

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.48 miles NE	100 ft (33 ft higher than site)	48

SITE NAME	MAPS	ID
KELLY AUTO PARTS	1, 3	RO0000881-ALA

ADDRESS	CITY	ZIP
4400 TELEGRAPH AVE	Oakland	94609

DETAILS

No Details Available

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.5 miles NW	51 ft (16 ft lower than site)	50

SITE NAME	MAPS	ID
FIDELITY ROOF COMPANY	1, 3	RO0000186-ALA

ADDRESS	CITY	ZIP
1075 40TH ST	Oakland	94608

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000186
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 12/19/1995
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8311278238
Agency Provided Longitude: -122.2778659894
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Preliminary Site Assessment Underway

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Remediation Plan

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Pollution Characterization

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Closed-CA	Closed	0.5 miles NW	76 ft (9 ft higher than site)	52

SITE NAME	MAPS	ID
ARCO	1, 3	RO0000132-ALA

ADDRESS	CITY	ZIP
4401 MARKET ST	Oakland	94608

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000132
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 4/9/1992
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8338013592
Agency Provided Longitude: -122.273305432
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Pollution Characterization

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Preliminary Site Assessment Underway

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Leak Confirmation

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.07 miles S	65 ft (2 ft lower than site)	6

SITE NAME	MAPS	ID
J&H AUTO REPAIR AND GAS STATION	1, 2, 3	RO0002910-ALA

ADDRESS	CITY	ZIP
3701 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0002910
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 4/10/2006
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8263490206
Agency Provided Longitude: -122.2694669997
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Preliminary Site Assessment Underway

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Pollution Characterization

Organization Name: RWQCB
Organization Type: Not Applicable
Status: Pollution Characterization

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.11 miles NE	73 ft (6 ft higher than site)	9

SITE NAME	MAPS	ID
GROVE STREET WASH RACK	1, 2, 3	RO0000027-ALA

ADDRESS	CITY	ZIP
3884 MARTIN LUTHER KING JR WAY	Oakland	94609

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000027
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 1/6/1995
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8287492148
Agency Provided Longitude: -122.2685048925
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Leak Confirmation

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Pollution Characterization

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.11 miles NW	66 ft (1 ft lower than site)	11

SITE NAME	MAPS	ID
NEIGHBORHOOD LAUNDROMAT	1, 2, 3	RO0000242-ALA

ADDRESS	CITY	ZIP
3838 WEST ST	Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000242 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 10/15/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8283420346 Agency Provided Longitude: -122.2712918244 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Underway Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: NA Organization Type: Unknown Status: Preliminary Site Assessment Underway More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.12 miles W	60 ft (7 ft lower than site)	13

SITE NAME	MAPS	ID
ARCO #04931	1, 2, 3	RO0000076-ALA

ADDRESS	CITY	ZIP
731 MACARTHUR BLVD	Oakland	94609

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000076
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 4/8/1992
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8272547612
Agency Provided Longitude: -122.2705040618
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Leak Confirmation

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Verification Monitoring Underway

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Pollution Characterization

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.12 miles SW	58 ft (9 ft lower than site)	14
SITE NAME			**MAPS**	**ID**
RD MINER COMPANY			1, 2, 3	RO0003064-ALA
ADDRESS			**CITY**	**ZIP**
750 37th ST			OAKLAND	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0003064 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 8/10/1987 Affected Media Description: Undetermined affected Agency Provided Latitude: 37.826487011 Agency Provided Longitude: -122.271039526 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.28 miles W	52 ft (15 ft lower than site)	33

SITE NAME	MAPS	ID
CHEVRON #9-2029	1, 3	RO0002438-ALA

ADDRESS	CITY	ZIP
890 MACARTHUR BLVD	OAKLAND	94608

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0002438
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 8/28/2001
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8281256157
Agency Provided Longitude: -122.2742325124
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Preliminary Site Assessment Underway

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Leak Confirmation

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Preliminary Site Assessment Workplan Submitted

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.29 miles NE	87 ft (20 ft higher than site)	34

SITE NAME	MAPS	ID
SHELL #12-9452	1, 3	RO0000264-ALA

ADDRESS	CITY	ZIP
500 40TH ST	Oakland	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000264 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 1/2/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8292875948 Agency Provided Longitude: -122.2645408709 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization Organization Name: J CHAN & I WONG TRUST ETAL Organization Type: Former Fee Title Owner Status: Pollution Characterization More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.29 miles SE	63 ft (4 ft lower than site)	35

SITE NAME	MAPS	ID
CALTRANS TELEGRAPH & HWY 24	1, 3	RO0003090-ALA

ADDRESS	CITY	ZIP
0 TELEGRAPH AVE	OAKLAND	94612

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0003090 Substance Code: 12034 Substance Description: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4 Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 9/8/2010 Affected Media Description: Undetermined affected Agency Provided Latitude: 37.8243813028 Agency Provided Longitude: -122.265785001 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: RWQCB Organization Type: Not Applicable Status: Leak Confirmation

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.3 miles NW	60 ft (7 ft lower than site)	36

SITE NAME	MAPS	ID
SAN FRANCISCO FRENCH BREAD	1, 3	RO0000490-ALA

ADDRESS	CITY	ZIP
3924 MARKET ST	Oakland	94607

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000490 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 10/15/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8300648333 Agency Provided Longitude: -122.273897809 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Remedial Action Underway More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.45 miles S	46 ft (21 ft lower than site)	41

SITE NAME	MAPS	ID
TONG PROPERTY	1, 3	RO0003054-ALA

ADDRESS	CITY	ZIP
3133 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0003054 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 1/25/1996 Affected Media Description: Undetermined affected Agency Provided Latitude: 37.820929047 Agency Provided Longitude: -122.270824007 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization Organization Name: NA Organization Type: Unknown Status: Leak Confirmation More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.46 miles NW	57 ft (10 ft lower than site)	43

SITE NAME	MAPS	ID
CALIFORNIA LINEN SUPPLY CO	1, 3	RO0000337-ALA

ADDRESS	CITY	ZIP
989 41ST ST	Oakland	94609

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000337 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 10/13/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8317987014 Agency Provided Longitude: -122.2761041516 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Workplan Submitted Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Remedial Action Underway Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Underway More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.47 miles W	36 ft (31 ft lower than site)	45

SITE NAME	MAPS	ID
SHELL #13-9619	1, 3	RO0000006-ALA

ADDRESS	CITY	ZIP
3420 SAN PABLO AVE	Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000006 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 7/20/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8253969933 Agency Provided Longitude: -122.2778826 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization Organization Name: PORTOLA VALLEY SHELL Organization Type: Property/Fee Title Owner Status: Pollution Characterization

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.48 miles W	34 ft (33 ft lower than site)	47

SITE NAME	MAPS	ID
THRIFTY OIL #49	1, 3	RO0000004-ALA

ADDRESS	CITY	ZIP
3400 SAN PABLO AVE	Oakland	94608

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000004
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 4/28/1994
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8252922125
Agency Provided Longitude: -122.2778500658
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Remediation Plan

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.49 miles SW	34 ft (33 ft lower than site)	49

SITE NAME	MAPS	ID
FG GASOLINE	1, 3	RO0000131-ALA

ADDRESS	CITY	ZIP
3314 SAN PABLO AVE	Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000131 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 3/6/1996 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8246392542 Agency Provided Longitude: -122.2776329366 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Workplan Submitted Organization Name: FG GASOLINE Organization Type: Property/Fee Title Owner Status: Leak Confirmation More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.5 miles NW	51 ft (16 ft lower than site)	**50**

SITE NAME	MAPS	ID
FIDELITY ROOF COMPANY	1, 3	RO0000186-ALA

ADDRESS	CITY	ZIP
1075 40TH ST	Oakland	94608

DETAILS

County: Alameda
Responsible Agency: Alameda County Environmental Health
GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP
URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search
Record ID: RO0000186
Substance Code: 8006619
Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Release Type: UST
Release Type Description: Substance released from Underground Storage Tank System
Program: LUST
Program Description: RP Identified & Solvent
RP Identification Date: 12/19/1995
Affected Media Description: Other Groundwater affected (uses other than drinking water)
Agency Provided Latitude: 37.8311278238
Agency Provided Longitude: -122.2778659894
Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Preliminary Site Assessment Underway

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Remediation Plan

Organization Name: ALAMEDA COUNTY LOP
Organization Type: Not Applicable
Status: Pollution Characterization

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-LUST-Open-CA	Open	0.5 miles NW	76 ft (9 ft higher than site)	52

SITE NAME	MAPS	ID
ARCO	1, 3	RO0000132-ALA

ADDRESS	CITY	ZIP
4401 MARKET ST	Oakland	94608

DETAILS
County: Alameda Responsible Agency: Alameda County Environmental Health GIS Mapper URL: http://gis.acgov.org/DEH/InspectionResults/?SITE=LOP URL Instructions: Go to URL, Choose in drop down Record Id-RO Number, Enter RO Number and Search Record ID: RO0000132 Substance Code: 8006619 Substance Description: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded Release Type: UST Release Type Description: Substance released from Underground Storage Tank System Program: LUST Program Description: RP Identified & Solvent RP Identification Date: 4/9/1992 Affected Media Description: Other Groundwater affected (uses other than drinking water) Agency Provided Latitude: 37.8338013592 Agency Provided Longitude: -122.273305432 Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Pollution Characterization Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Preliminary Site Assessment Underway Organization Name: ALAMEDA COUNTY LOP Organization Type: Not Applicable Status: Leak Confirmation More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
County-UST-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	13

SITE NAME	MAPS	ID
Westco Gas Food	1, 2, 3	FA0321486-ALA

ADDRESS	CITY	ZIP
731 W MacArthur Blvd	Oakland	

DETAILS
County: Alameda Responsible Agency: Alameda County Department of Environmental Health Facility ID: FA0321486 Description: UNDERGROUND STORAGE TANK 4 CONTAINERS Program Element Code: 4104 Stat: 01 Current Inspection Date: 11/21/2017 Last Inspection: 11/16/2016 Owner ID: OW0324594 Owner Name: Abdulrahim Alazani

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
DCF2-CA	Listed	0.11 miles NW	66 ft (1 ft lower than site)	11

SITE NAME	MAPS	ID
G & J Whirl & Twirl Laundry Mt	1, 2, 3	56225

ADDRESS	CITY	ZIP
3838 West St	Emeryville	94608

DETAILS
County: Alameda Executive First Name: Not Reported Executive Last Name: Not Reported Professional Title: Not Reported Executive Title: Not Reported Executive Gender: Not Reported Executive Biography: Not Reported ZIP Four: 3830 Carrier Route: C024 Delivery Point Barcode: 388 Metro Area: Sn Francisco, CA Neighborhood: Longfellow Phone Number Combined: (510) 594-2468 Fax Number Combined: 0 Toll Free Number Combined: 0 Website: Not Reported Company Description: Not Reported Primary SIC Code: 721201 Primary SIC Description: Cleaners Primary SIC Ad Size: Not Reported Primary SIC Year Appeared: 2011 SIC Code 1: 721201 SIC Code 1 Description: Cleaners SIC Code 1 Ad Size: Not Reported SIC Code 1 Year Appeared: Not Reported SIC Code 2: Not Reported SIC Code 2 Description: Not Reported More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
DCF2-CA	Listed	0.11 miles SW	59 ft (8 ft lower than site)	12
SITE NAME			MAPS	ID
Uni Clean			1, 2, 3	63170
ADDRESS			CITY	ZIP
705 37th St			Oakland	94609

DETAILS
County: Alameda Executive First Name: Harvey Executive Last Name: Fang Professional Title: Not Reported Executive Title: Site Manager Executive Gender: Male Executive Biography: Not Reported ZIP Four: 2331 Carrier Route: C022 Delivery Point Barcode: 58 Metro Area: Sn Francisco, CA Neighborhood: Longfellow Phone Number Combined: (510) 420-1711 Fax Number Combined: Not Reported Toll Free Number Combined: 0 Website: Uniclean.Com Company Description: Not Reported Primary SIC Code: 721805 Primary SIC Description: Clean Room Facilities Primary SIC Ad Size: Not Reported Primary SIC Year Appeared: 2001 SIC Code 1: 721101 SIC Code 1 Description: Laundries SIC Code 1 Ad Size: Not Reported SIC Code 1 Year Appeared: Not Reported SIC Code 2: 721805 SIC Code 2 Description: Clean Room Facilities More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
DCF2-CA	Listed	0.15 miles W	59 ft (8 ft lower than site)	20

SITE NAME	MAPS	ID
Yupi Building Svc	1, 2, 3	64059

ADDRESS	CITY	ZIP
3715 West St	Oakland	94608

DETAILS
County: Alameda Executive First Name: Not Reported Executive Last Name: Not Reported Professional Title: Not Reported Executive Title: Not Reported Executive Gender: Not Reported Executive Biography: Not Reported ZIP Four: 3922 Carrier Route: C024 Delivery Point Barcode: 151 Metro Area: Sn Francisco, CA Neighborhood: Longfellow Phone Number Combined: (510) 923-9658 Fax Number Combined: 0 Toll Free Number Combined: 0 Website: Not Reported Company Description: Not Reported Primary SIC Code: 721201 Primary SIC Description: Cleaners Primary SIC Ad Size: Regular Primary SIC Year Appeared: 2010 SIC Code 1: 721201 SIC Code 1 Description: Cleaners SIC Code 1 Ad Size: Not Reported SIC Code 1 Year Appeared: Not Reported SIC Code 2: Not Reported SIC Code 2 Description: Not Reported More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
DryCleaners-CA	Listed	0.11 miles NW	66 ft (1 ft lower than site)	11

SITE NAME	MAPS	ID
1X NEIGHBORHOOD LAUNDRYMAT	1, 2, 3	CAC000701240

ADDRESS	CITY	ZIP
3838 WEST STREET	OAKLAND	946080000

DETAILS
EPA ID: CAC000701240 Create Date: 12/10/1991 Facility Act Ind: N Inact Date: 10/25/2000 Facility Street2: Not Reported County: Alameda Mailing Name: Not Reported Facility Mailing Address: 4218 WEST STREET Facility Mailing Address 2: Not Reported Facility Mailing City: OAKLAND Facility Mailing State: CA Facility Mailing Zip Code: 946080000 Region Code: 2 Owner Name: BARBARA FISHER Owner Address: -- Owner Address2: Not Reported Owner City: -- Owner State: 99 Owner Zip Code: -- Owner Phone Number: 0000000000 Owner Fax Number: Not Reported Contact Name: BARBARA FISHER/OWNER Contact Address: -- Contact Address2: Not Reported Contact City: -- Contact State: 99 Contact Zip Code: -- More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.07 miles S	65 ft (2 ft lower than site)	6

SITE NAME	MAPS	ID
J&H AUTO REPAIR AND GAS STATION	1, 2, 3	T06019709592

ADDRESS	CITY	ZIP
3701 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

Global ID: T06019709592

County: Alameda

Site History: A Phase I report was prepared for the site in 2002 which identified the site as having been a retail service station from the 1940s to the 1990s. The underground storage tanks were left in place and the site is currently a vacant lot. A preliminary site assessment was performed on March 31, 2003. 160 mg/kg TPHg, 200 mg/kg TOG and 1 mg/kg benzene were detected in soil samples and 1,500 µg/L TPHg and 18 µg/l benzene were detected in groundwater samples. No MTBE was detected. Four additional borings were advanced at the request of the City of Oakland Environmental Service Division for approval of Community Development Corporation of Oakland loan. 0.072 mg/kg benzene was detected in soil. No other significant contaminants were detected. However, it is unclear where the samples were located since no map was present in the report. It appears that the groundwater samples may have been collected from upgradient. The case was transferred to ACEH on February 23, 2006 but the RP has been unresponsive to requests to claim the site in Geotracker. Unknown to ACEH, the USTs were removed and work was performed under the Orphan Fund perhaps under the CIty of Oakland's direction. To date ACEH has not recieved any reports nor have they been uploaded to Geotracker.

Case Type: LUST Cleanup Site

Status: Open - Site Assessment

Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)

Case Worker: JMJ

Local Agency: Not Reported

RB Case Number: 623106

Loc Case Number: RO0002910

File Location: All Files are on GeoTracker or in the Local Agency Database

Potential Contaminants of Concern: Gasoline

Potential Media Affected: Other Groundwater (uses other than drinking water)

How Discovered: * SA

How Discovered Description: Not Reported

Stop Method: Other Means

Stop Method Description: Not Reported

Action Date: 2014-10-08

Action Type: ENFORCEMENT

Action: Site Visit / Inspection / Sampling

Action Date: 2013-02-15

Action Type: ENFORCEMENT

Action: File Review - Closure

Action Date: 2012-06-18

Action Type: ENFORCEMENT

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.11 miles NE	73 ft (6 ft higher than site)	9

SITE NAME	MAPS	ID
GROVE STREET WASH RACK	1, 2, 3	T0600102106

ADDRESS	CITY	ZIP
3884 MARTIN LUTHER KING JR	Oakland	94609

DETAILS

Global ID: T0600102106
County: Alameda
Site History: Not all historic documents for the fuel leak case may be available on Geotracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at: http://www.acgov.org/aceh/lop/ust.htm The subject site was formerly in commercial use as an auto body shop, is currently a vacant lot, and is comprised of APN 12-968-31, located in Oakland, California. The site is located approximately 4,100 feet northeast and up gradient of a culvertized section of Glen Echo Creek. Lake Merritt is located approximately 1.30 miles south southeast of the property. The direction of site groundwater flow is towards the southwest. A 500 gallon gasoline underground storage tank (UST) and two 650 gallon gasoline USTs were removed on January 5, 1995. Confirmation soil samples taken from 7.5 feet or 9 below ground surface (bgs) beneath each UST detected up to 140 milligrams per kilogram (mg/kg) Total Petroleum Hydrocarbon as gasoline (TPHg), 610 mg/kg benzene 960 mg/kg toluene, 1,300 mg/kg ethylbenzene, and 9,700 xylenes (BTEX). In 2004 and 2006, soil and groundwater investigations were conducted at the site, which detected elevated TPHg and BTEX in soil and groundwater. In November 2006, a CAP was submitted and approved but not implemented. Eight groundwater monitoring wells were installed both on-and off-site in 2013–2014. A Feasibility Study/Corrective Action Plan (FS/CAP) was approved in December 2013 but not implemented. A Final Remedial Design Implementation Plan (RDIP) was approved in December 2014 but not implemented. A draft FS/CAP Addendum was submitted in June 2016.
Case Type: LUST Cleanup Site
Status: Open - Assessment & Interim Remedial Action
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: KLD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 142447
Loc Case Number: RO0000027
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Close and Remove Tank
Stop Method Description: Not Reported
Action Date: 2017-02-07
Action Type: ENFORCEMENT
Action: Staff Letter - #20170207

Action Date: 2016-09-14
Action Type: ENFORCEMENT
Action: Email Correspondence - #20160914

Action Date: 2016-08-16
Action Type: ENFORCEMENT

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	13

SITE NAME	MAPS	ID
ARCO #04931	1, 2, 3	T0600100110

ADDRESS	CITY	ZIP
731 W MACARTHUR BLVD	Oakland	94609

DETAILS

Global ID: T0600100110
County: Alameda
Site History: The site is an active Beacon-branded gasoline station. In December 1987, Pacific Environmental Group (PEG) installed four monitoring wells (A-9 through A-12) at the site. Monitoring wells A-1 through A-8 appear to have been installed previously by another consultant. Monitoring well construction details and reports for those wells were not found in our case file. Between November 1991 and April 1992, four single-walled underground storage tanks consisting of one 12,000-gallon fiberglass UST, two 8,000-gallon steel USTs and one 6,000-gallon steel UST) and associated product piping were removed from the site. TPH-g and benzene were detected at concentrations up to 430 mg/kg and 24 mg/kg, respectively, in soil sample SW12 collected at 12 feet bgs. Following UST pit over-excavation, ROUX stated that maximum residual TPH-g and benzene concentrations remaining in the UST cavity were detected at 250 mg/kg and 2.7 mg/kg, respectively. Following over-excavation of the product piping, maximum residual TPH-g and benzene concentrations remaining in the piping trenches were detected 400 mg/kg and 2.6 mg/kg, respectively, detected in sample L12 collected at 7.5 ft bgs. In January 1992, GeoStrategies, Inc. (GSI) installed one vapor extraction well to conduct a vapor extraction test. GSI concluded that vapor extraction did not create significant pressure influence at the closest vapor monitoring point location four feet from the vapor extraction point and subsequently vapor extraction was not considered a viable or feasible remediation option for the site. In November 1992, three recovery wells (AR-1 through AR-3) were installed at the site to facilitate groundwater extraction and abate free product detected in monitoring wells A-4 and A-8. The groundwater extraction system operated from 1992 to 1996.
Case Type: LUST Cleanup Site
Status: Open - Site Assessment
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: MD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-0118
Loc Case Number: RO0000076
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Action Date: 2017-03-02
Action Type: ENFORCEMENT
Action: Staff Letter

Action Date: 2016-09-08
Action Type: ENFORCEMENT
Action: Staff Letter - #20160908

Action Date: 2016-05-10
Action Type: ENFORCEMENT
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.12 miles SW	58 ft (9 ft lower than site)	14

SITE NAME	MAPS	ID
RD MINER COMPANY	1, 2, 3	T0600101123

ADDRESS	CITY	ZIP
750 37TH ST	OAKLAND	94609

DETAILS

Global ID: T0600101123
County: Alameda
Site History: Suspect case was opened mistakenly as the result of neighborhood complaints regarding excessive fumes and dying vegetation from ARCO station (RO76)that had a release in 1982. RO76 is a free product site with up to 4 feet of product observed in several site monitoring wells. The tanks located adjacent to the reported address of this site, were not removed until 1992. Soil excavated from the tank pit showed significant evidence of free product and thus likely were the source of the fumes. RO76 files contain a letter dated April 19, 1992 from another resident in the area complaining of impacts from the station.
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: TL
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-1221
Loc Case Number: RO0003064
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Under Investigation
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Action Date: 2013-05-13
Action Type: ENFORCEMENT
Action: File review

Action Date: 2012-03-08
Action Type: ENFORCEMENT
Action: File review

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.24 miles E	80 ft (13 ft higher than site)	28

SITE NAME	MAPS	ID
REGAL #120 / EAST BAY SURGERY CENTER	1, 2, 3	T06019716388

ADDRESS	CITY	ZIP
3875 TELEGRAPH	OAKLAND	94609

DETAILS

Global ID: T06019716388

County: Alameda

Site History: The approximately 0.9-acre Site is located at 3875 Telegraph Avenue in Oakland, California. Much of the site is covered by a 10,000-square foot building that is surrounded largely by paved parking areas. The Site is bounded by: 39th Street to the north; Telegraph Avenue to the east; Apgar Street to the south and a parking lot for the Bay Area Rapid Transit District (BART) MacArthur Station to the west. The surrounding area is a mixed residential and commercial neighborhood. In the 1930s, the Site was used for two gasoline stations, one in the southwest corner (3855 Telegraph Avenue) and one in the northern portion (3881 Telegraph Avenue) of the Site. By the 1940s, the two gasoline stations had been removed. In the 1950s, the southern portion of the Site was occupied by a tamale factory and restaurant; and the northern portion was occupied by another gasoline service station. In June 1984, as part of pre-construction evaluations, Harding Lawson Associates (HLA) drilled four borings for collection of soil samples for geotechnical testing. HLA noted the soil cores collected from approximately 15 feet below ground surface contained “gasoline odor.” In December 1984, the four USTs, associated service station buildings, and pump islands were removed (HLA, 1992). Following removal of the USTs, the excavation was backfilled with imported material. In 1984, the Site was purchased by East Bay Outpatient Surgery for development as a surgery center. In May 1985, as part of the surgery center construction, the UST excavation backfill material was removed. The former UST excavation was subsequently over-excavated to a depth of approximately 15 feet below ground surface with approximately 1,070 cubic yards of soil being disposed off-site. In 2001, Terracon advancing six borings, B-1 to B-6, to a depth of approximately 25-feet below ground surface for the collection of soil and groundwater samples. In January 2005, Gribi Associates (Gribi) collected 18 soil and 5 groundwater samples from borings advanced offsite within the BART parking lot to the west; and onsite within the southern parking lot. Subsequently, between February 2005 and June 2005, Ninyo & Moore, on behalf of BART, conducted investigations near the Site as part of the MacArthur BART Transit Village redevelopment project (N&M, 2005). The investigations included the collection of soil and groundwater samples from 27 borings (February 2005) and soil gas samples from 15 borings (June 2005) advanced within: 39th Street; 40th Street; Apgar Street; and the BART parking lot. The soil and groundwater investigations detected petroleum hydrocarbons both on-site and off-site. Elevated concentrations of TPH as gasoline (TPHg) have been detected in groundwater samples from temporary boring advanced both on-site and off-site. A plume of fuel hydrocarbons extends southwest from the Surgery Center to the BART parking lot. The most recent investigation activities have been conducted in the BART parking lot to define the off-site extent of contamination.

Case Type: LUST Cleanup Site

Status: Completed - Case Closed

Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)

Case Worker: MEJ

Local Agency: Not Reported

RB Case Number: 612514

Loc Case Number: Not Reported

File Location: All Files are on GeoTracker or in the Local Agency Database

Potential Contaminants of Concern: Diesel, Gasoline

Potential Media Affected: Other Groundwater (uses other than drinking water)

How Discovered: * SA

How Discovered Description: Not Reported

Stop Method: Other Means

Stop Method Description: Not Reported

Action Date: 2016-01-05

Action Type: ENFORCEMENT

Action: Closure/No Further Action Letter

Action Date: 2015-06-26

Action Type: ENFORCEMENT

Action: Notification - Public Notice of Case Closure

Action Date: 2012-06-29

Action Type: ENFORCEMENT

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
ENF-CA	Listed	0.25 miles SE	66 ft (1 ft lower than site)	31

SITE NAME	MAPS	ID
CHP - OAKLAND	1, 2, 3	T0619763665

ADDRESS	CITY	ZIP
3601 TELEGRAPH AVENUE	OAKLAND	94609

DETAILS

Global ID: T0619763665

County: Alameda

Site History: During UST system testing in 1988 and dispenser upgrades in 1997, unauthorized releases were detected. An indoor shooting range was located on the site and lead contamination was detected. Building demolition and lead abatement of shallow soil to 1 foot bgs was completed in 2008. A PSA completed in November 2008 collected limited soil samples above 5 feet bgs. UST system removal and replacement is proposed and confirmation soil sampling will be completed once the UST has been removed. Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp

Case Type: LUST Cleanup Site

Status: Open - Inactive

Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)

Case Worker: REL

Local Agency: Not Reported

RB Case Number: 625297

Loc Case Number: RO0002950

File Location: All Files are on GeoTracker or in the Local Agency Database

Potential Contaminants of Concern: Lead, Gasoline

Potential Media Affected: Other Groundwater (uses other than drinking water)

How Discovered: Tank Tightness Test

How Discovered Description: Not Reported

Stop Method: Repair Product Piping

Stop Method Description: Not Reported

Action Date: 2013-05-03

Action Type: ENFORCEMENT

Action: File Review - Closure

Action Date: 2012-05-31

Action Type: ENFORCEMENT

Action: Referral to Regional Board - #20120531

Action Date: 2011-06-13

Action Type: ENFORCEMENT

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Haulers-CA	Listed	0.04 miles S	67 ft (0 ft higher than site)	2

SITE NAME	MAPS	ID
Alex and Angel's Tires	1, 2, 3	1650025

ADDRESS	CITY	ZIP
657 W MacArthur Blvd	Oakland	94609-2341

DETAILS

URL: http://www.calrecycle.ca.gov/tires/data/organization/search.aspx
URL Instructions: Go to URL, Select Hauler for Type of Business, Search by TPID.
TPID: 1650025
County: Alameda
Organization Name: Alex and Angel's Tires
Agency Provided Latitude: 37.827022
Agency Provided Longitude: -122.269477
Contact Name: Angel Castillejos
Phone Number: Not Reported

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Dealers	Listed	0.06 miles E	70 ft (3 ft higher than site)	4

SITE NAME	MAPS	ID
It's About Cars	1, 2, 3	215038

ADDRESS	CITY	ZIP
622 W Macarthur Blvd	Oakland	94609

DETAILS

Site Added: 1/1/2013

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Dealers	Listed	0.06 miles E	70 ft (3 ft higher than site)	4
SITE NAME			MAPS	ID
Its About Cars			1, 2, 3	157926
ADDRESS			CITY	ZIP
622 W Macarthur Blvd			Oakland	94609
DETAILS				
Sic Code: 5521 Desc: Auto & Truck Dealer Site Added: 2/2010				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Dealers	Listed	0.06 miles E	70 ft (3 ft higher than site)	4
SITE NAME			MAPS	ID
DISCOUNT AUTO CTR			1, 2, 3	1580504-PD
ADDRESS			CITY	ZIP
622 W MACARTHUR BLVD			OAKLAND	94609-2324
DETAILS				
Listing Year: 1997 SIC Category: AUTOMOBILE DEALERS-USED CARS SIC Code: 551103				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.03 miles E	68 ft (1 ft higher than site)	1
SITE NAME			MAPS	ID
QUALITY TUNE-UP			1, 2, 3	546965-PD
ADDRESS			CITY	ZIP
640 W MACARTHUR BLVD			OAKLAND	94609-2324

DETAILS
Listing Year: 1997 SIC Category: AUTOMOBILE REPAIRING & SERVICE SIC Code: 753801

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.11 miles W	61 ft (6 ft lower than site)	10
SITE NAME			MAPS	ID
INSTA LUBE			1, 2, 3	464852-PD
ADDRESS			CITY	ZIP
736 W MACARTHUR BLVD			OAKLAND	94609-2326
DETAILS				
Listing Year: 1997 SIC Category: AUTOMOBILE LUBRICATION SERVICE SIC Code: 754903				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.13 miles N	75 ft (8 ft higher than site)	16
SITE NAME			MAPS	ID
YEM HONDA HYUNDAI AUTO SVC			1, 2, 3	611986-PD
ADDRESS			CITY	ZIP
3909 MARTIN LUTHER KING JR WAY			OAKLAND	94609-2315
DETAILS				
Listing Year: 1997 SIC Category: AUTOMOBILE REPAIRING & SERVICE SIC Code: 753801				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.16 miles W	61 ft (6 ft lower than site)	21

SITE NAME	MAPS	ID
Big O Tires	1, 2, 3	39310

ADDRESS	CITY	ZIP
810 W Macarthur Blvd	Oakland	94608

DETAILS

Sic Code: 5531
Desc: Auto, Truck & Tire Service
Site Added: 2/2010

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.16 miles W	61 ft (6 ft lower than site)	21

SITE NAME	MAPS	ID
BIG O TIRES	1, 2, 3	10156

ADDRESS	CITY	ZIP
810 W MACARTHUR BLVD	Emeryville	94608

DETAILS

Sic Code: 5531
Desc: Auto, Truck & Tire Service
Site Added: 2/2010

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Auto Repair	Listed	0.23 miles N	80 ft (13 ft higher than site)	27

SITE NAME	MAPS	ID
AL MANNING BODY SHOP	1, 2, 3	373049-PD

ADDRESS	CITY	ZIP
4101 MARTIN LUTHER KING JR WAY	OAKLAND	94609-2319

DETAILS
Listing Year: 1997 SIC Category: AUTOMOBILE BODY-REPAIRING & PAINTING SIC Code: 753201

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.03 miles E	68 ft (1 ft higher than site)	1
SITE NAME			MAPS	ID
QUALITY TUNE UP #35			1, 2, 3	7816513
ADDRESS			CITY	ZIP
640 W. MACARTHUR BLVD			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.07 miles S	65 ft (2 ft lower than site)	6
SITE NAME			MAPS	ID
HAMMOND SERVICE			1, 2, 3	4034840
ADDRESS			CITY	ZIP
3701 MARTIN LUTHER KING			OAKLAND	94609
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.11 miles W	61 ft (6 ft lower than site)	10
SITE NAME			MAPS	ID
INSTA LUBE			1, 2, 3	7815213
ADDRESS			CITY	ZIP
736 W. MACARTHUR BLVD			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.11 miles NW	66 ft (1 ft lower than site)	11
SITE NAME			MAPS	ID
1X NEIGHBORHOOD LAUNDRYMAT			1, 2, 3	7434979
ADDRESS			CITY	ZIP
3838 WEST ST			OAKLAND	946080000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.12 miles N	73 ft (6 ft higher than site)	15
SITE NAME			MAPS	ID
1X JOHNNYS AUTOMOTIVE			1, 2, 3	7810607
ADDRESS			CITY	ZIP
3901 MARTIN LUTHER KING JR. DR			OAKLAND	946600008
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.15 miles W	60 ft (7 ft lower than site)	18
SITE NAME			MAPS	ID
TUNE DYNAMICS			1, 2, 3	7817872
ADDRESS			CITY	ZIP
801 W. MACARTHUR BLVD			OAKLAND	946080000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.15 miles W	60 ft (7 ft lower than site)	18
SITE NAME			MAPS	ID
BEST AUTO REPAIR			1, 2, 3	7814157
ADDRESS			CITY	ZIP
801 W. MAC ARTHUR BLVD			OAKLAND	946080000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.16 miles W	61 ft (6 ft lower than site)	21
SITE NAME			MAPS	ID
BIG O TIRE			1, 2, 3	7732863
ADDRESS			CITY	ZIP
810 W. MACARTHUR BLVD			OAKLAND	946080000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.19 miles SE	68 ft (1 ft higher than site)	24

SITE NAME	MAPS	ID
1X 544 37TH ST.	1, 2, 3	7812368

ADDRESS	CITY	ZIP
544 37TH ST	OAKLAND	

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.21 miles N	77 ft (10 ft higher than site)	25

SITE NAME	MAPS	ID
1X SACRED HEART	1, 2, 3	7808433

ADDRESS	CITY	ZIP
675 41ST ST	OAKLAND	946090000

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.22 miles E	75 ft (8 ft higher than site)	26

SITE NAME	MAPS	ID
1X OAKLAND TELEGRAPH AVE LTD PARTNERSHIP	1, 2, 3	7808270

ADDRESS	CITY	ZIP
3833 TELEGRAPH AVE	OAKLAND	946120000

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.24 miles E	80 ft (13 ft higher than site)	28

SITE NAME	MAPS	ID
REGAL STATION #102	1, 2, 3	3203829

ADDRESS	CITY	ZIP
3875 TELEGRAPH AVE	OAKLAND	95607

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.24 miles E	80 ft (13 ft higher than site)	28

SITE NAME	MAPS	ID
EAST BAY SURGERY CENTER LP	1, 2, 3	7817042

ADDRESS	CITY	ZIP
3875 TELEGRAPH AVE	OAKLAND	946090000

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.24 miles E	80 ft (13 ft higher than site)	28

SITE NAME	MAPS	ID
1X JOSEPH DI GIORGIO & SONS INC	1, 2, 3	7817041

ADDRESS	CITY	ZIP
3875 TELEGRAPH AVE	OAKLAND	946090000

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.25 miles N	81 ft (14 ft higher than site)	30
SITE NAME			**MAPS**	**ID**
LITHOGRAPH REPRODUCTION INC			1, 2, 3	7817253
ADDRESS			**CITY**	**ZIP**
4120 MARTIN LUTHER KING JR. WA			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-CalFID-CA	Listed	0.25 miles SE	66 ft (1 ft lower than site)	31
SITE NAME			**MAPS**	**ID**
OAKLAND CHP			1, 2, 3	3779102
ADDRESS			**CITY**	**ZIP**
3601 TELEGRAPH AVE			OAKLAND	946090000
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-City-UST-CA	Listed	0.07 miles S	65 ft (2 ft lower than site)	6
SITE NAME			**MAPS**	**ID**
HAMMOND SERVICE			1, 2, 3	7851803
ADDRESS			**CITY**	**ZIP**
3701 MARTIN L KING WAY			OAKLAND	94609

DETAILS
Reported Date: 1998 List: City of Oakland Underground Storage Tank List Agency: City of Oakland Fire Department, Office of Emergency Services

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Cleaners	Listed	0.11 miles SW	59 ft (8 ft lower than site)	12
SITE NAME			MAPS	ID
Uniclean			1, 2, 3	43
ADDRESS			CITY	ZIP
705 37th St			Oakland	94609
DETAILS				
Sic Code: 7211 Desc: Laundry/Cleaner Services Site Added: 2/2010				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Cleaners	Listed	0.15 miles W	59 ft (8 ft lower than site)	20
SITE NAME			MAPS	ID
Yupi Building Services			1, 2, 3	75671
ADDRESS			CITY	ZIP
3715 West St			Emeryville	
DETAILS				
Site Added: 1/1/2013				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-ERNS-US	Listed	0.04 miles E	69 ft (2 ft higher than site)	3
SITE NAME			MAPS	ID
UNK			1, 2, 3	200109052
ADDRESS			CITY	ZIP
3820 MARTIN LUTHER KING JR BLVD			OAKLAND	
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-ERNS-US	Listed	0.07 miles NW	67 ft (0 ft higher than site)	7
SITE NAME			MAPS	ID
UNKNOWN			1, 2, 3	200249125
ADDRESS			CITY	ZIP
699 APGAR ST			OAKLAND	94607
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-ERNS-US	Listed	0.07 miles NW	67 ft (0 ft higher than site)	7
SITE NAME			MAPS	ID
UNKNOWN			1, 2, 3	200221353
ADDRESS			CITY	ZIP
699 APGAR ST			OAKLAND	94607
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-ERNS-US	Listed	0.25 miles SW	51 ft (16 ft lower than site)	29
SITE NAME			**MAPS**	**ID**
M&J TRANSMISSION			1, 2, 3	200005664
ADDRESS			**CITY**	**ZIP**
845 36TH STREET			OAKLAND	94607
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-HWS-CA	Listed	0.11 miles NW	66 ft (1 ft lower than site)	11
SITE NAME			**MAPS**	**ID**
NEIGHBORHOOD LAUNDROMAT			1, 2, 3	7434979
ADDRESS			**CITY**	**ZIP**
3838 WEST			OAKLAND	94608
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-HWS-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	13
SITE NAME			**MAPS**	**ID**
ARCO			1, 2, 3	930246
ADDRESS			**CITY**	**ZIP**
731 MACARTHUR			OAKLAND	94609
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-HWS-CA	Listed	0.25 miles SE	66 ft (1 ft lower than site)	31

SITE NAME	MAPS	ID
CALIFORNIA HIGHWAY PATROL	1, 2, 3	1231858

ADDRESS	CITY	ZIP
3601 TELEGRAPH	OAKLAND	

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-LUSTIS-CA	Listed	0.11 miles NE	73 ft (6 ft higher than site)	9

SITE NAME	MAPS	ID
GROVE STREET WASH RACK	1, 2, 3	7433498

ADDRESS	CITY	ZIP
3884 MARTIN LUTHER KING	OAKLAND	94609

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-LUSTIS-CA	Listed	0.11 miles NW	66 ft (1 ft lower than site)	11

SITE NAME	MAPS	ID
NEIGHBORHOOD LAUNDROMAT	1, 2, 3	4223133

ADDRESS	CITY	ZIP
3838 WEST ST	OAKLAND	94608

DETAILS
Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-LUSTIS-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	13
SITE NAME			MAPS	ID
ARCO			1, 2, 3	930246
ADDRESS			CITY	ZIP
731 MACARTHUR BLVD W			OAKLAND	94609
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-LUSTIS-CA	Listed	0.12 miles SW	58 ft (9 ft lower than site)	14
SITE NAME			MAPS	ID
RD MINER COMPANY			1, 2, 3	930122
ADDRESS			CITY	ZIP
750 37TH ST			OAKLAND	94609
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-LUSTIS-CA	Listed	0.15 miles NE	75 ft (8 ft higher than site)	17
SITE NAME			MAPS	ID
BART			1, 2, 3	5356196
ADDRESS			CITY	ZIP
3924 MARTIN LUTHER KING			OAKLAND	94609
DETAILS				
Reported Date: 1998				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-LUSTIS-CA	Listed	0.25 miles SE	66 ft (1 ft lower than site)	31

SITE NAME	MAPS	ID
CALIFORNIA HIGHWAY PATROL	1, 2, 3	1231858

ADDRESS	CITY	ZIP
3601 TELEGRAPH AVE	OAKLAND	94609

DETAILS

Reported Date: 1998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
HIST-MTBE-CA	Listed	0.11 miles NW	66 ft (1 ft lower than site)	11

SITE NAME	MAPS	ID
NEIGHBORHOOD LAUNDROMAT	1, 2, 3	8461-R2

ADDRESS	CITY	ZIP
3838 WEST ST	OAKLAND	94608

DETAILS

Region: 2 - San Francisco
County: Alameda
Ground Water Detection Limit: 0
Soil Detection Limit: Not Reported
MTBE Cnts: 1
MTBE Fuel: 1
Status: 3B
MTBE Tested: YES

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
HIST-MTBE-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	13

SITE NAME	MAPS	ID
ARCO # 04931	1, 2, 3	8049-R2

ADDRESS	CITY	ZIP
731 MACARTHUR BLVD W	OAKLAND	94609

DETAILS

Region: 2 - San Francisco
County: Alameda
Ground Water Detection Limit: 880
Soil Detection Limit: Not Reported
MTBE Cnts: 4
MTBE Fuel: 1
Status: 7
MTBE Tested: YES

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Printers	Listed	0.06 miles N	67 ft (0 ft higher than site)	5

SITE NAME	MAPS	ID
LEONG GRAPHICS	1, 2, 3	1171282-PD

ADDRESS	CITY	ZIP
679 APGAR ST	OAKLAND	94609-2345

DETAILS

Listing Year: 1997
SIC Category: COMMERCIAL PRINTING NEC
SIC Code: 275998

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-SLIC-CA	Listed	0.11 miles NE	73 ft (6 ft higher than site)	9
SITE NAME			MAPS	ID
GROVE STREET WASH RACK			1, 2, 3	7433498
ADDRESS			CITY	ZIP
3884 MARTIN LUTHER KING			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Region #2-San Francisco Bay Fuel Leaks List Agency: Regional Water Quality Control Board, Region #2				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-SLIC-CA	Listed	0.11 miles NW	66 ft (1 ft lower than site)	11
SITE NAME			MAPS	ID
NEIGHBORHOOD LAUNDROMAT			1, 2, 3	4223133
ADDRESS			CITY	ZIP
3838 WEST ST			OAKLAND	94608
DETAILS				
Reported Date: 1998 List: Region #2-San Francisco Bay Fuel Leaks List Agency: Regional Water Quality Control Board, Region #2				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-SLIC-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	13
SITE NAME			MAPS	ID
ARCO			1, 2, 3	930246
ADDRESS			CITY	ZIP
731 MACARTHUR BLVD W			OAKLAND	94609

DETAILS
Reported Date: 1998 List: Region #2-San Francisco Bay Fuel Leaks List Agency: Regional Water Quality Control Board, Region #2

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-SLIC-CA	Listed	0.12 miles SW	58 ft (9 ft lower than site)	14
SITE NAME			MAPS	ID
RD MINER COMPANY			1, 2, 3	930122
ADDRESS			CITY	ZIP
750 37TH ST			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Region #2-San Francisco Bay Fuel Leaks List Agency: Regional Water Quality Control Board, Region #2				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-SLIC-CA	Listed	0.15 miles NE	75 ft (8 ft higher than site)	17
SITE NAME			MAPS	ID
BART			1, 2, 3	5356196
ADDRESS			CITY	ZIP
3924 MARTIN LUTHER KING			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Region #2-San Francisco Bay Fuel Leaks List Agency: Regional Water Quality Control Board, Region #2				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-SLIC-CA	Listed	0.25 miles SE	66 ft (1 ft lower than site)	31
SITE NAME			MAPS	ID
CALIFORNIA HIGHWAY PATROL			1, 2, 3	1231858
ADDRESS			CITY	ZIP
3601 TELEGRAPH AVE			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Region #2-San Francisco Bay Fuel Leaks List Agency: Regional Water Quality Control Board, Region #2				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.07 miles S	65 ft (2 ft lower than site)	6
SITE NAME			MAPS	ID
HAMMOND SERVICE			1, 2, 3	4034840
ADDRESS			CITY	ZIP
3701 MARTIN L KING WAY			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.11 miles NE	73 ft (6 ft higher than site)	9
SITE NAME			MAPS	ID
GROVE STREET WASH RACK			1, 2, 3	7433498
ADDRESS			CITY	ZIP
3884 MARTIN L KING WAY			OAKLAND	94609

DETAILS
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	13
SITE NAME			MAPS	ID
ARCO STATION #04931			1, 2, 3	930246
ADDRESS			CITY	ZIP
731W MACARTHUR BLVD			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.15 miles NE	75 ft (8 ft higher than site)	17
SITE NAME			MAPS	ID
FRANK'S AUTO REPAIR			1, 2, 3	8586302
ADDRESS			CITY	ZIP
3924 MARTIN L KING WAY			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.18 miles N	77 ft (10 ft higher than site)	23

SITE NAME	MAPS	ID
APOSTOLIC CHURCH OF DELIVERY	1, 2, 3	7006093

ADDRESS	CITY	ZIP
4006 MARTIN L KING WAY	OAKLAND	94608

DETAILS

Reported Date: 1998
List: Alameda County UST
Agency: Department of Environmental Health

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.19 miles SE	68 ft (1 ft higher than site)	24

SITE NAME	MAPS	ID
APARTMENT BUILDING	1, 2, 3	8568735

ADDRESS	CITY	ZIP
544 37TH ST	OAKLAND	94609

DETAILS

Reported Date: 1998
List: Alameda County UST
Agency: Department of Environmental Health

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.24 miles E	80 ft (13 ft higher than site)	28

SITE NAME	MAPS	ID
REGAL STATION #102	1, 2, 3	3203829

ADDRESS	CITY	ZIP
3875 TELEGRAPH AVE	OAKLAND	94609

DETAILS
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Regional-UST-CA	Listed	0.25 miles SE	66 ft (1 ft lower than site)	31
SITE NAME			**MAPS**	**ID**
CALIFORNIA HIGHWAY PATROL			1, 2, 3	1231858
ADDRESS			**CITY**	**ZIP**
3601 TELEGRAPH AVE			OAKLAND	94609
DETAILS				
Reported Date: 1998 List: Alameda County UST Agency: Department of Environmental Health				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Service Stations	Listed	0.12 miles W	60 ft (7 ft lower than site)	13
SITE NAME			**MAPS**	**ID**
K&H City Gas Beacon			1, 2, 3	154399
ADDRESS			**CITY**	**ZIP**
731 W Macarthur Blvd			Oakland	94609
DETAILS				
Site Added: 1/1/2013				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Service Stations	Listed	0.12 miles W	60 ft (7 ft lower than site)	13

SITE NAME	MAPS	ID
GAS CITY	1, 2, 3	131851

ADDRESS	CITY	ZIP
731 W MACARTHUR BLVD	Oakland	94609

DETAILS

Sic Code: 5541
Desc: Service Stations/Vehicle Fueling
Site Added: 2/2010

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Service Stations	Listed	0.12 miles W	60 ft (7 ft lower than site)	13

SITE NAME	MAPS	ID
ARCO STATION #04931	1, 2, 3	200860

ADDRESS	CITY	ZIP
731 WEST MACARTHUR BOULEVARD	OAKLAND	94609

DETAILS

AS OF DATE: 11/13/2001
SITE TYPE: RETAIL
TANK TYPE: UST
COUNTY: ALAMEDA

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Service Stations	Listed	0.12 miles W	60 ft (7 ft lower than site)	13
SITE NAME			MAPS	ID
MANUS ARCO			1, 2, 3	34126-PD
ADDRESS			CITY	ZIP
731 W MACARTHUR BLVD			OAKLAND	94609-2325
DETAILS				
Listing Year: 1997 SIC Category: SERVICE STATIONS-GASOLINE & OIL SIC Code: 554101				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Service Stations	Listed	0.12 miles W	60 ft (7 ft lower than site)	13
SITE NAME			MAPS	ID
Manu's Arco			1, 2, 3	45869
ADDRESS			CITY	ZIP
731 W Macarthur Blvd			Oakland	94609
DETAILS				
Sic Code: 5541 Desc: Service Stations/Vehicle Fueling Site Added: 2/2010				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Service Stations	Listed	0.25 miles SE	66 ft (1 ft lower than site)	31
SITE NAME			MAPS	ID
CALIFORNIA HIGHWAY PATROL			1, 2, 3	200872
ADDRESS			CITY	ZIP
3601 TELEGRAPH AVENUE			OAKLAND	94609

DETAILS
AS OF DATE: 11/13/2001 SITE TYPE: STATE TANK TYPE: UST COUNTY: ALAMEDA

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	13
SITE NAME			**MAPS**	**ID**
RAJINDER K GOYAL			1, 2, 3	258353
ADDRESS			**CITY**	**ZIP**
731 W MACARTHUR BLVD			OAKLAND	94611
DETAILS				
Note: ID has been assigned by ERS Tank Details: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00035D36.pdf County: Alameda				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-CA	Listed	0.24 miles E	80 ft (13 ft higher than site)	28
SITE NAME			**MAPS**	**ID**
REGAL STATION 102			1, 2, 3	259478
ADDRESS			**CITY**	**ZIP**
3875 TELEGRAPH AVE			OAKLAND	95607
DETAILS				
Note: ID has been assigned by ERS Tank Details: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000364E7.pdf				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-CA	Listed	0.25 miles SE	66 ft (1 ft lower than site)	31

SITE NAME	MAPS	ID
CALIFORNIA HIGHWAY PATROL	1, 2, 3	219350

ADDRESS	CITY	ZIP
3601 TELEGRAPH AVE	OAKLAND	94609

DETAILS
Note: ID has been assigned by ERS Tank Details: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00035DCE.pdf

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-CA	Listed	0.25 miles SE	66 ft (1 ft lower than site)	31

SITE NAME	MAPS	ID
CALIFORNIA HIGHWAY PATROL	1, 2, 3	219351

ADDRESS	CITY	ZIP
3601 TELEGRAPH AVE	OAKLAND	94609

DETAILS
Note: ID has been assigned by ERS Tank Details: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00035DD1.pdf

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-Cleanup-CA	Listed	0.46 miles NW	57 ft (10 ft lower than site)	43

SITE NAME	MAPS	ID
Not Reported by Agency	1, 3	T0600100249

ADDRESS	CITY	ZIP
989 41ST ST	OAKLAND	

DETAILS
UST FUND PRIORITY CLASS: C UST FUND CLAIM NO#: 3000 GEOGRAPHIC AREA (BY REGIONAL BOARD NO#): 2 UST FUND CLAIM_CLOSURE DATE: Not Reported NO# OF FUND RECOMMEDED CLOSURE: 1 SITE LEAD AGENCY: ALAMEDA COUNTY LOP YEARS CASE HAS BEEN OPENED: 24 YEARS CLAIM HAS RECEIVED FUNDING: 15

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-Cleanup-CA	Listed	0.48 miles W	34 ft (33 ft lower than site)	47
SITE NAME			MAPS	ID
Not Reported by Agency			1, 3	T0600101365
ADDRESS			CITY	ZIP
3400 SAN PABLO AVE			OAKLAND	
DETAILS				
UST FUND PRIORITY CLASS: D UST FUND CLAIM NO#: 2115 GEOGRAPHIC AREA (BY REGIONAL BOARD NO#): 2 UST FUND CLAIM_CLOSURE DATE: Not Reported NO# OF FUND RECOMMEDED CLOSURE: 2 SITE LEAD AGENCY: ALAMEDA COUNTY LOP YEARS CASE HAS BEEN OPENED: 26 YEARS CLAIM HAS RECEIVED FUNDING: 15				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-UST-Cleanup-CA	Listed	0.5 miles NW	51 ft (16 ft lower than site)	50
SITE NAME			MAPS	ID
Not Reported by Agency			1, 3	T0600102117
ADDRESS			CITY	ZIP
1075 40TH ST			OAKLAND	

DETAILS
UST FUND PRIORITY CLASS: B UST FUND CLAIM NO#: 13833 GEOGRAPHIC AREA (BY REGIONAL BOARD NO#): 2 UST FUND CLAIM_CLOSURE DATE: Not Reported NO# OF FUND RECOMMEDED CLOSURE: 2 SITE LEAD AGENCY: ALAMEDA COUNTY LOP YEARS CASE HAS BEEN OPENED: 17 YEARS CLAIM HAS RECEIVED FUNDING: 9

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Hist-Vehicle-Washing	Listed	0.04 miles S	67 ft (0 ft higher than site)	2
SITE NAME			MAPS	ID
BURLEYS DETAIL			1, 2, 3	342311-PD
ADDRESS			CITY	ZIP
657 W MACARTHUR BLVD			OAKLAND	94609-2341
DETAILS				
Listing Year: 1997 SIC Category: AUTOMOBILE DETAIL & CLEAN-UP SERVICE SIC Code: 754203				

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
HWIS-CA	Listed	0.03 miles E	68 ft (1 ft higher than site)	1
SITE NAME			MAPS	ID
QUALITY TUNE UP #35			1, 2, 3	CAL000074673
ADDRESS			CITY	ZIP
640 W MACARTHUR BLVD			OAKLAND	946090000

DETAILS
EPA ID: CAL000074673 Facility County: 1 Mailing Street: 286 E HAMILTON AVE #A Mailing City: CAMPBELL Mailing State: CA Mailing Zip: 950080000 Contact Name: SIDE B CORPORATION Contact Phone: 4083742001 Year: 2000 TONS: 0.72 TSD EPA ID: CAD982446874 Category Code: 134 Category Description: Aqueous solution with total organic residues less than 10 percent Method Description: RECYCLER Year: 1999 TONS: 0.5629 TSD EPA ID: CAD982446874 Category Code: 134 Category Description: Aqueous solution with total organic residues less than 10 percent Method Description: Not Reported Year: 1999 TONS: 4.4618 TSD EPA ID: CAD982446874 Category Code: 134 More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
HWIS-CA	Listed	0.06 miles E	70 ft (3 ft higher than site)	4
SITE NAME			**MAPS**	**ID**
DISCOUNT AUTO CENTER			1, 2, 3	CAL000116066
ADDRESS			**CITY**	**ZIP**
622 WEST MACARTHUR BLVD			OAKLAND	946090000

DETAILS
EPA ID: CAL000116066 Facility County: 1 Mailing Street: 622 W MACARTHUR BLVD Mailing City: OAKLAND Mailing State: CA Mailing Zip: 946090000 Contact Name: BRETT LANDRUM Contact Phone: 5107630680 Year: 1997 TONS: 0.1042 TSD EPA ID: CAT080013352 Category Code: 222 Category Description: Oil/water separation sludge Method Description: RECYCLER

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.11 miles NW	66 ft (1 ft lower than site)	11

SITE NAME	MAPS	ID
NEIGHBORHOOD LAUNDROMAT	1, 2, 3	T0600101597

ADDRESS	CITY	ZIP
3838 WEST	Oakland	94608

DETAILS
Sites Details URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101597 Global ID: T0600101597 Case Type: LUST Cleanup Site Status: Completed - Case Closed Status Date: 3/31/2004 CUF Case: NO Lead Agency: ALAMEDA COUNTY LOP Case Worker: Not Reported Local Agency: Not Reported RB Case Number: 01-1726 Loc Case Number: RO0000242 File Location: All Files are on GeoTracker or in the Local Agency Database Potential Contaminants of Concern: Gasoline Potential Media Affected: Other Groundwater (uses other than drinking water) Site History: Not Reported Begin Date: 1/8/1992 How Discovered: Tank Closure How Discovered Description: TANK CLOSURE Stop Method: Other Means Stop Method Description: Not Reported Agency Provided Latitude: 37.8284048 Agency Provided Longitude: -122.2714352 Regulatory Activities Details Action Date: 1992-01-08 00:00:00 More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.12 miles SW	58 ft (9 ft lower than site)	14

SITE NAME	MAPS	ID
RD MINER COMPANY	1, 2, 3	T0600101123

ADDRESS	CITY	ZIP
750 37TH ST	OAKLAND	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101123
Global ID: T0600101123
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 6/30/2014
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: TL
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-1221
Loc Case Number: RO0003064
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Under Investigation
Site History: Suspect case was opened mistakenly as the result of neighborhood complaints regarding excessive fumes and dying vegetation from ARCO station (RO76)that had a release in 1982. RO76 is a free product site with up to 4 feet of product observed in several site monitoring wells. The tanks located adjacent to the reported address of this site, were not removed until 1992. Soil excavated from the tank pit showed significant evidence of free product and thus likely were the source of the fumes. RO76 files contain a letter dated April 19, 1992 from another resident in the area complaining of impacts from the station.
Begin Date: 8/10/1987
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.826885
Agency Provided Longitude: -122.270401

Regulatory Activities Details
Action Date: 1987-08-10 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.15 miles NE	75 ft (8 ft higher than site)	17

SITE NAME	MAPS	ID
BART PROPERTY	1, 2, 3	T0600101979

ADDRESS	CITY	ZIP
3924 MARTIN LUTHER KING JR	Oakland	94609

DETAILS
Sites Details URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101979 Global ID: T0600101979 Case Type: LUST Cleanup Site Status: Completed - Case Closed Status Date: 1/17/1997 CUF Case: NO Lead Agency: ALAMEDA COUNTY LOP Case Worker: Not Reported Local Agency: Not Reported RB Case Number: 92409 Loc Case Number: RO0000650 File Location: All Files are on GeoTracker or in the Local Agency Database Potential Contaminants of Concern: Gasoline Potential Media Affected: Other Groundwater (uses other than drinking water) Site History: Not Reported Begin Date: 5/17/1994 How Discovered: Other Means How Discovered Description: Not Reported Stop Method: Other Means Stop Method Description: Not Reported Agency Provided Latitude: 37.829561 Agency Provided Longitude: -122.267942 Regulatory Activities Details Action Date: 1994-05-17 00:00:00 More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.24 miles E	80 ft (13 ft higher than site)	28

SITE NAME	MAPS	ID
REGAL #120 / EAST BAY SURGERY CENTER	1, 2, 3	T06019716388

ADDRESS	CITY	ZIP
3875 TELEGRAPH	OAKLAND	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T06019716388
Global ID: T06019716388
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 1/5/2016
CUF Case: NO
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: MEJ
Local Agency: Not Reported
RB Case Number: 612514
Loc Case Number: Not Reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Diesel, Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: The approximately 0.9-acre Site is located at 3875 Telegraph Avenue in Oakland, California. Much of the site is covered by a 10,000-square foot building that is surrounded largely by paved parking areas. The Site is bounded by: 39th Street to the north; Telegraph Avenue to the east; Apgar Street to the south and a parking lot for the Bay Area Rapid Transit District (BART) MacArthur Station to the west. The surrounding area is a mixed residential and commercial neighborhood. In the 1930s, the Site was used for two gasoline stations, one in the southwest corner (3855 Telegraph Avenue) and one in the northern portion (3881 Telegraph Avenue) of the Site. By the 1940s, the two gasoline stations had been removed. In the 1950s, the southern portion of the Site was occupied by a tamale factory and restaurant; and the northern portion was occupied by another gasoline service station. In June 1984, as part of pre-construction evaluations, Harding Lawson Associates (HLA) drilled four borings for collection of soil samples for geotechnical testing. HLA noted the soil cores collected from approximately 15 feet below ground surface contained “gasoline odor.” In December 1984, the four USTs, associated service station buildings, and pump islands were removed (HLA, 1992). Following removal of the USTs, the excavation was backfilled with imported material. In 1984, the Site was purchased by East Bay Outpatient Surgery for development as a surgery center. In May 1985, as part of the surgery center construction, the UST excavation backfill material was removed. The former UST excavation was subsequently over-excavated to a depth of approximately 15 feet below ground surface with approximately 1,070 cubic yards of soil being disposed off-site. In 2001, Terracon advancing six borings, B-1 to B-6, to a depth of approximately 25-feet below ground surface for the collection of soil and groundwater samples. In January 2005, Gribi Associates (Gribi) collected 18 soil and 5 groundwater samples from borings advanced offsite within the BART parking lot to the west; and onsite within the southern parking lot. Subsequently, between February 2005 and June 2005, Ninyo & Moore, on behalf of BART, conducted investigations near the Site as part of the MacArthur BART Transit Village redevelopment project (N&M, 2005). The investigations included the collection of soil and groundwater samples from 27 borings (February 2005) and soil gas samples from 15 borings (June 2005) advanced within: 39th Street; 40th Street; Apgar Street; and the BART parking lot. The soil and groundwater investigations detected petroleum hydrocarbons both on-site and off-site. Elevated concentrations of TPH as gasoline (TPHg) have been detected in groundwater samples from temporary boring advanced both on-site and off-site. A plume of fuel hydrocarbons extends southwest from the Surgery Center to the BART parking lot. The most recent investigation activities have been conducted in the BART parking lot to define the off-site extent of contamination.
Begin Date: 1/8/2005
How Discovered: * SA
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.827811
Agency Provided Longitude: -122.265215

Regulatory Activities Details
Action Date: 1984-01-01 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.29 miles NE	87 ft (20 ft higher than site)	34

SITE NAME	MAPS	ID
SHELL #12-9452	1, 3	T0600101265

ADDRESS	CITY	ZIP
500 40TH	Oakland	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101265
Global ID: T0600101265
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 3/24/2014
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: JTW
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-1370
Loc Case Number: RO0000264
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: The site is currently a retail shopping center consisting of commercial buildings and a parking area. Surrounding land use is mixed residential and commercial. Prior to development of the site as a retail shopping center in 1986, the site was a gasoline service station. The MacArthur BART station is located approximately 500 feet west of the site. Construction of a transit village is planned for the BART parking lot, which is approximately 130 feet southwest (downgradient) of the site. In July 1982, Shell reported a fuel leak at the site. Eight groundwater monitoring wells (B-1 through B-8) were installed on the site in July 1982 to define the potential extent of contamination. From 1982 to 1987, free product was observed in on-site groundwater monitoring wells B-3, B-4, B-6, and B-8, with an increasing thickness trend occurring in the summer when water tables were lower. Up to six feet of free product was observed in well B-4 during the period between 1982 and 1987. Between September 1982 and July 1983, approximately 4.19 gallons of free product was removed by manual bailing and periodic batch extraction using a vacuum truck. Additional monitoring wells B-9 through B-11 and recovery wells R-1 and R-2 were installed between June and October 1983. No reports document the operation of recovery wells R-1 and R-2, which were subsequently removed in November 1983 during tank removal. The first-generation tanks were reportedly removed in November 1983, with no reports documenting the excavation. Following the 1983 tank removal, three 10,000-gallon gasoline USTs were installed in 1984 and subsequently removed on September 25, 1986. Shell Oil Company owned the site until 1986. The commercial shopping center which currently occupies the site was constructed in January 1987 and covered previous wells. Soil lithology consists of silty clay with trace to slight amounts of sand and gravel. The groundwater gradient at the site has varied between the west, south, and southeast. Depth to water has historically varied between 8.42 feet below ground surface (fbgs) and 19.35 fbgs. Residual contamination appears to be typically encountered at a depth of approximately 10 fbgs. Four soil borings were advanced east of the former USTs in May and September 1989 and completed as groundwater monitoring wells MW-2 through MW-5. Soil samples were collected from the borings between 4 and 16 feet below ground surface (fbgs). The soil sample collected from boring MW-3 at 10 fbgs contained the only reported concentrations of TPHg, benzene, and xylenes at concentrations of 28 ppm, 0.054 ppm, and 0.099 ppm, respectively. Between October and December 1989, four soil borings were advanced (CSB-1, OMW-6, OMW-9, and OMW-10). The maximum concentration of TPHg in soil was detected off-site in boring OMW-9 at a concentration of 210 ppm. The maximum on-site concentration of TPHg in soil was 18 ppm, collected from boring OMW-6 at a depth of 10 fbgs. Monitoring well MW-8 and extraction well EW-1 were installed on June 27 and 28, 1990. Soil samples were collected from the borings between 6 and 20 fbgs. Soil collected from boring EW-1 at 10 fbgs contained the only detections of TPHg and TPHd at concentrations of 110 ppm and 4.4 ppm, respectively. The soil from boring EW-1 also contained the only detections of BTEX. Off-site monitoring wells OMW-11 through OMW-13 were installed on November 20 and 22, 1991. Soil samples were collected from the borings between 5 and 15 fbgs. The only soil contamination detected was 56 ppm TPHmo, collected from boring OMW-12 at a depth of 4.5 fbgs. No activities other than groundwater monitoring appear to have take place between 1991 and November 2004. On November 18, 2004, wells EW-1, MW-4, MW-5, OMW-10, OMW-11, and OMW-12 were decommissioned. Two nested soil vapor probes (SVP-1 and SVP-2) and two sub-slab vapor probes (SVP-3 and SVP-4) were installed on October 25, 2011. The probes were sampled on November 30, 2011 and January 18, 2012. Sub-slab probes SVP-3 and SVP-4 did not contain TPHg or benzene at concentrations above reporting limits of 3,800 and 16 micrograms per cubic meter (µg/m3), respectively. Toluene, ethylbenzene, and xylenes were detected in sub-slab probes SVP-3 and SVP-4 at maximum concentrations of 20, 82, and 110 µg/m3, respectively. These concentrations are below residential and commercial Environmental Screening Levels. Off-site groundwater was most recently sampled on March 26, 2012. Groundwater samples from wells on the south side of 40th Street contained up to 2,900 ppb TPHg, 1,200 ppb TPHd, and 2.9 ppb benzene. Well OMW-6, the closest off-site boring to the property, was last sampled on November 26, 2011. During the November 26, 2011 sampling event, groundwater from well OMW-6 contained 7,000 ppb TPHg, 2,000 ppb TPHd, and 2.3 ppb benzene. Groundwater monitoring has been conducted at the site since 1982. The monitoring data indicate that the plume generally appears to be stable with slowly decreasing trends in concentrations. Based on the evidence in provided reports, the residual contamination on-site and off-site of soil, groundwater, and soil vapor is not suspected to pose a threat to human or environmental health.
Begin Date: 7/1/1982
How Discovered: * SA
How Discovered Description: Not Reported
Stop Method: Close and Remove Tank
Stop Method Description: Not Reported
Agency Provided Latitude: 37.829319002
Agency Provided Longitude: -122.264549312

Regulatory Activities Details
Action Date: 1982-07-01 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.36 miles SE	58 ft (9 ft lower than site)	37

SITE NAME	MAPS	ID
SUMMIT MEDICAL CENTER	1, 3	T0600100952

ADDRESS	CITY	ZIP
3420 TELEGRAPH	Oakland	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100952
Global ID: T0600100952
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 6/28/1996
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-1031
Loc Case Number: RO0000991
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 4/26/1993
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.823165
Agency Provided Longitude: -122.265557

Regulatory Activities Details
Action Date: 1993-04-26 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.43 miles SE	75 ft (8 ft higher than site)	39

SITE NAME	MAPS	ID
UNOCAL #3538	1, 3	T0600101472

ADDRESS	CITY	ZIP
411 WEST MACARTHUR BOULEVARD	Oakland	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101472
Global ID: T0600101472
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 8/19/2015
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: KEN
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-1597
Loc Case Number: RO0000251
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: The site is a former service station property. The property has perimeter fencing and the vacant service station building remains. Due to residual contamination, the site is closed with Site Management Requirements that limit future land use to the current commercial land use. In July 1989 one 10,000-gallon and one 12,000-gallon gasoline USTs removed and replaced. One 550-gallon waste-oil UST was also removed. Soil samples were collected from 450 yd3 of stockpiled soil that were present at the site. September 6 and 7, 1989 four monitoring wells were installed on-site. In September 1998, two 12,000-gallon gasoline USTs and associated dispensers and product piping were removed from the site. Soil samples collected indicated petroleum hydrocarbon impact. Groundwater was not encountered during the tank removal. Groundwater samples collected from the March 2006 borings had maximum detected concentrations of 13,000 ppb TPHg, 510 ppb benzene and 340 ppb MTBE. Grab groundwater samples reported up to 9,500 ug/L TPHg and 430 ug/L benzene in a 2011 investigation. Based on the bioattentuation zone thickness and the distance to nearby receptors, a determination has been made the site meets the LTCP closure criteria.
Begin Date: 7/12/1989
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8250058553705
Agency Provided Longitude: -122.261888980865

Regulatory Activities Details
Action Date: 1989-07-12 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.44 miles NE	96 ft (29 ft higher than site)	40

SITE NAME	MAPS	ID
SIMPSON, RONN	1, 3	T0600102120

ADDRESS	CITY	ZIP
489 43RD	Oakland	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600102120
Global ID: T0600102120
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 9/27/2001
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 147925
Loc Case Number: RO0000270
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 9/18/1995
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8315803
Agency Provided Longitude: -122.2630707

Regulatory Activities Details
Action Date: 1995-09-18 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.45 miles NE	97 ft (30 ft higher than site)	42

SITE NAME	MAPS	ID
WALTER BLUMERT COMPANY	1, 3	T0600100822

ADDRESS	CITY	ZIP
490 43RD	Oakland	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100822
Global ID: T0600100822
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 8/28/2001
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-0891
Loc Case Number: RO0000272
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 12/20/1991
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8318299
Agency Provided Longitude: -122.263101

Regulatory Activities Details
Action Date: 1992-01-24 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.46 miles NW	57 ft (10 ft lower than site)	43

SITE NAME	MAPS	ID
CALIFORNIA LINEN SUPPLY CO	1, 3	T0600100249

ADDRESS	CITY	ZIP
989 41ST	Oakland	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100249
Global ID: T0600100249
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 9/20/2013
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: MD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-0267
Loc Case Number: RO0000337
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: In February 1989 three USTs were removed and confirmation soil sampling in the tank pits confirmed that an unauthorized release to the subsurface had occurred. In October 1989 groundwater monitoring wells were installed to evaluate the dissolved phase plume; high concentrations of dissolved phase petroleum hydrocarbons were detected beneath the site. In December 2006 one UST was removed and confirmation soil sampling detected elevated levels of hydrocarbon contamination in soil. Several phases of investigation were completed between 2006 and 2009, and interim remedial action performed between October 2006 and July 2008 removed 620 cubic yards of contaminated soil and 15,000 gallons of contaminated water. In March 2009 verification soil vapor sampling detected high concentrations of 15,000,000 µg/m3 TPHg and 33,000 µg/m3 benzene in soil vapor samples. This site is situated at the eastern end of the currently known extent of paleochannels that extends beneath Oakland and Emeryville for a distance of over 1,500 feet (see attached mapped paleochannel network). This has allowed the migration of free-phase concentrations of petroleum hydrocarbons (mineral spirits and gasoline) over that distance (not the 250 feet per the often cited LLNL study). There are 7 known sites that have comingled plumes, and innocent property owners are involved. Continuing work at this site appears to extend the paleochannel network to the northeast of this site. This recent work (2009 and continuing as of this date, and thus not fully reported yet) is based on geophysical conductivity profiles (fine vs. granular sediments) upgradient and downgradient of the site, as well as soil vapor sampling beneath the site and upgradient of the site. Onsite soil vapor sampling appears to map out two principal paleochannels beneath the site. Soil vapor concentrations within those paleochannels for TPHg are up to 15,000,000 ug/m3 (29,000 ug/m3 ESL) and for benzene 53,000 ug/m3 (280 ug/m3 ESL); these are one to two orders of magnitude above their respective commercial ESLs (see attached map data submittal). The recent, on-going, and currently unreported work appears to have located one and perhaps two unreported UST locations north of 41st Street (currently unlisted as the data has not been fully reported). These may be the source of soil vapor concentrations beneath the subject site; however, this is not fully understood due to the current and on-going nature of the data at present. The elevated soil vapor concentrations are mapped to extend to the south of the subject site (via the paleochannel network) to older residential properties and low income housing that border the subject site on the south (over 300 feet from their potential source). These have been unevaluated for vapor intrusion, but the work is already approved, but is pending the resolution of offsite access difficulties. Due to offsite access difficulties, ACEH letters requesting / requiring offsite access of several parcels are likely to be issued shortly. Two of the homes are reported to have basements. Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.
Begin Date: 2/8/1989
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8317640177705
Agency Provided Longitude: -122.276265621185

Regulatory Activities Details
Action Date: 1989-02-08 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.46 miles W	41 ft (26 ft lower than site)	44

SITE NAME	MAPS	ID
BLAZIC INDUSTRIAL BALANCING	1, 3	T0600101618

ADDRESS	CITY	ZIP
1016 MACARTHUR	Oakland	94608

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101618
Global ID: T0600101618
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 8/28/1997
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-1747
Loc Case Number: RO0000985
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 2/8/1994
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.805546
Agency Provided Longitude: -122.236916

Regulatory Activities Details
Action Date: 1993-08-23 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.47 miles W	36 ft (31 ft lower than site)	45

SITE NAME	MAPS	ID
SHELL #13-9619	1, 3	T0600101253

ADDRESS	CITY	ZIP
3420 SAN PABLO	Oakland	94608

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101253
Global ID: T0600101253
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 5/13/2014
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: JTW
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-1358
Loc Case Number: RO0000006
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil Vapor
Site History: In December 1984, gasoline-saturated soil was discovered beneath the pump island area. The steel USTs were replaced in January 1985. Monitoring well installation and other site characterization activities were conducted at various times from 1988 to 2006. A soil vapor extraction test was conducted in 1993. In 1997, the station was station was renovated and a new larger station building constructed. Free product was bailed from monitoring wells MW-1 through MW-7 at various times during groundwater monitoring. Groundwater monitoring has been conducted at the site since 1991. The site was evaluated for case closure under the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy and was closed on May 13, 2014. Based upon the information available in our files to date, no further investigation or cleanup for the fuel leak case is necessary at this time. Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.
Begin Date: 8/8/1988
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Close and Remove Tank
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8259295780339
Agency Provided Longitude: -122.277815937996

Regulatory Activities Details
Action Date: 1989-02-15 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.48 miles SW	34 ft (33 ft lower than site)	46

SITE NAME	MAPS	ID
LOOMIS ARMORED INC	1, 3	T0600100849

ADDRESS	CITY	ZIP
936 BROCKHURST	Oakland	94608

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100849
Global ID: T0600100849
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 7/7/1997
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-0924
Loc Case Number: RO0001099
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 3/9/1990
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.823704
Agency Provided Longitude: -122.276621

Regulatory Activities Details
Action Date: 1990-03-09 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.48 miles W	34 ft (33 ft lower than site)	47

SITE NAME	MAPS	ID
THRIFTY OIL #49	1, 3	T0600101365

ADDRESS	CITY	ZIP
3400 SAN PABLO	Oakland	94608

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101365
Global ID: T0600101365
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 4/15/2014
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: JTW
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-1478
Loc Case Number: RO0000004
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: The site is an active service station at the northeast corner of the intersection of San Pablo Avenue and 34th Street in Oakland, CA. Site assessment, cleanup, and groundwater monitoring were conducted at the site between 1986 and 2013. The site was evaluated for case closure under the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy and was closed on April 15, 2014. Based upon the information available in our files to date, no further investigation or cleanup for the fuel leak case is necessary at this time. Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.
Begin Date: 10/2/1986
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.825787
Agency Provided Longitude: -122.277468

Regulatory Activities Details
Action Date: 1986-08-18 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.48 miles NE	100 ft (33 ft higher than site)	48

SITE NAME	MAPS	ID
KELLY AUTO PARTS	1, 3	T0600100790

ADDRESS	CITY	ZIP
4400 TELEGRAPH	Oakland	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100790
Global ID: T0600100790
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 9/2/1998
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-0856
Loc Case Number: RO0000881
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Stoddard solvent / Mineral Spriits / Distillates
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not Reported
Begin Date: 10/24/1988
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.832696
Agency Provided Longitude: -122.263073

Regulatory Activities Details
Action Date: 1988-10-24 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.5 miles NW	51 ft (16 ft lower than site)	50

SITE NAME	MAPS	ID
FIDELITY ROOF COMPANY	1, 3	T0600102117

ADDRESS	CITY	ZIP
1075 40TH STREET	Oakland	94608

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600102117
Global ID: T0600102117
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 5/14/2013
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: MD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 146464
Loc Case Number: RO0000186
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp. The site is currently used as a company yard and offices for Fidelity Roof Company. The property is located in a mixed commercial and residential area of Oakland and is bordered to the south by Yerba Buena Avenue, residential properties to the east, commercial and residential properties to the west, and 40th Street to the north. Soil on the site generally consists of clays, with occasional interbedded silts, sands, and gravel. Stabilized groundwater is generally at depths between 5 and 10 feet below ground surface (fbgs). Groundwater appears to have been encountered initially at depths ranging from 12 to 16 fbgs, but this is not specifically reported. Groundwater monitoring has been conducted at the site from March 19, 1997 to December 29, 2011. Contamination on the site is highest in the southeast portion of the site in areas west, northwest, and around the former underground storage tanks (USTs). On December 19, 1995, one 1,000-gallon diesel UST and one 500- or 800-gallon gasoline UST were removed from the southeastern area of the property. Three discrete soil samples and one soil stockpile sample were collected. Soil samples collected beneath the 1,000-gallon diesel UST contained up to 8.7 milligrams per kilogram (mg/kg) Total Petroleum Hydrocarbons as gasoline (TPHg), 29 mg/kg Total Petroleum Hydrocarbons as diesel (TPHd), and 29 mg/kg Methyl Tertiary Butyl Ether (MTBE), and 0.77 mg/kg benzene. Soil samples collected from beneath the 500-gallon UST gasoline contained 100 mg/kg TPHg, 96 mg/kg TPHd, 2.3 mg/kg benzene, and 1.4 mg/kg MTBE (benzene is not reported). The soil stockpile sample contained 580 mg/kg TPHg, 120 mg/kg TPHd, and 42 mg/kg lead. Groundwater was not encountered in the excavation. Holes and corrosion were noted on all portions of the USTs, but the locations were not specifically defined. On September 12, 1996, four soil borings (SB-1 through SB-4) were advanced near the former UST excavation. Soil samples were collected every five feet; only the samples collected at ten fbgs were analyzed. The soil sample collected from boring SB-1 at ten fbgs contained the highest concentrations including up to 290 mg/kg TPHg, 45 mg/kg TPHd, 3.9 mg/kg benzene, and 1.5 mg/kg MTBE. Groundwater was encountered at approximately 13-15 fbgs and grab groundwater samples were collected from bores SB-2 and SB-4. Concentrations in the grab groundwater samples contained up to 5,500 micrograms per liter (µg/l) TPHg, 2,100 µg/l TPHd, 340 µg/l benzene, and 230 µg/l MTBE. The tank removal excavation pit remained open and a four-point composite soil sample was collected from the stockpiled soil generated during this event. Two soil samples were additionally collected from the southern wall of the open excavation. On October 25, 1996, the tank removal excavation was overexcavated laterally seven feet to the south and 12 feet to the west. Three sidewall and three four-point composite stockpile soil samples were collected during the excavation activities. The sidewall sample collected from the west wall of the excavation contained the greatest concentration; with 150 mg/kg TPHg, 300 mg/kg TPHd, and 16 mg/kg benzene (MTBE was not analyzed in these samples). The greatest contaminant concentrations in the four-point stockpile samples were 850 mg/kg TPHg, 720 mg/kg TPHd, and 1.3 mg/kg benzene. In November 1996, 235 tons of contaminated soil was disposed of at the BFI Vasco Road Sanitary Landfill in Livermore, CA. On March 6, 1997 three borings (BH-1 through BH-3) were advanced and converted to monitoring wells (MW-1 to MW-3). Soil samples collected from 10 fbgs were analyzed for contamination. Groundwater samples were collected from the wells on March 13, 1997. The soil sample collected from BH-3 (MW-3) contained the greatest TPHg and benzene concentrations of 110 mg/kg and 1.1 mg/kg, respectively. The soil samples collected from BH-2 (MW-2) contained the greatest TPHd concentration of 18 mg/kg. No MTBE was detected in the soil samples. The groundwater sample collected from MW-3 was the only sample with detectable concentrations of constituents other than MTBE. Groundwater from MW-3 contained 26,000 µg/l TPHg, 5,000 µg/l TPHd and 3,000 µg/l benzene. MTBE was detected in MW-1, MW-2, and MW-3 groundwater samples at concentrations of 23, 65, and 230 µg/l, respectively. The static groundwater depth was measured between 7.59 and 8.25 fbgs. To assess lateral extent of impacted groundwater, six soil borings (SB-1 through SB-6) were drilled south and west of existing well locations on November 4, 1998. The borings were advanced to depths between 15 and 20 fbgs and groundwater was encountered between 12 and 15 fbgs. Soil samples were collected; however, all samples were placed on hold at the laboratory and were not analyzed. In groundwater, TPHd was only detected in upgradient bore SB-1 at a concentration of 2,400 µg/l. Toluene was the only other detected constituent and was found in SB-6 at a concentration of 0.6 µg/l. Based on the November 4, 1998 boring results monitoring well MW-4 was requested to be installed upgradient (south) of the former tank locations on July 15, 1999. Two soil samples were collected at 10 and 14 fbgs from the boring. No detectable concentrations of petroleum hydrocarbons were found in the soil samples. Well MW-4 was sampled during the next groundwater monitoring event on August 5, 1999. MTBE was the only detectable constituent in well MW-4 in that sampling event; at a concentration of 37 µg/l. Groundwater sampled from well MW-3 during the same event contained the highest groundwater concentrations; with 5,100 µg/l TPHd, 31,000 µg/l TPHg and 5,400 µg/l benzene detected. The MW-2 groundwater sample contained 600 µg/l MTBE. A Corrective Action Plan (CAP) was submitted on July 31, 2001 which evaluated a number of remedial technologies, recommended vapor extraction / air sparging, and proposed that a pilot test of the technology be conducted. The need for the pilot test was accepted in a December 2001 directive letter; however, the proposed remedial cleanup goals were not. On May 6, 2004, soil borings AS-1, AS-2, and SVE-1 were completed as two 30 fbgs air sparge wells and one ten fbgs soil vapor extraction well, respectively. Additionally, six shallow vapor points (DP-1 through DP-6) were installed to a depth of 15.5 fbgs on May 12 and 13, 2004. The purpose of the May 6, 2004 well installation was to determine the potential for air sparge/soil vapor extraction (AS/SVE) remediation. Soil samples were collected at approximately five foot intervals from the soil borings. Grab groundwater samples were collected on May 24, 2004 from bores DP-1, DP-2, and DP-3, and groundwater was collected from well MW-3. All contaminant concentrations, with the

exception of MTBE, were greatest in shallow vapor point DP-5, located at the edge, but within the area of overexcavation, 15 feet southwest of the former UST area. Soil concentrations, at a depth of 11.5 fbgs, in DP-5 were 2,900 mg/kg TPHg, 830 mg/kg TPHd, 0.012 mg/kg benzene, and <10 mg/kg MTBE. The highest MTBE soil concentration was 0.049 mg/kg, detected in well AS-1 which was located approximately 15 feet west of the former overexcavated UST area. Groundwater samples collected during the event contained up to 90,000 µg/l TPHg, 26,000 µg/l TPHd, 6,700 µg/l benzene, and <1,200 µg/l MTBE in MW-3. Preliminary tests of the AS/SVE pilot test were conducted during May and June, 2004. Air samples collected during AS/SVE operation contained up to 150,000 micrograms per liter (µg/L) TPHg (150,000,000 micrograms per cubic meter [µg/m3]), 1,800 µg/L (1,800,000 µg/m3) benzene, and 1,400 µg/L (1,400,000 µg/m3) MTBE. Based on the results a combined bio-sparge and SVE remediation system was recommended. After the AS/SVE pilot test light non-aqueous phase liquid (LNAPL) was observed in MW-3 from September 2004 to March 2006. The LNAPL was requested to be removed prior to any corrective action measures. Three mobile LNAPL extraction events were conducted between September and November 2004; 245 gallons of LNAPL and groundwater were extracted and LNAPL thickness was reduced from 0.66 to 0.05 feet. Due to the low permeability of soils, AS/SVE remediation was deemed to be less effective than high vacuum dual phase extraction (HVDPE). Consequently a 5-day HVDPE extraction event was conducted after receipt of permits from EBMUD and the BAAQMD by Cal-Clean between March 8 and March 13, 2006. Approximately 4,900 gallons of groundwater was extracted and discharged to the sanitary sewer collection system. The estimated hydrocarbon recovery from this event was 58.4 lbs., with calculated 1,763 lbs. remaining in the smear zone soils. On December 14, 2006 wells MW-5 and MW-6 were installed to delineate the lateral and downgradient extent of the MTBE plume. Soil samples were collected at approximately 10 and 16 fbgs in each soil bore; groundwater stabilized at 16 and 8 fbgs, respectively. All concentrations in soil (TPHg, TPHd, BTEX, and MTBE) were non-detectable at standard reporting limits. Subsequently a LNAPL recovery system was proposed in March 2007 work plan, and consisted of a passive Keck skimmer device. After a change in consultants a change in the remedial approach was proposed in an April 2007 work plan. The work plan proposed excavation in the vicinity of the former fuel dispenser and LNAPL containing well MW-3 and the implementation of an ozone injection pilot test. A work plan addendum was requested and an addendum included the installation of four soil bores to characterize residual hydrocarbon concentrations associated with the excavation backfill, and beneath the depth of the excavation. On November 23, 2007, wells DP-3, DP-4, DP-5, DP-6, AS-1, AS-2, and MW-3 were decommissioned by pressure grouting. On November 27, 2007, soil borings B-1 to B-4 were installed to vertically characterize residual concentrations associated with the backfilled UST excavation. Existing reports indicated the excavations were backfilled with uncharacterized cleaner tank excavation spoils below clean fill, while the vertical extent previously had not been determined. The bores were installed to depths ranging from approximately 16 to 30 fbgs in the source zone. Soil and grab groundwater samples were collected from each boring. The highest concentration of TPHd in soil and groundwater was detected in boring B-3 at eight fbgs at 410 mg/kg and 750 µg/l, respectively. The highest concentration of TPHg in soil and groundwater was detected in boring B-2 at eight fbgs at a concentration of 170 mg/kg and 320 µg/l, respectively. Boring B-2 also contained the highest concentration of MTBE in soil (at 12 fbgs) and groundwater, at concentrations of 6.5 mg/kg and with 180 µg/l, respectively. Remedial excavation activities were conducted between March 10 and 12, 2008 immediately north of the Yerba Buena Avenue entrance to the site. The excavation measured approximately 25 by 55 feet and extended to an approximate depth of 12 fbgs. Of the total volume of soil excavated, a total of 282 tons of soil was segregated and disposed of offsite. After completion of excavation activities on March 12, 2007, groundwater was periodically removed from the excavation cavity after allowing it to recharge. A total of 2,500 gallons of hydrocarbon impacted groundwater was extracted over approximately a one week period. One grab groundwater sample (VH-2) was collected from the holding tank containing the extracted recharge water. Nine sidewall soil samples (SW-1 through SW-9) and six pit bottom soil samples (EB-1 through EB-6) were collected from the excavation pit on March 18, 2008. The highest sidewall soil concentrations were collected from the southern wall of the excavation at with 73 mg/kg TPHg, 63 mg/kg TPHd, and 0.003 mg/kg benzene; no MTBE was detected at standard reporting limits. The highest excavation bottom sample concentrations were 170 mg/kg TPHg, 7.4 mg/kg TPHd, 0.012 mg/kg benzene; no MTBE was detected at standard limits of reporting. Additionally, sixteen discrete soil samples (SP-1 through SP-16) were collected from soil stockpiles generated during the excavation that were designated as clean backfill for the excavation pit. Only one soil stockpile sample contained detectable amounts of contaminants, with concentrations of 1.5 mg/kg TPHg and 0.043 mg/kg xylenes. The grab groundwater sample collected from the holding tank contained 100 µg/l TPHg, 440 µg/l TPHd, and 8.0 µg/l xylenes. The interim remedial action report recommended case closure exclusively based on the residual concentrations in soil in the vicinity of the excavation. As a result of the interim remedial excavation ACEH requested that post-excavation groundwater monitoring occur prior to implementation of the ozone injection pilot test, requested soil vapor sampling due to documented benzene concentrations in soil and groundwater, and requested that the extent of the MTBE plume be delineated. Between April 7 and 11, 2011, groundwater monitoring well MW-7 and borings GA-1 through GA-8 were drilled and installed. Soil and grab groundwater samples were collected from each boring. Three soil gas samples (SG/VS-1 through SG/VS-3) were collected from vapor wells adjacent to the building in the eastern portion of the site. Well MW-7 was installed in a submerged condition with the top of the screen approximately six feet below first encountered groundwater; consequently the well does not monitor the groundwater surface but a position below the groundwater surface. The soil sample collected from boring GA-4, advanced in the location of the former USTs, at 19.5 fbgs was the only sample to contain constituents other than MTBE. Soil sample GA-4 contained 7.9 mg/kg TPHg, 0.13 mg/kg benzene, and 2.5 mg/kg tert-butyl alcohol (TBA). MTBE was detected in soil from borings GA-1 through GA-4, with the highest concentration detected of 0.89 mg/kg, collected from GA-4. Grab groundwater samples collected from borings GA-2 and GA-4, located closest but downgradient of, the former UST location and the March 2008 excavation area, contained the highest contaminant concentrations. The highest detected concentrations in grab groundwater were 250 µg/l TPHg, 100 µg/l benzene, and 1,600 µg/l MTBE. MTBE was detected in all groundwater samples except those from downgradient borings GA-7 and GA-8. Soil vapor samples collected May 5, June 10, and September 28, 2011 contained concentrations of leak check compounds of up to 28,000 µg/m3 1,1-Diflouroethane (1,1-DFA), 34,000 µg/m3 1,1-DFA, and 1,800 µg/m3 Isopropyl Alcohol (IP), respectively. Because the shroud concentrations of 1,1-DFA were not collected, an estimate of the leak rate cannot be made. While the IP tracer was present in the September 2011 sampling results, shroud concentrations were significantly higher (57,000 µg/m3 IP). This represents a concentration of 3.16% of the shroud concentration, and is not expected to significantly affect the results. Soil vapor samples collected using the IP tracer documented vapor concentrations of up to <160 µg/m3 benzene, 26 µg/m3 toluene, 6.3 µg/m3 ethylbenzene, and 37.7 µg/m3 xylenes; each is less than their respective soil gas vapor intrusion ESL. Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.

Begin Date: 12/19/1995

How Discovered: Tank Closure

How Discovered Description: TANK CLOSURE

Stop Method: Close and Remove Tank

Stop Method Description: Not Reported

Agency Provided Latitude: 37.8307270296044

Agency Provided Longitude: -122.276953607798

Regulatory Activities Details
Action Date: 1995-12-19 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Closed-CA	Completed - Case Closed	0.5 miles NW	76 ft (9 ft higher than site)	52

SITE NAME	MAPS	ID
ARCO	1, 3	T0600100430

ADDRESS	CITY	ZIP
4401 MARKET	Oakland	94608

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100430
Global ID: T0600100430
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 3/29/2012
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: Not Reported
Local Agency: Not Reported
RB Case Number: 01-0474
Loc Case Number: RO0000132
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Four USTs were removed from the site in June 1990. Soil borings were installed in 1994 and in 1995. Monitoring well installations followed in 2001.
Begin Date: 6/20/1990
How Discovered: Tank Closure
How Discovered Description: TANK REMOVAL
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.834106
Agency Provided Longitude: -122.272583

Regulatory Activities Details
Action Date: 1990-06-22 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Site Assessment	0.07 miles S	65 ft (2 ft lower than site)	6

SITE NAME	MAPS	ID
J&H AUTO REPAIR AND GAS STATION	1, 2, 3	T06019709592

ADDRESS	CITY	ZIP
3701 MARTIN LUTHER KING JR WAY	OAKLAND	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T06019709592
Global ID: T06019709592
Case Type: LUST Cleanup Site
Status: Open - Site Assessment
Status Date: 4/21/2003
CUF Case: YES
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: JMJ
Local Agency: Not Reported
RB Case Number: 623106
Loc Case Number: RO0002910
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: A Phase I report was prepared for the site in 2002 which identified the site as having been a retail service station from the 1940s to the 1990s. The underground storage tanks were left in place and the site is currently a vacant lot. A preliminary site assessment was performed on March 31, 2003. 160 mg/kg TPHg, 200 mg/kg TOG and 1 mg/kg benzene were detected in soil samples and 1,500 µg/L TPHg and 18 µg/l benzene were detected in groundwater samples. No MTBE was detected. Four additional borings were advanced at the request of the City of Oakland Environmental Service Division for approval of Community Development Corporation of Oakland loan. 0.072 mg/kg benzene was detected in soil. No other significant contaminants were detected. However, it is unclear where the samples were located since no map was present in the report. It appears that the groundwater samples may have been collected from upgradient. The case was transferred to ACEH on February 23, 2006 but the RP has been unresponsive to requests to claim the site in Geotracker. Unknown to ACEH, the USTs were removed and work was performed under the Orphan Fund perhaps under the CIty of Oakland's direction. To date ACEH has not recieved any reports nor have they been uploaded to Geotracker.
Begin Date: 9/27/2002
How Discovered: * SA
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8264804163206
Agency Provided Longitude: -122.269506454468

Regulatory Activities Details
Action Date: 1989-02-14 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Assessment & Interim Remedial Action	0.11 miles NE	73 ft (6 ft higher than site)	9

SITE NAME	MAPS	ID
GROVE STREET WASH RACK	1, 2, 3	T0600102106

ADDRESS	CITY	ZIP
3884 MARTIN LUTHER KING JR	Oakland	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600102106
Global ID: T0600102106
Case Type: LUST Cleanup Site
Status: Open - Assessment & Interim Remedial Action
Status Date: 12/24/2013
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: KLD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 142447
Loc Case Number: RO0000027
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not all historic documents for the fuel leak case may be available on Geotracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at: http://www.acgov.org/aceh/lop/ust.htm The subject site was formerly in commercial use as an auto body shop, is currently a vacant lot, and is comprised of APN 12-968-31, located in Oakland, California. The site is located approximately 4,100 feet northeast and up gradient of a culvertized section of Glen Echo Creek. Lake Merritt is located approximately 1.30 miles south southeast of the property. The direction of site groundwater flow is towards the southwest. A 500 gallon gasoline underground storage tank (UST) and two 650 gallon gasoline USTs were removed on January 5, 1995. Confirmation soil samples taken from 7.5 feet or 9 below ground surface (bgs) beneath each UST detected up to 140 milligrams per kilogram (mg/kg) Total Petroleum Hydrocarbon as gasoline (TPHg), 610 mg/kg benzene 960 mg/kg toluene, 1,300 mg/kg ethylbenzene, and 9,700 xylenes (BTEX). In 2004 and 2006, soil and groundwater investigations were conducted at the site, which detected elevated TPHg and BTEX in soil and groundwater. In November 2006, a CAP was submitted and approved but not implemented. Eight groundwater monitoring wells were installed both on-and off-site in 2013–2014. A Feasibility Study/Corrective Action Plan (FS/CAP) was approved in December 2013 but not implemented. A Final Remedial Design Implementation Plan (RDIP) was approved in December 2014 but not implemented. A draft FS/CAP Addendum was submitted in June 2016.
Begin Date: 1/5/1995
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Close and Remove Tank
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8288023663628
Agency Provided Longitude: -122.268433570862

Regulatory Activities Details
Action Date: 1993-12-28 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Site Assessment	0.12 miles W	60 ft (7 ft lower than site)	13

SITE NAME	MAPS	ID
ARCO #04931	1, 2, 3	T0600100110

ADDRESS	CITY	ZIP
731 W MACARTHUR BLVD	Oakland	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100110
Global ID: T0600100110
Case Type: LUST Cleanup Site
Status: Open - Site Assessment
Status Date: 10/10/2013
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: MD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-0118
Loc Case Number: RO0000076
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: The site is an active Beacon-branded gasoline station. In December 1987, Pacific Environmental Group (PEG) installed four monitoring wells (A-9 through A-12) at the site. Monitoring wells A-1 through A-8 appear to have been installed previously by another consultant. Monitoring well construction details and reports for those wells were not found in our case file. Between November 1991 and April 1992, four single-walled underground storage tanks consisting of one 12,000-gallon fiberglass UST, two 8,000-gallon steel USTs and one 6,000-gallon steel UST) and associated product piping were removed from the site. TPH-g and benzene were detected at concentrations up to 430 mg/kg and 24 mg/kg, respectively, in soil sample SW12 collected at 12 feet bgs. Following UST pit over-excavation, ROUX stated that maximum residual TPH-g and benzene concentrations remaining in the UST cavity were detected at 250 mg/kg and 2.7 mg/kg, respectively. Following over-excavation of the product piping, maximum residual TPH-g and benzene concentrations remaining in the piping trenches were detected 400 mg/kg and 2.6 mg/kg, respectively, detected in sample L12 collected at 7.5 ft bgs. In January 1992, GeoStrategies, Inc. (GSI) installed one vapor extraction well to conduct a vapor extraction test. GSI concluded that vapor extraction did not create significant pressure influence at the closest vapor monitoring point location four feet from the vapor extraction point and subsequently vapor extraction was not considered a viable or feasible remediation option for the site. In November 1992, three recovery wells (AR-1 through AR-3) were installed at the site to facilitate groundwater extraction and abate free product detected in monitoring wells A-4 and A-8. The groundwater extraction system operated from 1992 to 1996.
Begin Date: 3/13/1983
How Discovered: Other Means
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.827139963
Agency Provided Longitude: -122.271487404

Regulatory Activities Details
Action Date: 1983-03-13 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Inactive	0.25 miles SE	66 ft (1 ft lower than site)	31

SITE NAME	MAPS	ID
CHP - OAKLAND	1, 2, 3	T0619763665

ADDRESS	CITY	ZIP
3601 TELEGRAPH AVENUE	OAKLAND	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0619763665
Global ID: T0619763665
Case Type: LUST Cleanup Site
Status: Open - Inactive
Status Date: 2/17/2016
CUF Case: NO
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: REL
Local Agency: Not Reported
RB Case Number: 625297
Loc Case Number: RO0002950
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Lead, Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: During UST system testing in 1988 and dispenser upgrades in 1997, unauthorized releases were detected. An indoor shooting range was located on the site and lead contamination was detected. Building demolition and lead abatement of shallow soil to 1 foot bgs was completed in 2008. A PSA completed in November 2008 collected limited soil samples above 5 feet bgs. UST system removal and replacement is proposed and confirmation soil sampling will be completed once the UST has been removed. Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp
Begin Date: 11/28/1988
How Discovered: Tank Tightness Test
How Discovered Description: Not Reported
Stop Method: Repair Product Piping
Stop Method Description: Not Reported
Agency Provided Latitude: 37.824405
Agency Provided Longitude: -122.265796

Regulatory Activities Details
Action Date: 1988-01-01 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Assessment & Interim Remedial Action	0.28 miles W	52 ft (15 ft lower than site)	33

SITE NAME	MAPS	ID
CHEVRON #9-2029	1, 3	T0600173887

ADDRESS	CITY	ZIP
890 MACARTHUR BLVD	OAKLAND	94608

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600173887
Global ID: T0600173887
Case Type: LUST Cleanup Site
Status: Open - Assessment & Interim Remedial Action
Status Date: 10/26/2005
CUF Case: YES
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: MD
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: NA
Loc Case Number: RO0002438
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp. In February 1997 five dispenser islands were removed and replaced; associated excavations detected concentrations of hydrocarbons significantly below the current day ESLs. In October 2000 soil bores B-1 to B-10 were installed and grab groundwater concentrations of concern were encountered. In March 2002 wells MW-1 to MW-4 were installed. In April 2005 the station was demolished and all USTs and associated piping were removed. Also beginning in April 2005, a remedial excavation was conducted and removed 5,134 tons of soil, and 25,486 gallons of groundwater were pumped. In March 2006 soil bores SB-1 to SB-7 were installed. In September 2006 wells MW-1 to MW-4 were decommissioned to facilitate site redevelopment; including a residential option. In July 2008 wells MW-5 to MW-8 were installed offsite. Two additional soil bores are currently proposed to define the downgradient extent of dissolved phase impacts; downgradient well MW-7 has a strong increasing concentration trend.
Begin Date: 2/26/1997
How Discovered: UST System Modification
How Discovered Description: Not Reported
Stop Method: Replace product piping
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8282727309058
Agency Provided Longitude: -122.274194955826

Regulatory Activities Details
Action Date: 1997-02-26 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Site Assessment	0.3 miles NW	60 ft (7 ft lower than site)	36

SITE NAME	MAPS	ID
SAN FRANCISCO FRENCH BREAD	1, 3	T0600101187

ADDRESS	CITY	ZIP
3924 MARKET ST.	Oakland	94608

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600101187
Global ID: T0600101187
Case Type: LUST Cleanup Site
Status: Open - Site Assessment
Status Date: 5/15/1995
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: KEN
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: 01-1290
Loc Case Number: RO0000490
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: The site is occupied by a single story commercial building with adjacent paved parking. The building is on a raised floor with basement and is currently occupied by Atthowe Fine Arts Services for storage, packaging, and shipping of fine art. One 500-gallon UST, reported to contain diesel fuel, and a fuel dispenser were removed from the site in March 1991. Analysis of confirmation samples performed following over excavation of the UST pit determined residual concentrations of total petroleum hydrocarbons (TPH) as gasoline (TPHg), and benzene at concentrations of 210 milligrams per kilogram (mg/kg) and 0.4 mg/kg, respectively. In 1995, three groundwater monitoring wells were installed and sampled quarterly for approximately one year. Maximum concentrations reported through 1996 included 220 micrograms per liter (ug/L) TPHg, 10,000 ug/L TPH as diesel (TPHd), and 3.5 ug/L, 1.0 ug/L, 3.0 ug/L for benzene, toluene, and xylenes (BTX) compounds, respectively. Ethylbenzene (E) concentrations were reported below the laboratory reporting limits. In 1999, to evaluate the case for closure, ACDEH requested recovery of groundwater samples to to include analysis for methyl tertiary butyl ether (MTBE). The monitoring event, conducted in August 1999, encountered a viscous free product (FP) in monitoring well MW-1, additionally FP was subsequently encountered in wells MW-2 and MW-3 in April 2000. The FP in the three wells was identified as Bunker C fuel oil. The source of the fuel oil has not been identified. Additionally, secondary evidence of free product concentrations of TPHd and TPH motor oil (TPHmo) were reported in water samples from MW-1 and MW-3 during the April 2000 monitoring event. BTEX and MTBE concentrations were reported below laboratory reporting limits in wells MW-2 and MW-3, the two wells sampled for these chemicals. The monitoring wells were not sampled between June 2000 and June 2015. Depth to water measurements for the seven groundwater monitoring events have ranged between 9.70 feet to 13.40 feet. An investigation consisting of both on- and off-site soil bores was conducted in 2013 to delineate the extent of the free phase hydrocarbons. TPH was not reported in in soil or grab-groundwater (GGW) samples collected from the two off-site soil bores, advanced to the west, roughly in the down gradient direction across Market Street, and soil bores B-5 and B-9 appear to have delineated the TPH plume to the south and east. In 2015, an on-site water supply well was decommissioned. The supply well, approximately 200 feet deep, was situated about 100 feet cross gradient from the former UST location and was reported to be last used prior to 1985. Prior to its abandonment, a water sample was collected from the well and analyzed for TPHg, TPHd, TPHmo, BTEX and the fuel oxygenates (FOs) MTBE, diisopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA), and the polynulear aromatic hydrocarbons (PNAs) naphthalene, acenaphthene, acenaphthylene, anthracene, phenanthrene, fluorene, chrysene, fluoranthene, pyrene, benzo(b)fluoranthene, benzo(a) pyrene, benzo(k)fluoranthene, benzo(a)anthracene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, and benzo(g,h,i)perylene. Benzene, at a concentration of 6.8 ug/L, was the only compound documented above the laboratory reporting limit. An investigation consisting of both on- and off-site soil bores was also conducted in 2015. Based on the findings of the investigation, the contaminant plume remains undefined to the north, in the up gradient direction from the former UST. Soil and GGW samples collected from bores advanced within the boundary of the plume (B-10 and B-11) were reported to contain PNAs. The three monitoring wells were also sampled, with FP present in each well. No BTEX, FOs, or naphthalene concentrations were detected in groundwater recovered from the wells. However, concentrations of several PNAs were reported above their respective laboratory reporting limits. Additionally, two soil gas samples were recovered for a vapor intrusion to indoor air evaluation. BTEX compounds were reported present in both samples at concentrations up to 17 micrograms per cubic meter (ug/m3), 94 ug/m3, 120 ug/m3, and 530 ug/m3, respectively. Naphthalene concentrations were not reported above the laboratory reporting limit, and oxygen was reported at 8.29 percent (%) and 9.10%. A well survey was conducted in 2016 with a search radius of 1,000 feet around the property. The survey contained Department of Water Resources (DWR) and Alameda County Public Works Agency (ACPWA) records review. No supply wells were identified within the search radius; however, a cathodic protection well is identified approximately 550 feet in the southly direction, roughly down gradient of the site.
Begin Date: 3/29/1991
How Discovered: Tank Closure
How Discovered Description: TANK CLOSURE
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8302031719854
Agency Provided Longitude: -122.27392984425

Regulatory Activities Details
Action Date: 1991-03-29 00:00:00

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
LUST-Open-CA	Open - Eligible for Closure	0.49 miles SW	34 ft (33 ft lower than site)	49

SITE NAME	MAPS	ID
FORMER FG GASOLINE	1, 3	T0600102132

ADDRESS	CITY	ZIP
3314 SAN PABLO AVE.	Oakland	94608

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600102132
Global ID: T0600102132
Case Type: LUST Cleanup Site
Status: Open - Eligible for Closure
Status Date: 11/1/2016
CUF Case: YES
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: REL
Local Agency: Not Reported
RB Case Number: 152673
Loc Case Number: Not Reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Contaminants of Concern: Benzene, Gasoline
Potential Media Affected: Other Groundwater (uses other than drinking water)
Site History: February 29, through March 1, 1996 four gasoline USTs (one 8,000 gallon, one 6,000 gallon and Two 4,000 gallon) were removed from the site. The maximum concentrations in soil were 8,000 mg/kg TPHg and 4 mg/kg benzene. Grab groundwater was 46,000 µg/L TPHg and 440µg/L benzene. Soil removed from the tank pit was placed back in the excavation with no treatment. A work plan was subsequently submitted and approved but was not implemented. On the Project Information screen, add this phrase to the Staff Notes and Site History: Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historical case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.
Begin Date: 2/29/1996
How Discovered: Tank Closure
How Discovered Description: Not Reported
Stop Method: Other Means
Stop Method Description: Not Reported
Agency Provided Latitude: 37.8245821255098
Agency Provided Longitude: -122.277510166168

Regulatory Activities Details
Action Date: 1990-08-30 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Response-CA	ACTIVE	0.54 miles SW	35 ft (32 ft lower than site)	53

SITE NAME	MAPS	ID
CAL TECH METALS	1, 3	1340118

ADDRESS	CITY	ZIP
825, 829, 841 31ST STREET	OAKLAND	94608

DETAILS

URL: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=1340118
Envirostor ID: 1340118
Program Type: STATE RESPONSE
Cleanup Status: ACTIVE
Status Date: 5/2/2006
County: ALAMEDA
Site Code: 200882
Agency Provided Latitude: 37.8208694448441
Agency Provided Longitude: -122.274468449601

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Response-CA	ACTIVE	0.62 miles SW	30 ft (37 ft lower than site)	54

SITE NAME	MAPS	ID
LANE METAL FINISHERS	1, 3	60000594

ADDRESS	CITY	ZIP
2942 SAN PABLO AVENUE	OAKLAND	94608

DETAILS

URL: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60000594
Envirostor ID: 60000594
Program Type: STATE RESPONSE
Cleanup Status: ACTIVE
Status Date: 3/15/2007
County: ALAMEDA
Site Code: 201736
Agency Provided Latitude: 37.8201518201527
Agency Provided Longitude: -122.275963675717

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Response-CA	ACTIVE	0.66 miles S	33 ft (34 ft lower than site)	55

SITE NAME	MAPS	ID
HARRIS DRY CLEANERS	1, 3	1720109

ADDRESS	CITY	ZIP
2801 MARTIN LUTHER KING JR. WAY	OAKLAND	94609

DETAILS
URL: http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=1720109 Envirostor ID: 1720109 Program Type: STATE RESPONSE Cleanup Status: ACTIVE Status Date: 6/16/2000 County: ALAMEDA Site Code: 201253 Agency Provided Latitude: 37.8181288606979 Agency Provided Longitude: -122.271665945525

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
SLIC-Closed-CA	Completed - Case Closed	0.5 miles NE	103 ft (36 ft higher than site)	51

SITE NAME	MAPS	ID
SHATTUCK AVE PROPERTY	1, 3	T06019777882

ADDRESS	CITY	ZIP
4501 SHATTUCK	OAKLAND	94609

DETAILS
Sites Details URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T06019777882 Global ID: T06019777882 Case Type: Cleanup Program Site Status: Completed - Case Closed Status Date: 6/25/1999 CUF Case: NO Lead Agency: ALAMEDA COUNTY LOP Case Worker: Not Reported Local Agency: Not Reported RB Case Number: NA Loc Case Number: RO0002715 File Location: All Files are on GeoTracker or in the Local Agency Database Potential Contaminants of Concern: Not Reported Potential Media Affected: Other Groundwater (uses other than drinking water) Site History: Not Reported Begin Date: 6/25/1999 How Discovered: Other Means How Discovered Description: Not Reported Stop Method: Other Means Stop Method Description: Not Reported Agency Provided Latitude: 37.833522 Agency Provided Longitude: -122.263836 Regulatory Activities Details : Not Reported More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
SLIC-Open-CA	Open - Remediation	0.27 miles NE	84 ft (17 ft higher than site)	32

SITE NAME	MAPS	ID
MacArthur BART Transit Village	1, 3	T10000000406

ADDRESS	CITY	ZIP
None 40th Street and Telegraph Avenue (APNs 012-0969-053-03, 012-0968-055-01, 012-0967-049-01)	Oakland	94612

DETAILS
Sites Details URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000000406 Global ID: T10000000406 Case Type: Cleanup Program Site Status: Open - Remediation Status Date: 12/10/2011 CUF Case: NO Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2) Case Worker: MEJ Local Agency: Not Reported RB Case Number: 01S0696 Loc Case Number: Not Reported File Location: Regional Board Potential Contaminants of Concern: Diesel, Total Petroleum Hydrocarbons (TPH), Waste Oil / Motor / Hydraulic / Lubricating Potential Media Affected: Indoor Air, Other Groundwater (uses other than drinking water), Soil Vapor Site History: This site was contaminated with petroleum hydrocarbons from an off site, neighboring, former gas station facility. This site is composed of several different parcels that will be redeveloped into a mixed-use; commercial and residential space, vapor intrusion is a concern. A soil and vapor management plan has been required of the different parcels. Begin Date: 10/10/2008 How Discovered: Not Reported How Discovered Description: Not Reported Stop Method: Not Reported Stop Method Description: Not Reported Agency Provided Latitude: 37.8290735382453 Agency Provided Longitude: -122.264742851257 Regulatory Activities Details Action Date: 2009-09-24 00:00:00 More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
SLIC-Open-CA	Open - Site Assessment	0.43 miles SE	75 ft (8 ft higher than site)	39

SITE NAME	MAPS	ID
411 MACARTHUR REDEVELOPMENT	1, 3	T10000007937

ADDRESS	CITY	ZIP
411 WEST MACARTHUR BLVD	OAKLAND	94609

DETAILS

Sites Details
URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000007937
Global ID: T10000007937
Case Type: Cleanup Program Site
Status: Open - Site Assessment
Status Date: 11/4/2015
CUF Case: NO
Lead Agency: ALAMEDA COUNTY LOP
Case Worker: KEN
Local Agency: ALAMEDA COUNTY LOP
RB Case Number: Not Reported
Loc Case Number: RO0003192
File Location: Not Reported
Potential Contaminants of Concern: Not Reported
Potential Media Affected: Not Reported
Site History: January 9, 2017 Conference call with Mr. Hernon and City of Oakland representatives fell through. ACDEH requesting additional dates and time for reschedule. Conference call with Messrs. Joe Hernon (RP) and consultants Michael Kara (prepared HHRA) and Jim Gribi (PG), and Heriberto Robles (performing HHRA 3rd party review) on 9/21/2016. Meeting to discuss the HHRA and review status. In summary, Mr. Robles requested the complete data set for the TO-15 and 8260 analyses in order to complete his HHRA review. Mr. Gribi indicated he would contact the lab for the data and provide to Mr. Robles. The path forward would be to complete the review, with ACDEH completing its review of the RAP upon completion of the HHRA review. Based on discussions during the first half of September, 2016 related to the scope of the HHRA third-party review, ACDEH has requested a conference call for September 20, 2016 to discuss the HHRA and the path forward. Meeting held on August 25, 2016 for follow up presentation of the current analytical data, and discussion of the human health risk assessment (HHRA) provided to our office on August 19, 2016. ACDEH pointed out that we did not have a qualified risk assessor (RA) on staff and that we would provide a list of RAs provided by California Environmental Protection Agency/ Department of Toxic Substances Control (DTSC). We requested the Responsible Party (RP) select an RA from the list to hire as a third-party consultant for the HHRA review. On August 30, 2016, Mr. Heriberto Robles contacted ACDEH informing us he had been contracted to perform the HHRA review. Meeting held on June 22, 2016 for presentation of data requested in meeting of April 20, 2016, including the soil sampling conducted in May 2016 along the swath of soil between the former fuel tank pit and Webster St. The only non-ACDEH attendee was a consultant who had not present at any of the previous meetings and had not been brief on the data to be presented. ACDEH reviewed case and rationale behind the request. Meeting held on April 20, 2016 for discussion of the results of the approved work plan to address residual contamination in the swath of soil between the former fuel tank pit and Webster St. The areas investigated are the location of the proposed elevator pit and the swath of soil between the former fuel tank pit and Webster St. The laboratory report documented concentrations of up to 42,000 micrograms per liter (ug/L) total petroleum hydrocarbons as gasoline (TPHg),110 ug/L benzene, and 2,300 ug/L naphthalene in groundwater and up to 2,700,000 micrograms per cubic meter (ug/m3) TPHg and ug/m3 benzene in soil gas. The sample collection and analysis provided to ACDEH as an email attachment on 4/19/2016 for the 4/20/2016 meeting. The data demonstrated the existence of potential vapor intrusion risks and indicates the presence of residual product. At the meeting, ACDEH requested an attempt be made to determine if residual source is present and the limits of the contamination. ACDEH requested on-site soil borings be advanced along the strip of native soil between the former tank pit and Webster Street and to present the findings in a document which would include a cross section through this area showing the distribution of contaminants, depth to water (dtw), and the proposed 'clean fill' line for a 5-foot sub-slab bioattenuation zone. Meeting held on March 30, 2016 for discussion of path forward addressing vapor intrusion due to residual contamination with respect to proposed development. ACEH requested preparation of a work plan to investigate this concern. Meeting held on January 08, 2016 for presentation of proposed development. ACEH requested figures, cross sections and data tables to be provided electronically for the case file. Case documents delivered to ACEH on 2/29/2016 for review prior to meeting of 3/30/2016. At the meeting, it was agreed that the next course of action is for work plan submittal for collection of soil gas and grab-groundwater samples. The work plan was approved and implemented. The laboratory report documented concentrations of up to 42,000 ug/L TPHg,110 ug/L benzene, and 2,300 ug/L naphthalene in groundwater and up to 2,700,000 ug/m3 TPHg and ug/m3 benzene in soil gas. The sample collection and analysis provided to ACDEH as an email attachment on 4/19/2016 for meeting held on 4/20/2016. The data demonstrated the existence of potential vapor intrusion risks and indicates the presence of residual product. At the meeting ACEH requested an attempt be made to determine if residual source is present and the limits of the contamination. ACDEH letter dated 4/22/2016 requested submittal of work plan.
Begin Date: 10/29/2015
How Discovered: Not Reported
How Discovered Description: Not Reported
Stop Method: Not Reported
Stop Method Description: Not Reported
Agency Provided Latitude: 37.825105
Agency Provided Longitude: -122.261965

Regulatory Activities Details
Action Date: 2015-10-29 00:00:00
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
Spills-SSO-CA	Listed	0.15 miles E	71 ft (4 ft higher than site)	19

SITE NAME	MAPS	ID
37th St and West MacArthur Blvd	1, 2, 3	761464

ADDRESS	CITY	ZIP
Not Reported by Agency		

DETAILS

Certificate ID: 761464
Region: 2
County: Alameda
Agency: Oakland City DPW
Collection SYS: Oakland City CS
WDID: 2SSO11204
Event ID: 811301
Certificate Person Name: Kenneth Patton
Certificate Person Title: Public Works Supervisor II
Certificate Location: 7101 Edgewater Dr. Oakland Ca, 94621
Certificate Date: 2014.12.26 00.00.00
Spill Location Description: Not Reported
Spill Type: Category 2
Appear PT: Gravity Mainline
Appear PT Explanation: Sanitary main sewer plugged and overflowed out of the manhole in the middle of the street.
Reach Surface: No
reach Storm Drainpipe: No
Return To SSS: Not Applicable - Spill did not reach a separate storm drainpipe
Privt Latrl Spill: No
Responsible Party: Not Reported
Final Spill Dest: Other (specify below);Street/Curb and Gutter
Final Spill Dest Explanation: 8 sanitary main sewer plugged due to grease and overflowed out of the manhole in the middle of the street into the curb and gutter and storm inlet.
Spill Volume Reached Land: Not Reported
Spill Volume Discharge A: Not Reported
Spill Volume Discharge B: Not Reported
Spill Volume Discharge C: Not Reported
Spill Volume Discharge D: Not Reported

More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	13
SITE NAME			MAPS	ID
Westco Gas Food			1, 2, 3	13133
ADDRESS			CITY	ZIP
731 W MacArthur Blvd			Oakland	94609
DETAILS				

More Information on Site? Go to Following Link: http://geotracker.waterboards.ca.gov/search.asp
Global ID: Not Reported
COUNTY: Alameda
Permitting Agency: Alameda County Environmental Health
Agency Provided Latitude: 37.82717
Agency Provided Longitude: -122.27142
PROJECT TYPE: Not Reported
RB Case Number: Not Reported
LOC Case Number: Not Reported
Case Worker: Not Reported
MTBE DATE: Not Reported
GW CONC (PPB): Not Reported
MATRIX: Not Reported

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-CRSP-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	13
SITE NAME			MAPS	ID
Westco Gas Food			1, 2, 3	85423
ADDRESS			CITY	ZIP
731 W MACARTHUR BLVD			OAKLAND	94609

DETAILS

Site Regulated Program Information
Site ID: 85423
Site EI ID: 10510504
Agency Provided Latitude: 37.827168
Agency Provided Longitude: -122.271423

Program Description: Underground Storage Tank

Evaluation Information
Evaluation Date: 11/21/2016
Violations Found? (Y/N): Yes
Evaluation General Type: Compliance Evaluation Inspection
Evaluation Type: Routine done by local agency
Evaluation Note(s): ANNUAL UST INSPECTION

Westco Gas Food
731 W. Macarthur Blvd
Oakland, CA 94609

Annual Underground Storage Tank (UST) inspection conducted by Alameda County Department of Environmental Health (ACDEH) on November 21, 2016. Nik Zagorov of ECO-CHEK is the service technician conducting the monitoring equipment certification and spill container testing.

There are four 10,000 gallon double walled fiberglass underground storage tank (three Regular Unleaded and one Premium Unleaded gasoline). There is a master 87 with ELLD, a slave 87 with turbine without ELLD and a siphon 87. There are VR 208 sensors in the fill and turbine/pipe sumps (turbine/fill sump sensors shutdown turbines). Annular sensors are VR 407's). The product lines are double wall fiberglass as are the vent lines. UDC have VR 208 that shutdown the turbines. There is sensor out and failsafe. Overfill protection is by overfill alarm.

The last Secondary Containment test was conducted on [Truncated]
Evaluation Division: Alameda County Environmental Health
Evaluation Program: UST
Evaluation Source: CERS

Evaluation Date: 11/16/2015
Violations Found? (Y/N): No
Evaluation General Type: Compliance Evaluation Inspection
Evaluation Type: Routine done by local agency
Evaluation Note(s): Westco Gas Food
731 W. Macarthur Blvd
Oakland, CA 94609

CAL000336267

Initial Hazardous Waste Generator (HWG) inspection conducted by Alameda County Department of Environmental Health (ACDEH) on November 16, 2015.

Consent to inspect was given by and the completed inspection report was reviewed with SALEM ALAZANI, CASHIER.

Evaluation Division: Alameda County Environmental Health
Evaluation Program: HW
Evaluation Source: CERS
More Details Link

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-Priority-CA	Listed	0.28 miles W	52 ft (15 ft lower than site)	33

SITE NAME	MAPS	ID
CHEVRON STATION #9-2029	1, 3	19167

ADDRESS	CITY	ZIP
890 MACARTHUR BLVD	OAKLAND	94608

DETAILS

Facility Information
Global ID: 19167
Claim Number: T0600173887
County: Alameda
Priority: D
Rank: 3279
Report Date: 2/26/1997
Stop Date: 2/26/1997
Discovered Date: 2/26/1997
Claimant: CHEVRON PRODUCTS COMPANY
Lead Agency: ALAMEDA COUNTY LOP
Regional Board: SAN FRANCISCO BAY RWQCB (REGION 2)
Region: SAN FRANCISCO BAY RWQCB
Region Code: REGION 2

GIS Information
Agency Provided Longitude: -122.274194955826
Agency Provided Latitude: 37.8282727309058

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-Priority-CA	Listed	0.29 miles NE	87 ft (20 ft higher than site)	34

SITE NAME	MAPS	ID
FORMER SHELL STATION #129452	1, 3	19548

ADDRESS	CITY	ZIP
500 40TH ST	OAKLAND	94609

DETAILS
Facility Information Global ID: 19548 Claim Number: T0600101265 County: Alameda Priority: D Rank: 3416 Report Date: 7/1/1982 Stop Date: 9/25/1986 Discovered Date: 7/1/1982 Claimant: EQUILON ENTERPRISES, LLC, ASSIGNEE Lead Agency: ALAMEDA COUNTY LOP Regional Board: SAN FRANCISCO BAY RWQCB (REGION 2) Region: SAN FRANCISCO BAY RWQCB Region Code: REGION 2 GIS Information Agency Provided Longitude: -122.264549312 Agency Provided Latitude: 37.829319002

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-Priority-CA	Listed	0.47 miles W	36 ft (31 ft lower than site)	45

SITE NAME	MAPS	ID
FORMER SHELL #139619	1, 3	19158

ADDRESS	CITY	ZIP
3420 SAN PABLO AVE	OAKLAND	94608

DETAILS
Facility Information Global ID: 19158 Claim Number: T0600101253 County: Alameda Priority: D Rank: 3281 Report Date: 2/15/1989 Stop Date: 7/26/1997 Discovered Date: Not Reported Claimant: EQUILON ENTERPRISES, LLC, ASSIGNEE Lead Agency: ALAMEDA COUNTY LOP Regional Board: SAN FRANCISCO BAY RWQCB (REGION 2) Region: SAN FRANCISCO BAY RWQCB Region Code: REGION 2 GIS Information Agency Provided Longitude: -122.277815937996 Agency Provided Latitude: 37.8259295780339

DATABASE	STATUS	DISTANCE	ELEVATION	MAP ID
UST-Proposed-CA	Listed	0.12 miles W	60 ft (7 ft lower than site)	13

SITE NAME	MAPS	ID
Arco Station #04931	1, 2, 3	124

ADDRESS	CITY	ZIP
731 West MacArthur Boulevard	Oakland	94609

DETAILS

Note: This is an ERS assigned Automated ID.
County: Not Reported
Type: UST Case Closure Proposed For Consideration by the Executive Director
Documents: Notice, Exec Draft Order, Closure Summary
Notice Document URL: http://www.waterboards.ca.gov/water_issues/programs/ustcf/docs/prop_closure_cases/ro0000076_notice.pdf
Draft Order Document URL: http://www.waterboards.ca.gov/water_issues/programs/ustcf/docs/prop_closure_cases/ro0000076_draftorder.pdf
Summary Document URL: http://www.waterboards.ca.gov/water_issues/programs/ustcf/docs/prop_closure_cases/ro0000076_closuresummary.pdf
Written Comments Received 1: Not Reported
Written Comments Received 2: Not Reported
Written Comments Received 3: Not Reported
Written Comments Received 4: Not Reported
Written Response to Comments 1: Not Reported
Written Response to Comments 2: Not Reported
Written Response to Comments 3: Not Reported
Claim No# / Case No#: Case No. RO0000076
Deadline to Receive Comments 12 Noon: 10/3/2014

RECORDS SOURCES SEARCHED

Air-CA
Air Permits with Emissions
Category: ERS Supplemental Govt Sources
Description: This database contains permitted facilities that report to the ARB by the different Air Quality Districts.
Agency: California Air Resources Board
Phone Number: 9163222990
Date last updated: 12/20/2016
Date last checked: 12/2/2016
Distance searched: 0.25 miles
Sites:
BAY AREA RAPID TRANSIT MapID: 22 Listed
CALIFORNIA HIGHWAY PATROL-TELECOMMUNICATIONS MapID: 31 Listed

AIR-DIST-CA
Air Pollution Control District
Category: ERS Supplemental Govt Sources
Description: This database contains air permitted facilities as reported by various Air Quality and Air Pollution Control Districts in California.
Antelope Valley AQMD: (661) 723-8070
Butte AQMD: (530) 332-9400
Mariposa County APCD: (209) 966-2220
North Coast Unified AQMD: (707) 443-3093
Placer APCD: (530) 745-2330
Sacramento AQMD: (916) 874-4800
San Diego County APCD: (858) 586-2600
Santa Barbara APCD: (805) 961-8800
South Coast AQMD: (909) 396-2000
Agency: Local District Agencies
Phone Number: 7146698096
Date last updated: 3/3/2017
Date last checked: 2/20/2017
Distance searched: 0.25 miles
Sites:
None Found

AST-CA
Aboveground Storage Tanks
Category: State/Tribal UST

Description: This database includes aboveground storage tanks previously maintained by the California EPA. The data is historic as AST's are now tracked by local county offices.
Agency: California Environmental Protection Agency
Phone Number: 9163232514
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

AST-CRSP-CA

Aboveground Storage Tanks
Category: State/Tribal UST
Description: Aboveground Storage Tanks listed on the CalEPA Regulated Site Portal. The portal is a website that combines data about environmentally regulated sites and facilities in California into a single, searchable database and interactive map. For information on a particular site, contact the appropriate agency:
California Environmental Reporting System (CERS): cers@calepa.ca.gov
California Integrated Water Quality System (CIWQS): 866-79-CIWQS
EnviroStor Cleanup/Haz Waste: 877-786-9427
GeoTracker: 866-480-1028
Agency: Cal EPA
Phone Number: 9164455049
Date last updated: 3/17/2017
Date last checked: 2/14/2017
Distance searched: 0.25 miles
Sites:
CHP Oakland Area/370 MapID: 31 Listed

BF-US

A Listing of Brownfields Sites
Category: Federal Brownfield
Description: This database contains a listing of Brownfields sites listed under the "Cleanups in My Community" program maintained by EPA.
Agency: United States Environmental Protection Agency
Phone Number: 2025662777
Date last updated: 4/28/2017
Date last checked: 4/20/2017
Distance searched: 0.5 miles
Sites:
Lucky's Auto Body Shop MapID: 8 Listed

BioFuel-US
Bio Diesel Fuel
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of EPA Fuels Programs facilities.
Agency: United States Environmental Protection Agency
Phone Number: 2023439303
Date last updated: 1/13/2017
Date last checked: 1/6/2017
Distance searched: 0.25 miles
Sites:
None Found

Cal-BZ-HazWaste-CA
Border Zone or Hazardous Waste Property
Category: State/Tribal ASTM Other
Description: This database Identifies properties that went through the Border Zone Property or Hazardous Waste Property process of evaluation as reported by California Department of Toxic and Substance Control. Potential Border Zone properties are located within 2,000 feet of a significant disposal of hazardous waste; Hazardous Waste Property facilities/sites have a significant disposal of hazardous waste.
Agency: California Department of Toxic and Substance Control.
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

Cal-CorAct-Closed-CA
Corrective Action Sites
Category: State/Tribal ASTM Other
Description: This database contains Investigation or cleanup activities at Resource Conservation and Recovery Act (RCRA) or state-only hazardous waste reported by the California Department of Toxic and Substance Control.
Agency: California Department of Toxic and Substance Control.
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

Cal-CorAct-Open-CA
Corrective Action Sites

Category: State/Tribal ASTM Other
Description: This database contains Investigation or cleanup activities at Resource Conservation and Recovery Act (RCRA) or state-only hazardous waste reported by the California Department of Toxic and Substance Control.
Agency: California Department of Toxic and Substance Control.
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

Cal-Eval-Hist
EnviroStor Database Evaluation History Listing
Category: State/Tribal Voluntary Cleanup Sites
Description: This database contains a listing of Historical Sites. Historical sites are Identified sites from an older database where no site type was identified. Most of these sites have a status of Referred or No Further Action. DTSC is working to clean up this data by identifying an appropriate site type for each Historic Site.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:

LUCKY'S AUTO BODY	MapID: 8	Listed

Cal-Eval-Hist-NFA
EnviroStor Database Evaluation History NFA Listing
Category: State/Tribal Voluntary Cleanup Sites
Description: This database contains a listing of Historical sites from older database where no site type was identified. These particular sites have received No Further Action.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

Cal-Military-Active
EnviroStor Database Military Active Listing
Category: State/Tribal Voluntary Cleanup Sites

Description: This database contains a listing Military sites including open and closed bases and Former Used Defense Sites. Active sites are those with confirmed or unconfirmed releases and where DTSC is involved in investigation and/or remediation, either in a lead or support capacity.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 1 mile
Sites:
None Found

Cal-Military-NFA
EnviroStor Database Military NFA Listing
Category: State/Tribal Voluntary Cleanup Sites
Description: This database contains a listing of Military sites including open and closed bases and Former Used Defense Sites. The confirmed or unconfirmed releases have been cleaned up and the case has received No Further Action.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

Cal-Military-Other
EnviroStor Database Military Other Listing
Category: State/Tribal Voluntary Cleanup Sites
Description: This database contains a listing of Military sites including open and closed bases and Former Used Defense Sites.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 1 mile
Sites:
None Found

Cal-Mortgage-CA
Cal Mortgage Facilities
Category: ERS Supplemental Govt Sources
Description: Cal-Mortgage: Under a Memorandum of Understanding with the Cal-Mortgage

Loan Insurance Division (Cal-Mortgage) of the Office of Statewide Health Planning and Development, DTSC reviews environmental documents for sites applying for their guaranteed loan insurance program for the construction, improvement and expansion of health care facilities. The loan applicants are either public entities or non-profit groups. The environmental review is done as part of the real estate due diligence process and the properties are not expected to have had hazardous substances releases.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.25 miles
Sites:
None Found

<u>Cal-School-Active</u>
EnviroStor Database School Active Listing
Category: State/Tribal Voluntary Cleanup Sites
Description: This database contains a listing of proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

<u>Cal-School-NFA</u>
EnviroStor Database School NFA Listing
Category: State/Tribal Voluntary Cleanup Sites
Description: This database contains a listing of proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. These particular cases have now received a No Further Action.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

<u>Cal-School-Other</u>
EnviroStor Database School Other Listing
Category: State/Tribal Voluntary Cleanup Sites

Description: This database contains a listing of proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

Cal-State-Response-Active
EnviroStor Database Superfund Other Listing
Category: State/Tribal NPL
Description: This database contains a listing of State Response Active sites. These sites are confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high priority and high potential risk.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 1 mile
Sites:

CAL TECH METALS	MapID: 53	Listed
Lane Metal Finishers	MapID: 54	Listed
HARRIS DRY CLEANERS	MapID: 55	Listed

Cal-State-Response-NFA
EnviroStor Database State Response NFA Listing
Category: State/Tribal NPL
Description: This database contains a listing of State Response Sites. These sites are confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These particular cases have now received No Further Action.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

Cal-State-Response-Other
EnviroStor Database State Response Other Listing
Category: State/Tribal NPL

Description: This database contains a listing of State Response Sites. These sites are confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

Cal-Superfund-Active
BEAP
Category: State/Tribal CERCLIS Equivalent
Description: This database contains a listing of Federal Superfund Sites identified by the U.S. EPA where the DTSC is actively involved, either in a lead or support capacity, in the investigation and/or remediation currently in progress.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 1 mile
Sites:
None Found

Cal-Superfund-NFA
EnviroStor Database Superfund NFA Listing
Category: State/Tribal CERCLIS Equivalent
Description: This database contains a listing of Federal Superfund Sites identified by the U.S. EPA where the DTSC is actively involved, either in a lead or support capacity in the investigation and/or remediation currently in progress. These particular cases have now received No Further Action.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 1 mile
Sites:
None Found

Cal-Superfund-Other
EnviroStor Database Superfund Other Listing
Category: State/Tribal CERCLIS Equivalent

Description: This database contains a listing of Federal Superfund Sites identified by the U.S. EPA where DTSC is actively involved, either in a lead or support capacity in the investigation and/or remediation currently in progress.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 1 mile
Sites:
None Found

<u>Cal-TierPer-CA</u>
Tiered Permits
Category: ERS Supplemental Govt Sources
Description: This database contains facilities with a Tiered Permit reported by the California Department of Toxic and Substance Control. These facilities manage waste not regulated under RCRA, but regulated as a hazardous waste by the State of California. These facilities include, but are not limited to recyclers, oil transfer stations, and precious metals recyclers.
Agency: California Department of Toxic and Substance Control.
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.25 miles
Sites:
None Found

<u>Cal-VCP-Active</u>
EnviroStor Database VCP Active Listing
Category: State/Tribal Voluntary Cleanup Sites
Description: This database contains a listing of sites with either confirmed or unconfirmed releases, and the project proponents have requested that DTSC oversee evaluation, investigation, and/or cleanup activities and have agreed to provide coverage for DTSC's costs.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

<u>Cal-VCP-NFA</u>
EnviroStor Database VCP NFA Listing
Category: State/Tribal Voluntary Cleanup Sites

Description: This database contains a listing of sites where the confirmed or unconfirmed releases have been cleaned up and have been reported as receiving No Further Action.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

Cal-VCP-Other
EnviroStor Database VCP Other Listing
Category: State/Tribal Voluntary Cleanup Sites
Description: This database contains a listing of sites with either confirmed or unconfirmed releases, and the project proponents have requested that DTSC oversee evaluation, investigation, and/or cleanup activities and have agreed to provide coverage for DTSC's costs.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

CBF-CA
Considered Brownfield Sites
Category: State/Tribal ASTM Other
Description: This database contains facilities that are considered Brownfields reported by the State Water Resource Controls Board.
Agency: State Water Resource Controls Board
Phone Number: 9163237905
Date last updated: 3/10/2017
Date last checked: 2/27/2017
Distance searched: 0.5 miles
Sites:
MacArthur BART Transit Village MapID: 32 Listed

CDL-CA
Clandestine Drug Labs
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of Clandestine Drug Lab locations. This listing includes active and inactive cases, as well as, labs that need maintenance.
Agency: California Department of Toxic Substances Control

Phone Number: 9162556572
Date last updated: 5/18/2016
Date last checked: 5/11/2016
Distance searched: 0.063 miles
Sites:
None Found

CDL-US
National Clandestine Drug Lab Register
Category: ERS Supplemental Govt Sources
Description: National Clandestine Drug Lab Register. This database contains a listing of addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites.
Agency: Unites States Drug Enforcement Administration
Phone Number: 2023071000
Date last updated: 1/16/2017
Date last checked: 1/9/2017
Distance searched: 0.063 miles
Sites:
None Found

CERCLIS-Archived-US
CERCLIS sites that have been archived
Category: Federal CERCLIS NFRAP
Description: The Superfund Enterprise Management System (SEMS). The reports produced by SEMS contain information on the assessment and remediation of current and archived hazardous waste sites. The archived designation means that to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates that this decision was not appropriate or other considerations require a recommendation for listing at a later time. Information provided to the previous CERCLIS Legacy System has been added to the details of the sites.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 5/22/2017
Date last checked: 4/28/2017
Distance searched: 0.5 miles
Sites:
None Found

CERCLIS-US
Comprehensive Environmental Response, Compensation, and Liability Information System
Category: Federal CERCLIS

Description: The Superfund Enterprise Management System (SEMS). The reports produced by SEMS contain information on the assessment and remediation of current hazardous waste sites. Information provided to the previous CERCLIS Legal System has been added to the details of the sites.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 5/22/2017
Date last checked: 4/28/2017
Distance searched: 0.5 miles
Sites:
None Found

CERS-CA
California Environmental Reporting System (CERS)
Category: State/Tribal ASTM Other
Description: The California Environmental Reporting System (CERS) is a statewide web-based system to support California Unified Program Agencies (CUPAs) and Participating Agencies (PAs) in electronically collecting and reporting various hazardous materials-related data as mandated by the California Health and Safety Code and new 2008 legislation (AB 2286). Under oversight by Cal/EPA, CUPAs implement Unified Program mandates that streamline and provide consistent regulatory activities. The database includes the following counties:
Amador
Calaveras
Contra Costa
Fresno
Glenn
Humboldt
Los Angeles
Los Angeles – Vernon City
Los Angeles – Torrance City
Los Angeles – Santa Fe Springs
Madera
Mendocino
Mono
Nevada (Agency no longer provides update as of Aug 2016)
Orange (Agency no longer provides update as of March 2017)
San Bernardino
Santa Clara
Santa Cruz
San Francisco
San Luis Obispo
Santa Clara
Solano
Sonoma
Sutter
Tuolumne
Ventura

Agency: California Environmental Protection Agency
Phone Number: 9164455049
Date last updated: 6/2/2017
Date last checked: 5/24/2017
Distance searched: 0.25 miles
Sites:
None Found

CHMIRS-CA
California Hazardous Material Incident Report System
Category: Emergency Release Reports
Description: This database contains California's Haz Mat spill notifications reported to the California Office of Emergency Service.
Agency: Governor's Office of Emergency Service
Phone Number: 9168458768
Date last updated: 4/11/2017
Date last checked: 3/17/2017
Distance searched: 0.063 miles
Sites:
None Found

CHWF-CA
Commercial Offsite Hazardous Waste Facilities
Category: ERS Supplemental Govt Sources
Description: This list contains Commercial Recycling Facilities that accept hazardous materials/waste such as: Batteries, Plastics, Oil, Lamps, Metals, Paint related waste etc. Some of the facilities listed handle more than one material. For more information on the facility go to the Facility website listed on the details section.
Agency: Department of Toxic Substance Control
Phone Number: 8777869427
Date last updated: 5/4/2016
Date last checked: 5/2/2016
Distance searched: 0.5 miles
Sites:
None Found

City-AST-CA
Underground Storage Tanks
Category: State/Tribal UST
Description: This database contains registered Aboveground Storage Tanks reported by city agencies. The following is contact information for the respective cities:
Alameda, Union City: 510-567-6704
Alameda, Hayward City: 510 583-4924
Alameda, San Leandro City: 510-577-3401

Agency: Local City Agencies
Phone Number: 7146698096
Date last updated: 1/13/2017
Date last checked: 1/19/2017
Distance searched: 0.25 miles
Sites:
None Found

City-CUPA-CA
Certified Unified Program Agency
Category: State/Tribal ASTM Other
Description: The records in this database come from city CUPA listings. The CUPA program provides oversight for the following statewide environmental programs: Hazardous Waste, Hazardous Materials Business Plan, California Release Prevention Program, UST, AST, Onsite Hazardous Waste Treatment. The following is contact information for the respective CUPA cities:
Alameda, Union City: (510) 675-5367
Alameda, San Leandro City: (510) 577-3401
Alameda, Hayward City: (510) 583-4924
Sonoma, Santa Rosa City: (707) 543-3537
Sonoma, Healdsburg City: (707) 431-3125
Sonoma, Petaluma City: (707) 778-4389
Sonoma, Sebastopol City: (707) 431-3125
Agency: Local City Agencies
Phone Number: 7146698096
Date last updated: 1/13/2017
Date last checked: 1/19/2017
Distance searched: 0.25 miles
Sites:
None Found

City-Others-CA
Hazardous Material Facilities
Category: State/Tribal ASTM Other
Description: This database contains facilities reported by city agencies. Respective database/listing name is mentioned in the details section of the occurrence.
Santa Clara – San Jose City: 408-535-7694
Agency: Local City Agencies
Phone Number: 7146698096
Date last updated: 12/2/2016
Date last checked: 11/18/2016
Distance searched: 0.25 miles
Sites:
None Found

City-UST-CA
City Agency Underground Storage Tanks
Category: State/Tribal UST
Description: This database contains registered Underground Storage Tanks reported by city agencies. The following is contact information for the respective cities:
Alameda County, Union City: 510-675-5358
http://www.ci.union-city.ca.us/departments/economic-community-development/environmental-programs/cupa/underground-storage-tanks
Alameda County, Berkeley: 510-981-7500
http://www.ci.berkeley.ca.us/Planning_and_Development/Toxics_Management/Underground_Storage_Tank_Program.aspx
Alameda County, Hayward: 510-583-4924
https://www.hayward-ca.gov/services/permits/underground-storage-tank-ust
Alameda County, San Leandro: 510-577-3401
http://www.sanleandro.org/depts/pw/env/envhazmat.asp
Los Angeles County, El Segundo: 310-524-2242
http://www.elsegundo.org/depts/fire/enviro/default.asp
Los Angeles County, Long Beach: 562-570-2588
http://www.longbeach.gov/fire/fire-prevention/cupa/
Los Angeles County, Torrance: 310-618-2973
http://www.torranceca.gov/TFD/12958.htm
Sonoma County, Santa Rosa: 707-543-3500 707-565-6571
http://ci.santa-rosa.ca.us/departments/fire/prevention/Pages/default.aspx
Kern County, Bakersfield: 661-326-3979
http://www.bakersfieldcity.us/gov/depts/fire_/fire_prevention.htm
Agency: Local City Agencies
Phone Number: 7146698096
Date last updated: 1/13/2017
Date last checked: 1/19/2017
Distance searched: 0.25 miles
Sites:
None Found

Coal-Ash-Dams-US
Coal Ash Contaminated Sites and Hazard Dams
Category: ERS Supplemental Govt Sources
Description: This database contains coal ash contaminated sites and hazard dams. Coal combustion waste sites have contaminated groundwater, wetlands, and rivers. The U.S. EPA rates coal ash ponds according to a National Inventory of Dams criteria that categorizes the ponds by the damage that would occur in the event of a dam failure. This database contains High Hazard and Significant Hazard dams.
Agency: EarthJustice
Phone Number: 8005846460
Date last updated: 5/25/2017
Date last checked: 5/25/2017
Distance searched: 0.5 miles
Sites:

None Found

Controls-CA

Calsites with Deed Restrictions or other Controls

Category: State/Tribal Inst/Eng Controls

Description: A deed restricted site is a property where DTSC has placed limits or requirements on future use of the property due to varying levels of cleanup possible, practical, or necessary at the site. The DTSC Site Mitigation and Brownfield's Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. Not all deed restrictions are available at this time.

Agency: California Department of Toxic Substances Control

Phone Number: 9162553745

Date last updated: 3/24/2017

Date last checked: 3/13/2017

Distance searched: 0.5 miles

Sites:

None Found

Controls-RCRA-US

Federal RCRA with Controls

Category: Federal Inst/Eng Controls

Description: This database contains RCRA facilities that have Inst/Eng Controls placed on them as identified by the EPA.

Agency: United States Environmental Protection Agency

Phone Number: 8004249346

Date last updated: 4/28/2017

Date last checked: 4/24/2017

Distance searched: 0.5 miles

Sites:

None Found

Controls-US

Controls List

Category: Federal Inst/Eng Controls

Description: This database contains a listing of Voluntary Action Program Sites with Engineering Controls and/or Institutional Controls placed on them and were identified by the Environmental Protection Agency.

Agency: United States Environmental Protection Agency

Phone Number: 8004249346

Date last updated: 4/28/2017

Date last checked: 4/28/2017

Distance searched: 0.5 miles

Sites:

None Found

CORTESE-CA
Cortese Hazardous Waste & Substances Sites List
Category: State/Tribal ASTM Other
Description: The Hazardous Waste and Substances Sites (Cortese) List. These sites are active or backlogged on remediation and may also be listed on other CA databases. The specific database type was done to comply with the California Environmental Quality Act.
Agency: California Department of Toxic Substances Control
Phone Number: 8007286942
Date last updated: 3/24/2017
Date last checked: 3/13/2017
Distance searched: 0.25 miles
Sites:
None Found

County-AST-CA
Aboveground Storage Tanks
Category: State/Tribal UST
Description: This database contains registered Underground Storage Tanks reported by county agencies. The following is contact information for the respective counties:
Alameda: 510-567-6700
Amador: 209-223-6439
Butte: 530-538-7281
Contra Costa: 925-335-3200
Del Norte: 707-465-0426
Humboldt: 707-268-2204
Imperial: 760-352-0381
Inyo: 760-878-0264
Kern: 661-862-8748
Kings: 559-584-1411
Lake: 707-263-1164
Los Angeles: 626-458-5100
Marin: 415-473-7085
Merced: 209-381-1100
Mendocino: 707-234-6625
Mono: 760-924-1830
Napa: 707-253-4471
Orange: 714-433-6000
Placer: 530-745-2350
Riverside: 951 955-8980
San Bernardino: 909-386-8400
San Joaquin: 209-468-3451
San Luis Obispo: 805-781-5544
San Mateo: 650-372-6200
Santa Clara: 408-918-3400

Santa Cruz: 831-454-2022
Solano: 707-784-6765
Sonoma: 707-565-6571
Sutter: 530-822-7400
Tuolumne: 209-533-5633
Trinity: 866-348-0028
Ventura: 805-654-2815
Yolo: 530-666-8646
Yuba: 530-749-5450
Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: 6/2/2017
Date last checked: 5/24/2017
Distance searched: 0.25 miles
Sites:
None Found

County-BI-CA
Business Inventory
Category: ERS Supplemental Govt Sources
Description: This database contains Business Inventory listing reported by county agencies of California. List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks
San Mateo: 650-372-6200
Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: 4/14/2017
Date last checked: 4/3/2017
Distance searched: 0.25 miles
Sites:
None Found

County-Hist-CA
Historic County Listings
Category: State/Tribal ASTM Other
Description: This database contains historic databases reported by county agencies.
San Diego: 619-505-6921
Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

County-LUST-CA

County Agency Leaking Underground Storage Tanks

Category: State/Tribal LUST

Description: This database contains leaking underground storage tanks reported by county agencies in California. The reporting agency has not provided the status, the case has been referred to the SWRCB, or the agency no longer updates their LUST database and has referred it to Geotracker. The following is contact information for the respective counties:
Alameda: 510-567-6702
Riverside: 951 955-8980
San Joaquin: 209-468-3451
Sonoma: 707-565-6565
Stanislaus: 209-525-6700
Ventura: 805-654-2815

Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: 3/3/2017
Date last checked: 2/20/2017
Distance searched: 0.5 miles
Sites:

Name not provided by Agency/Source MapID: 35 Listed

County-LUST-Closed-CA

Leaking Underground Storage Tanks, Closed Cases

Category: State/Tribal LUST

Description: This database contains leaking underground storage tanks reported by county agencies in California. The following is contact information for the respective counties:
Alameda: 510-567-6700
Del Norte: 707-465-0426
Humboldt: 707-268-2212
Napa: 707-253-4471
Riverside: 951 955-8980
San Francisco: 415-252-3900
San Mateo: 650-372-6200
Santa Clara: 408-918-3400
Sonoma: 707-565-6571
Orange: 714-433-6000
San Diego: 858-505-6818
San Joaquin: 209-468-3451
Solano: 707-784-3314
Stanislaus: 209-525-6700
Tulare: 559-624-7400

Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: 6/2/2017

Date last checked: 5/24/2017
Distance searched: 0.5 miles
Sites:

NEIGHBORHOOD LAUNDROMAT	MapID: 11	Closed
RD MINER COMPANY	MapID: 14	Closed
BART PROPERTY	MapID: 17	Closed
SHELL #12-9452	MapID: 34	Closed
SUMMIT MEDICAL CENTER	MapID: 37	Closed
CITY OF OAKLAND FIRE STATION #5	MapID: 38	Closed
SIMPSON, RONN	MapID: 40	Closed
WALTER BLUMERT COMPANY	MapID: 42	Closed
CALIFORNIA LINEN SUPPLY CO	MapID: 43	Closed
BLAZIC INDUSTRIAL BALANCING	MapID: 44	Closed
SHELL #13-9619	MapID: 45	Closed
LOOMIS ARMORED INC	MapID: 46	Closed
THRIFTY OIL #49	MapID: 47	Closed
KELLY AUTO PARTS	MapID: 48	Closed
FIDELITY ROOF COMPANY	MapID: 50	Closed
ARCO	MapID: 52	Closed

County-LUST-Open-CA
Leaking Underground Storage Tanks, Open Cases
Category: State/Tribal LUST
Description: This database contains leaking underground storage tanks reported by county agencies in California. The following is contact information for the respective counties:
Alameda: 510-567-6700
Del Norte: 707-465-0426
Humboldt: 707-268-2212
Napa: 707-253-4471
Riverside: 951 955-8980
San Francisco: 415-252-3900
San Mateo: 650-372-6200
Santa Clara: 408-918-3400
Sonoma: 707-565-6571
Orange: 714-433-6000
San Diego: 858-505-6818
San Joaquin: 209-468-3451
Solano: 707-784-3314
Stanislaus: 209-525-6700
Tulare: 559-624-7400
Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: 6/2/2017
Date last checked: 5/24/2017
Distance searched: 0.5 miles

Sites:

J&H AUTO REPAIR AND GAS STATION	MapID: 6	Open
GROVE STREET WASH RACK	MapID: 9	Open
NEIGHBORHOOD LAUNDROMAT	MapID: 11	Open
ARCO #04931	MapID: 13	Open
RD MINER COMPANY	MapID: 14	Open
CHEVRON #9-2029	MapID: 33	Open
SHELL #12-9452	MapID: 34	Open
CALTRANS TELEGRAPH & HWY 24	MapID: 35	Open
SAN FRANCISCO FRENCH BREAD	MapID: 36	Open
TONG PROPERTY	MapID: 41	Open
CALIFORNIA LINEN SUPPLY CO	MapID: 43	Open
SHELL #13-9619	MapID: 45	Open
THRIFTY OIL #49	MapID: 47	Open
FG GASOLINE	MapID: 49	Open
FIDELITY ROOF COMPANY	MapID: 50	Open
ARCO	MapID: 52	Open

County-Others-CA
Various County Files
Category: State/Tribal ASTM Other
Description: This database contains facilities reported by county agencies. Respective database/listing name is mentioned in the details section of the occurrence.
Sacramento: 916-875-8484
San Joaquin: 209-468-3420
Ventura: 805-654-2815
Solano: 707-784-6765
Napa: 707-253-4471
Alameda: 510-567-6700
Placer: 530-745-2350
Contra Costa: 925-313-6636
San Bernardino: 909-386-8401
Riverside: 951-358-7018
Orange: 714-433-6000
Los Angeles: 626-458-5100
San Diego: 858-874-7000
Shasta: 530-225-5787
Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: 6/2/2017
Date last checked: 5/23/2017
Distance searched: 0.25 miles
Sites:
None Found

County-SLIC-Closed-CA
County SLIC Sites
Category: Emergency Release Reports
Description: This database contains SLIC sites reported by county agencies. The following is contact information for the respective counties:
Alameda: 510-567-6700
Solano: 707-784-6765
Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: 4/14/2017
Date last checked: 4/3/2017
Distance searched: 0.25 miles
Sites:
None Found

County-SLIC-Open-CA
County SLIC Sites
Category: Emergency Release Reports
Description: This database contains SLIC sites reported by county agencies. The following is contact information for the respective counties:
Alameda: 510-567-6700
Solano: 707-784-6765
Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: 4/14/2017
Date last checked: 4/3/2017
Distance searched: 0.5 miles
Sites:
None Found

County-SML-CA
County Site Mitigation Unit List
Category: State/Tribal ASTM Other
Description: This database contains sites listed by the Site Mitigation Unit program at various county agencies. The following is contact information for the respective counties:
Santa Barbara: 805-346-8359
Santa Cruz: 831-454-2761
San Joaquin: 209-468-3451
Solano: 707-784-6765
Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: 1/13/2017
Date last checked: 1/19/2017
Distance searched: 0.5 miles

Sites:
None Found

<u>**County-SWF-CA**</u>
County Solid Waste Facilities
Category: State/Tribal Landfill/Solid Waste
Description: This database contains a listing of solid waste facilities reported by county agencies. The following is the contact information for the respective counties:
Alameda: 510-567-6790
Los Angeles: 888-253-2652
Napa: 707-253-4471
San Diego: 858-694-2801
Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: 1/13/2017
Date last checked: 1/19/2017
Distance searched: 0.5 miles
Sites:
None Found

<u>**County-UST-CA**</u>
County Agency Underground Storage Tanks
Category: State/Tribal UST
Description: This database contains registered Underground Storage Tanks reported by county agencies. The following is contact information for the respective counties:
Alameda: 510-567-6702
Amador: 209-223-6439
Butte: 530-538-7281
Contra Costa: 925-335-3200
Del Norte: 707-465-0426
Humboldt: 707-445-6215
Imperial: 760-352-0381
Inyo: 760-878-0264
Kern: 661-862-8740
Kings: 559-584-1411
Lake: 707-263-1164
Los Angeles: 626-458-3517
Marin: 415-473-7085
Merced: 209-381-1100
Mendocino: 707-234-6625
Mono: 760-924-1830
Napa: 707-253-4471
Orange: 714-433-6000
Placer: 530-745-2300
Riverside: 951 955-8980

San Bernardino: 909-387-5950
San Diego: 858-505-6880
San Joaquin: 209-468-3451
San Luis Obispo: 805-781-5544
San Mateo: 650-372-6200
Santa Clara: 408-918-3400
Santa Cruz: 831-454-2022
Solano: 707-784-6765
Sonoma: 707-565-6565
Sutter: 530-822-7400
Tuolumne: 209-533-5633
Trinity: 866-352-0381
Ventura: 805-654-2815
Yolo: 530-666-8646
Yuba: 530-749-5450
Agency: Various County Agencies
Phone Number: 7146698096
Date last updated: 6/2/2017
Date last checked: 5/24/2017
Distance searched: 0.25 miles
Sites:

Westco Gas Food	MapID: 13	Listed

<u>CUPA-CA</u>
Certified Unified Program Agency
Category: State/Tribal ASTM Other
Description: The records in this database come from county CUPA listings. The CUPA program provides oversight for the following statewide environmental programs: Hazardous Waste, Hazardous Materials Business Plan, California Release Prevention Program, UST, AST, Onsite Hazardous Waste Treatment. The following is contact information for the respective CUPA counties:
Alpine: 530-694-2235
Amador: 209-223-6439
Butte: 530-538-7281
Calaveras: 209-754-6399
Colusa: 530-458-0395
Del Norte: 707-465-0426
El Dorado: 530-621-5300
Fresno: 559-600-3271
Humboldt: 707-445-6215
Imperial: 760-352-0381
Inyo: 760-878-0238
King: 559-584-1411
Lake: 707-263-1164
Madera: 559-675-7823
Marin: 415-473-7085

Mendocino: 707-234-6625
Merced: 209-381-1100
Mono: 760-924-1830
Monterey: 831-755-4511
Napa: 707-253-4471
Nevada: 530-265-7134
San Bernardino: 909-386-8401
San Diego: 858-505-6880
San Luis Obispo: 805-781-5544
Santa Clara: 408-918-3400
Santa Cruz: 831-454-2022
Shasta: 530-225-5787
Solano: 707-784-3314
Sonoma: 707-565-1152
Sutter: 530-822-7400
Trinity: 866-348-0028
Tuolumne: 209-533-5633
Ventura: 805-654-2823
Yuba: 530-749-5450
Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: 6/2/2017
Date last checked: 5/24/2017
Distance searched: 0.25 miles
Sites:
None Found

Dams-CA
California Dams
Category: ERS Supplemental Govt Sources
Description: This database contains dam locations in California. The data is provided by the University of Arizona Institutional Repository and has not been updated since 1996.
Agency: United States Environmental Protection Agency
Phone Number: 2022607301
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

DCF2-CA
Dry Cleaners
Category: ERS Supplemental Govt Sources
Description: This database contains dry cleaner locations reported by Reference USA GOV.
Agency: Reference USA GOV

Phone Number: 8005555211
Date last updated: 5/4/2016
Date last checked: 4/29/2016
Distance searched: 0.25 miles
Sites:

G & J Whirl & Twirl Laundry Mt	MapID: 11	Listed
Uni Clean	MapID: 12	Listed
Yupi Building Svc	MapID: 20	Listed

Debris-US
Debris Sites
Category: Federal Solid Waste
Description: This database contains the Torres Martinez Reservation Illegal dump sites reported by the United States Environmental Protection Agency.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

Deed-CA
Deed Restrictions/Land Use Restrictions
Category: State/Tribal Inst/Eng Controls
Description: This database includes sites as reported by the State Water Resource Control Board to have a deed restriction/land use restriction and or covenant.
Agency: State Water Resource Control Board
Phone Number: 9163415455
Date last updated: 3/29/2017
Date last checked: 3/22/2017
Distance searched: 0.5 miles
Sites:
None Found

Delisted-NPL-US
Delisted NPL Sites
Category: Federal Delisted NPL
Description: The Superfund Enterprise Management System (SEMS). The reports produced by SEMS contain information on the assessment and remediation of current hazardous waste sites. This database contains a listing of Delisted NPL sites. These are facilities that have been removed from the NPL list. The EPA may delete a final NPL site if it determines that no further response is required to protect human health or the environment.

Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 5/22/2017
Date last checked: 5/15/2017
Distance searched: 1 mile
Sites:
None Found

DPR-CA
Pesticide Regulation Licenses
Category: ERS Supplemental Govt Sources
Description: This database contains businesses that have been issued a Department of Regulation Pesticide license as reported by the California Department of Pesticide Regulation.
Agency: California Department of Pesticide Regulation
Phone Number: 9164454038
Date last updated: 5/18/2016
Date last checked: 5/4/2016
Distance searched: 0.25 miles
Sites:
None Found

DryCleaners-CA
Dry Cleaner Facilities
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of drycleaners reported by the California Department of Toxic Substances Control.
Agency: California Department of Toxic Substances Control
Phone Number: 8007286942
Date last updated: 4/29/2016
Date last checked: 4/19/2016
Distance searched: 0.25 miles
Sites:

1X NEIGHBORHOOD LAUNDRYMAT	MapID: 11	Listed

EGRID-US
Emissions & Generation Resource Facilities
Category: ERS Supplemental Govt Sources
Description: Emissions & Generation Resource Integrated Database (eGRID) is a comprehensive source of data on the environmental characteristics of almost all electric power generated in the United States.
Agency: United States Environmental Protection Agency
Phone Number: 2023439340
Date last updated: 5/22/2017
Date last checked: 5/11/2017

Distance searched: 0.5 miles
Sites:
None Found

ENF-CA
Enforcement Actions Data
Category: State/Tribal ASTM Other
Description: This database contains facilities that have been assigned an Enforcement Action by the California State Water Resources Control Board.
Agency: California State Water Resources Control Board
Phone Number: 9163415808
Date last updated: 3/16/2017
Date last checked: 3/8/2017
Distance searched: 0.25 miles
Sites:

J&H AUTO REPAIR AND GAS STATION	MapID: 6	Listed
GROVE STREET WASH RACK	MapID: 9	Listed
ARCO #04931	MapID: 13	Listed
RD MINER COMPANY	MapID: 14	Listed
REGAL #120 / EAST BAY SURGERY CENTER	MapID: 28	Listed
CHP - OAKLAND	MapID: 31	Listed

ENF-SMARTS-CA
Stormwater Enforcement Actions
Category: State/Tribal ASTM Other
Description: This data set lists Active and historical enforcement actions that are stored in the Storm Water Multiple Application & Report Tracking System (SMARTS). Enforcement actions are generally issued in response to one or more instances of non-compliance (violations) of a base regulatory measure; enforcement actions can be monetary or non-monetary.
Agency: State Water Resource Control Board
Phone Number: 8667924977
Date last updated: 12/12/2016
Date last checked: 3/13/2017
Distance searched: 0.25 miles
Sites:
None Found

ENF-Wastewater-CA
Wastewater Enforcement Actions
Category: State/Tribal ASTM Other

Description: This data set lists active and historical enforcement actions records that are stored in the California Integrated Water Quality System (CIWQS). Enforcement actions are generally issued in response to one or more instances of non-compliance (violations) of a base regulatory measure. Enforcement actions can be monetary or non-monetary.
Agency: State Water Resource Control Board
Phone Number: 8667924977
Date last updated: 8/12/2016
Date last checked: 3/13/2017
Distance searched: 0.25 miles
Sites:
None Found

<u>EPA-Watch-List-US</u>
EPA Watch List
Category: ERS Supplemental Govt Sources
Description: This database contains facilities listed on the Clean Air Act, Clean Water Act, and RCRA Watch List. These reports are now considered archived and will no longer be updated. Being on the Watch List may not mean that the facility has actually violated the law only that an evaluation or investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. The Watch List does not identify which alleged violations of environmental laws may pose the greatest risk to public health or the environment. It is an automated report based on data from the Air Facility System
(AFS), which is used by federal, state and local agencies to track environmental enforcement and compliance information.
Agency: United States Environmental Protection Agency
Phone Number: 2025661667
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

<u>ERNS-US</u>
Emergency Response Notification System
Category: Federal ERNS
Description: The primary function of the National Response Center is to serve as the sole national point of contact for reporting all oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories. This database contains a listing of discharge locations.
Agency: National Response Center
Phone Number: 8004248802
Date last updated: 3/9/2017
Date last checked: 4/21/2017
Distance searched: 0.063 miles
Sites:

None Found

FA-HW-CA

Financial Assurance, Hazardous Waste

Category: ERS Supplemental Govt Sources

Description: This database contains Financial Assurance facilities under the Hazardous Waste program reported by the California Department of Toxic Substances Control.

Agency: California Department of Toxic Substances Control

Phone Number: 9163233400

Date last updated: 11/23/2016

Date last checked: 11/16/2016

Distance searched: 0.063 miles

Sites:

None Found

FA-HW-US

Financial Assurance, Hazardous Waste

Category: ERS Supplemental Govt Sources

Description: This database contains Financial Assurance facilities listed under the Hazardous Waste program as reported by the United States Environmental Protection Agency.

Agency: United States Environmental Protection Agency

Phone Number: 8004249346

Date last updated: 1/9/2017

Date last checked: 12/15/2016

Distance searched: 0.063 miles

Sites:

None Found

FA-SWF-CA

Financial Assurance, Solid Waste Facilities

Category: ERS Supplemental Govt Sources

Description: This database contains Financial Assurance facilities under the Solid Waste program reported by the California Department of Resources Recycling and Recovery.

Agency: California Department of Resources Recycling and Recovery

Phone Number: 9163416320

Date last updated: 8/22/2016

Date last checked: 7/25/2016

Distance searched: 0.063 miles

Sites:

None Found

FEMA-UST-US

FEMA Underground Storage Tanks

Category: Federal UST
Description: This database contains Federal Emergency Management Agency (FEMA) owned and operated underground storage tanks. The report was published in 2006.
Agency: United States Environmental Protection Agency
Phone Number: 7036037165
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

FRS-US
Facility Registry Index (FINDS)
Category: ERS Supplemental Govt Sources
Description: The Facility Registry System (FRS) is a centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest.
Agency: United States Environmental Protection Agency
Phone Number: 2022720167
Date last updated: 8/3/2015
Date last checked: 1/10/2017
Distance searched: 0.063 miles
Sites:
None Found

FTTS-ENF-US
FIFRA/TSCA Tracking System (FTTS) Enforcement Actions
Category: Federal ASTM Other
Description: The FIFRA/TSCA Tracking System (FTTS) is a regional system used to track compliance activities such as inspections, case review, enforcement actions taken, samples collected, and pesticide grants and cooperative agreement information. The compliance monitoring and enforcement activities are tracked from the time an inspector conducts (or schedules) an inspection until the time the case is closed or the enforcement action is settled. Specific legal citations include, but are not limited to: Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), Toxic Substances Control Act (TSCA), and Emergency Planning and Community Right-to-Know Act (EPCRA).
Agency: United States Environmental Protection Agency
Phone Number: 2025642501
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

FTTS-INSP-US
FIFRA/TSCA Tracking System (FTTS) Inspections

Category: ERS Supplemental Govt Sources
Description: The FIFRA/TSCA Tracking System (FTTS) is a regional system used to track compliance activities such as inspections, case review, enforcement actions taken, samples collected, and pesticide grants and cooperative agreement information. The compliance monitoring and enforcement activities are tracked from the time an inspector conducts (or schedules) an inspection until the time the case is closed or the enforcement action is settled. Specific legal citations include, but are not limited to: Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), Toxic Substances Control Act (TSCA), and Emergency Planning and Community Right-to-Know Act (EPCRA).
Agency: United States Environmental Protection Agency
Phone Number: 2025642501
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

FUDS-US
Formerly Used Defense Sites
Category: ERS Supplemental Govt Sources
Description: The Department of Defense (DoD) is responsible for environmental restoration of properties that were formerly owned by, leased to or otherwise possessed by the United States and under the jurisdiction of the Secretary of Defense. Such properties are known as Formerly Used Defense Sites (FUDS). The Army is the executive agent for the program and the U.S. Army Corps of Engineers manages and directs the program's administration. The scope and magnitude of the FUDS program are significant, with more than 9,900 properties identified for potential inclusion in the program. Information about the origin and extent of contamination, land transfer issues, past and present property ownership, and program policies must be evaluated before DoD considers a property eligible for Defense Environment Restoration Account (DERA) funding under the FUDS program. Environmental cleanup procedures at FUDS are similar to those at active DoD installations.
Agency: Department of Defense
Phone Number: 2025284285
Date last updated: 1/16/2017
Date last checked: 1/9/2017
Distance searched: 1 mile
Sites:
None Found

FUSRAP-US
Formerly Utilized Sites Remedial Action Program Sites
Category: ERS Supplemental Govt Sources
Description: The Formerly Utilized Sites Remedial Action Program (FUSRAP) was initiated in 1974 to identify, investigate and clean up or control sites through the United States that had became contaminated from the nation’s early atomic weapons and energy programs during the 1940s, 1950s and 1960s. Activities were performed by the Manhattan Engineer District or under the Atomic Energy Commission, prior to the Department of Energy being formed.

Agency: Department of Energy, Office of Legacy Management
Phone Number: 2025863559
Date last updated: 3/8/2017
Date last checked: 2/23/2017
Distance searched: 0.25 miles
Sites:
None Found

Haulers-CA
Registered Waste Tire Haulers Listing
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of listing of registered waste tire haulers.
Agency: California Department of Resources Recycling and Recovery
Phone Number: 9163416422
Date last updated: 4/21/2016
Date last checked: 4/14/2016
Distance searched: 0.063 miles
Sites:

Alex and Angel's Tires	MapID: 2	Listed

HazWaste-CA
Hazardous Waste Sites
Category: State/Tribal ASTM Other
Description: This database contains a listing of Hazardous Waste Sites tracked by DTSC. The majority of the sites are no longer in operation.
Agency: California Department of Toxic Substance Control
Phone Number: 9163233400
Date last updated: 3/16/2017
Date last checked: 3/8/2017
Distance searched: 0.25 miles
Sites:
None Found

Hist-AFS2-US
Air Facility System for Clean Air Act stationary sources
Category: ERS Supplemental Govt Sources
Description: AFS contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners (automobiles and other mobile air pollution sources are tracked by a different AIRS subsystem (AMS).
Agency: United States Environmental Protection Agency
Phone Number: 2025645962
Date last updated: Historical Database

Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

<u>Hist-AFS-US</u>
Air Facility System for Clean Air Act stationary sources
Category: ERS Supplemental Govt Sources
Description: AFS contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners (automobiles and other mobile air pollution sources are tracked by a different AIRS subsystem (AMS).
Agency: United States Environmental Protection Agency
Phone Number: 2025645962
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

<u>Hist-Agriculture</u>
Ranches/Farms, Livestock/Agriculture
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites such as: Ranches, Farms, Livestock, and/or Agriculture.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

<u>Hist-AST-CA</u>
Historical Aboveground Storage Tanks
Category: ERS Supplemental Govt Sources
Description: This database contains aboveground storage tanks. This is a historical database compiled by the State Water Resource Control Board in 1998.
Agency: State Water Resource Controls Board
Phone Number: 9162274364
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles

Sites:
None Found

Hist-Auto Dealers

Auto and Truck Dealers
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes Auto Dealers.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:

It's About Cars	MapID: 4	Listed
Its About Cars	MapID: 4	Listed
DISCOUNT AUTO CTR	MapID: 4	Listed

Hist-Auto Repair

Automotive Repair
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites such as: Auto Repair and Tire Dealers.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:

QUALITY TUNE-UP	MapID: 1	Listed
INSTA LUBE	MapID: 10	Listed
YEM HONDA HYUNDAI AUTO SVC	MapID: 16	Listed
Big O Tires	MapID: 21	Listed
BIG O TIRES	MapID: 21	Listed
AL MANNING BODY SHOP	MapID: 27	Listed

Hist-AWS-CA

Annual Workplan Sites
Category: ERS Supplemental Govt Sources

Description: This database is provided by the Cal. Environmental Protection Agency, Dept. of Toxic Substances Control. Annual Work Plan (AWP) sites and sites where Preliminary Endangerment Assessments are a high priority are included.
Agency: California Environmental Protection Agency, Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-CA
Previously Listed California Sites
Category: ERS Supplemental Govt Sources
Description: ERS has compiled records that have been previously listed in other agency databases. When ERS updates an agency database, if there is a record that was in the older version but the record is not found in the newer version, it is put into this database. The site may have been completely removed, or there was a significant change in the record such as Name, ID, or Address. The information from the old listing is preserved in this database along with which database it was originally in, It is also possible that it was moved from one database to another such as a LUST Open site receiving closure and now being listed in the LUST Closed database.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-CalFID-CA
Facility Inventory Database
Category: ERS Supplemental Govt Sources
Description: This database lists facilities included in the Facility Inventory Database as reported by the Environmental Protection Agency, Department of Toxic Substances Control in 1998.
Agency: California Department of Toxic and Substance Control.
Phone Number: 9163233400
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:

QUALITY TUNE UP #35	MapID: 1	Listed
HAMMOND SERVICE	MapID: 6	Listed
INSTA LUBE	MapID: 10	Listed
1X NEIGHBORHOOD LAUNDRYMAT	MapID: 11	Listed
1X JOHNNYS AUTOMOTIVE	MapID: 15	Listed

TUNE DYNAMICS	MapID: 18	Listed
BEST AUTO REPAIR	MapID: 18	Listed
BIG O TIRE	MapID: 21	Listed
1X 544 37TH ST.	MapID: 24	Listed
1X SACRED HEART	MapID: 25	Listed
1X OAKLAND TELEGRAPH AVE LTD PARTNERSHIP	MapID: 26	Listed
REGAL STATION #102	MapID: 28	Listed
EAST BAY SURGERY CENTER LP	MapID: 28	Listed
1X JOSEPH DI GIORGIO & SONS INC	MapID: 28	Listed
LITHOGRAPH REPRODUCTION INC	MapID: 30	Listed
OAKLAND CHP	MapID: 31	Listed

Hist-CALSITES-CA
Calsites Database
Category: ERS Supplemental Govt Sources
Description: The CalSites database includes both known and potential sites. Two- thirds of these sites have been classified, based on available information, as needing "No Further Action" (NFA) by the Department of Toxic Substances Control. The remaining sites are in various stages of review and remediation to determine if a problem exists at the site. Several hundred sites have been remediated and are considered certified. Some of these sites may be in long term operation and maintenance.
Agency: Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-CERCLIS-NFRAP-US
CERCLIS-NFRAP
Category: ERS Supplemental Govt Sources
Description: This database contains CERCLIS sites that are classified as No Further Action Remedial Action Planned as reported in 1998.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-CERCLIS-US
CERCLIS Sites

Category: ERS Supplemental Govt Sources
Description: This database contains CERCLIS sites as reported in 1998.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Chemical Manufacturing
Manufacturing and Distribution of Chemicals, Gases, and/or Solids
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites such as: Manufacturing and Distribution of Chemicals, Gases, and/or Solids.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Chemical-Storage
Chemical/Hazardous Use Storage
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes chemical storage facilities.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-City-UST-CA
Underground Storage Tanks
Category: ERS Supplemental Govt Sources
Description: This database contains UST listings reported by City Agencies in 1998. The corresponding agency name and database name will be listed in the details section of the occurrence.

Agency: Local City Agencies
Phone Number: 7146698096
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:

HAMMOND SERVICE	MapID: 6	Listed

Hist-Cleaners

Laundry, Cleaners, and Dry Cleaning Services
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites, such as: Laundry, Cleaners, and Dry Cleaning Services.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:

Uniclean	MapID: 12	Listed
Yupi Building Services	MapID: 20	Listed

Hist-Controls-CA

Previous Restricted Use Sites
Category: State/Tribal Inst/Eng Controls
Description: This database contains a listing of previous (historical) restricted use sites where DTSC placed limits or requirements on future use of the property.
Agency: Department of Toxic Substances Control
Phone Number: 9162553745
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

Hist-Convenience

Convenience Store with Possible Gas
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes convenience stores with possible gas use.

Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Cort-CA
Hist Cortese list
Category: State/Tribal ASTM Other
Description: This database contains historical cortese listings reported by the California State Water Resource Control Board.
Agency: California State Water Resource Control Board.
Phone Number: 8007286942
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Deed-CA
Deed Restriction Properties
Category: ERS Supplemental Govt Sources
Description: These are voluntary deed restriction agreements with owners of property who propose building residences, schools, hospitals, or day care centers on property that is "on or within 2,000 feet of a significant disposal of hazardous waste".
Agency: Department of Health Services-Land Use and Air Assessment
Phone Number: 9163233376
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Disposal-Recycle
Hazardous Disposal/Recycle and Dumps/Waste
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes hazardous disposal facilities.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database

Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

<u>Hist-DTG-CA</u>
Depth to Groundwater
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of Depth to Groundwater reported by the Los Angeles region State Water Resources Control Board.
Agency: California State Water Resources Control Board
Phone Number: 2135766600
Date last updated: 2/9/2016
Date last checked: 1/21/2016
Distance searched: 0.25 miles
Sites:
None Found

<u>Hist-Dumps-US</u>
Dumps Inventory of 1985
Category: Federal Solid Waste
Description: This database contains Dumps as reported on the Inventory of Open Dumps from 1985. This report was published by the Office of Solid Waste, EPA.
Agency: Environmental Protection Agency
Phone Number: 2025660200
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

<u>Hist-ERNS-US</u>
Emergency Response Notification System (ERNS)
Category: ERS Supplemental Govt Sources
Description: The Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the US Coast Guard, the National Response Center and the Department of transportation. A search of the database records for the period October 1986 through January 1998 revealed information regarding reported spills of oil or hazardous substances in the stated area.
Agency: National Response Center
Phone Number: 8004248802
Date last updated: Historical Database
Date last checked: N/A

Distance searched: 0.25 miles
Sites:

UNK	MapID: 3	Listed
UNKNOWN	MapID: 7	Listed
UNKNOWN	MapID: 7	Listed
M&J TRANSMISSION	MapID: 29	Listed

Hist-FIFRA-US

Case Administration Data from National Compliance Database (Federal Insecticide, Fungicide, and Rodenticide Act)
Category: ERS Supplemental Govt Sources
Description: This database is no longer maintained by EPA since 2006. The system tracked compliance monitoring and enforcement activities from the time an inspector conducts an inspection until the inspector closes the case or settles any resulting enforcement action(s). EPA now has the ICS database to track this information.
Agency: U.S. Environmental Protection Agency
Phone Number: 2025642501
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-FINDS-US

Facility Index System
Category: ERS Supplemental Govt Sources
Description: The Facility Index System (FINDS) is a compilation of any property or site which the EPA has investigated, reviewed or been made aware of in connection with its various regulatory programs. The data is from 1998.
Agency: United States Environmental Protection Agency
Phone Number: 2022720167
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Food-Processors

Food Processing Manufacturers
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes food processors.

Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Gun-Ranges
Gun Ranges/Clubs
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes gun ranges/clubs.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-HWS-CA
Cortese List-Hazardous Waste Substance Site List
Category: ERS Supplemental Govt Sources
Description: This database (CORTESE) is based on input from the following: (1)CALSITES-Department of
Toxic Substances Control, Abandoned Sites Program Information Systems; (2)SARA Title III Section III Toxic Chemicals Release Inventory for 1987, 1988, 1989, and 1990; (3)FINDS; (4)HWIS-Department of Toxic Substances Control, Hazardous Waste Information System. Vista has not included one time generator facilities from Cortese in our database.; (5)SWRCB-State Water Resources Control Board;(6)SWIS-Integrated Waste Management Control Board (solid waste facilities); (7)AGT25-Air Resources
Board, dischargers of greater than 25 tons of criteria pollutants to the air; (8)A1025-Air Resources Board, dischargers of greater than 10 and less than 25 tons of criteria pollutants to the air;(9)LTANK-SWRCB Leaking Underground Storage Tanks; (10)UTANK-SWRCB Underground tanks reported to the SWEEPS systems; (11)IUR-Inventory Update Rule (Chemical Manufacturers);
(12)WB-LF- Waste Board - Leaking Facility, site has known migration; (13)WDSE-Waste Discharge System - Enforcement Action; (14)DTSCD-Department of Toxic Substance Control Docket.
Agency: Office of Environmental Protection, Office of Hazardous Material
Phone Number: 9164456532
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:

NEIGHBORHOOD LAUNDROMAT	MapID: 11 Listed
ARCO	MapID: 13 Listed
CALIFORNIA HIGHWAY PATROL	MapID: 31 Listed

Hist-LUSTIS-CA
Lust Information System (LUSTIS)
Category: ERS Supplemental Govt Sources
Description: This database contains sites reported on the Lust Information System in 1998.
Agency: California Environmental Protection Agency
Phone Number: 9164456532
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:

GROVE STREET WASH RACK	MapID: 9 Listed
NEIGHBORHOOD LAUNDROMAT	MapID: 11 Listed
ARCO	MapID: 13 Listed
RD MINER COMPANY	MapID: 14 Listed
BART	MapID: 17 Listed
CALIFORNIA HIGHWAY PATROL	MapID: 31 Listed

Hist-Machine Shop
Machine Shops, Welding, Machine Repair
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites, such as: Machine shops, welding shops and machine repair.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Manufacturing
Historic Sources US: Manufacturing
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes manufacturing sites.

Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Metal Plating
Metal Plating
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes metal plating sites.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Mining
Mining Operations
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes Mining facilities.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

HIST-MLTS-US
Material Licensing Tracking System
Category: ERS Supplemental Govt Sources
Description: This database contains facilities listed on the Material Licensing Tracking system that possess or use radioactive materials as reported by the U.S. Nuclear Regulatory Commission. In late 2012, the agency changed from MLTS to WBL system and no longer keep track of certain information that was available in the old MLTS system.
Agency: U.S. Nuclear Regulatory Commission

Phone Number: 3014157169
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Mortuaries
Crematories/Mortuaries
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites such as: Mortuaries and Crematories.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

HIST-MTBE-CA
Historical Sites With MTBE (Methyl Tertiary‑Butyl Ether) Contamination
Category: ERS Supplemental Govt Sources
Description: This database contains Historical Sites With MTBE (Methyl Tertiary‑Butyl Ether) Contamination reported by the California Regional Water Quality Control Boards.
Agency: California Environmental Protection Agency-California Regional Water Quality Control Boards
Phone Number: 9163415254
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:

NEIGHBORHOOD LAUNDROMAT	MapID: 11	Listed
ARCO # 04931	MapID: 13	Listed

Hist-NPL-US
National Priority List
Category: ERS Supplemental Govt Sources
Description: This database contains NPL sites as reported in 1998.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A

Distance searched: 0.25 miles
Sites:
None Found

<u>Hist-Oil-Gas</u>
Oil and Gas Well Related Facilities
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes Oil and Gas Well related facilities.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

<u>Hist-OilGas-Refiners</u>
Oil/Gas Refiners/Manufacturers/Plants
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes Oil and Gas Refiners and/or plants.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

<u>Hist-Orange-County-LF-CA</u>
Orange County Landfills
Category: ERS Supplemental Govt Sources
Description: This database contains county landfills reported in 1998.
Agency: Orange County Health Care Agency
Phone Number: 7148343446
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Historical-CA
Historical Sites
Category: ERS Supplemental Govt Sources
Description: Identifies sites from an older database where no site type was identified. Most of these sites have a status of Referred or No Further Action. DTSC is working to clean-up this data by identifying an appropriate site type for each "Historic" site.
Agency: California Department of Toxic Substance Control
Phone Number: 8777869427
Date last updated: 4/7/2017
Date last checked: 3/28/2017
Distance searched: 0.5 miles
Sites:
None Found

Hist-Other
Environmental Facilities
Category: ERS Exclusive Historic Sources
Description: City Directory data of listings that fall under the categories of Lumber, Machinery dealers, and machnists.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Paint-Stores
Paint Stores
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes paint stores.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Petroleum
Petroleum Refining/ Manufacturing/ Chemicals

Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites such as: Petroleum Refining, Manufacturing, and/or processing Chemicals.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Post-Offices
Post Offices
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes post offices.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Printers
Printers and Publishers
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites such as: Printers and Publishers.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
LEONG GRAPHICS MapID: 5 Listed

Hist-Prop65-CA
Historical Prop 65 Sites

Category: ERS Supplemental Govt Sources
Description: This database contains historical sites that have a Prop 65 form on their file as reported by the Ventura County Environmental Health.
Agency: Ventura County Environmental Health
Phone Number: 8056542815
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

HIST-R4-CA
Historical sites
Category: State/Tribal ASTM Other
Description: This database contains a listing of Historical sites in Los Angeles Region reported by Los Angeles Regional Water Quality Control Board.
Agency: Los Angeles Regional Water Quality Control Board
Phone Number: 2135766725
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-RCRIS-US
EPA's Resource Conservation and Recovery Act
Category: ERS Supplemental Govt Sources
Description: This database contains RCRA facilities as reported by the EPA in 1998. It includes, small, large, and conditionally exempt generators.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Regional-LUST-CA
Leaking Underground Storage Tanks
Category: ERS Supplemental Govt Sources
Description: This database contains LUST listings reported by Regional Districts of the Water Quality Control Board in 1998. The corresponding agency name and database name will be listed in the details section of the occurrence.
Agency: Regional Water Quality Control Board

Phone Number: 9163415808
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Regional-Other-CA
Toxic Lists, Site Mitigation, and Groundwater Cleanup Program
Category: ERS Supplemental Govt Sources
Description: This database contains environmental listings reported by County Offices in 1998. The corresponding agency name and database name will be listed in the details section of the occurrence.
Agency: Local County Agencies
Phone Number: 7146698096
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Regional-SLIC-CA
List of Spills and Leak Sites
Category: ERS Supplemental Govt Sources
Description: This database contains SLIC listings reported by Regional Districts of the Water Quality Control Board in 1998. The corresponding agency name and database name will be listed in the details section of the occurrence.
Agency: Regional Water Quality Control Board
Phone Number: 9163415808
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:

GROVE STREET WASH RACK	MapID: 9	Listed
NEIGHBORHOOD LAUNDROMAT	MapID: 11	Listed
ARCO	MapID: 13	Listed
RD MINER COMPANY	MapID: 14	Listed
BART	MapID: 17	Listed
CALIFORNIA HIGHWAY PATROL	MapID: 31	Listed

Hist-Regional-Spills-CA
Industrial Cleanup Sites
Category: ERS Supplemental Govt Sources

Description: This database contains the industrial cleanup sites reported in 1998 by the Orange County Health Care Agency.
Agency: Orange County Health Care Agency
Phone Number: 7148343446
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Regional-SWLF-CA
County Landfills and Transfer Stations
Category: ERS Supplemental Govt Sources
Description: This database contains county landfills and transfer stations as reported in 1998 by the Public Health Investigations, Hazardous Material Control Program.
Agency: Public Health Investigations, Hazardous Material Control Program
Phone Number: 2138814151
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Regional-UST-CA
Underground Storage Tanks
Category: ERS Supplemental Govt Sources
Description: This database contains UST listings reported by Regional Districts of the Water Quality Control Board in 1998. The corresponding agency name and database name will be listed in the details section of the occurrence.
Agency: Regional Water Quality Control Board
Phone Number: 9163415808
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:

HAMMOND SERVICE	MapID: 6	Listed
GROVE STREET WASH RACK	MapID: 9	Listed
ARCO STATION #04931	MapID: 13	Listed
FRANK'S AUTO REPAIR	MapID: 17	Listed
APOSTOLIC CHURCH OF DELIVERY	MapID: 23	Listed
APARTMENT BUILDING	MapID: 24	Listed
REGAL STATION #102	MapID: 28	Listed
CALIFORNIA HIGHWAY PATROL	MapID: 31	Listed

Hist-Rental
Rental Equipment & Yards
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes rental equipment facilities and yards.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-RV-Dealers
Trailer and Recreational Vehicle Dealers
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites such as: Trailer and Recreational Vehicle Dealers.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Salvage
Vehicle Salvage Yards or Wreckers
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites such as: Vehicle Salvage Yards or Wreckers.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-SCL-CA

California Cerclis Sites
Category: ERS Supplemental Govt Sources
Description: This database contains California CERCLIS sites as reported in 1998.
Agency: U.S. Environmental Protection Agency, Region 9
Phone Number: 4159478000
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Service Stations
Service Stations/Vehicle Fueling
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites such as: Service Stations/Vehicle Fueling Stations.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:

K&H City Gas Beacon	MapID: 13	Listed
GAS CITY	MapID: 13	Listed
ARCO STATION #04931	MapID: 13	Listed
MANUS ARCO	MapID: 13	Listed
Manu's Arco	MapID: 13	Listed
CALIFORNIA HIGHWAY PATROL	MapID: 31	Listed

Hist-Steel-Metals
Steel Mills/Manufacturers/Foundries/Smelters
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes steel metal manufacturers, foundries, and smelters.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-SWF-CA
Previous listed Solid Waste Facilities
Category: State/Tribal Landfill/Solid Waste
Description: This database contains a listing of previous listed active sites that may no longer be active as reported by the California Department of Toxic and Substance Control.
Agency: California Department of Toxic and Substance Control
Phone Number: 9163233400
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

Hist-SWIS-CA
Solid Waste Information System (SWIS)
Category: ERS Supplemental Govt Sources
Description: The California Solid Waste Information System (SWIS) database consists solid waste disposal facilities and transfer stations. This database is from 1998.
Agency: Integrated Waste Management Board
Phone Number: 9162554021
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Textile
Textile Mills/Manufacturers
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes textile mill manufacturers.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-ToxicPits-CA
Toxic Pits Cleanup Facilities
Category: ERS Supplemental Govt Sources

Description: This database contains toxic pit sites reported in 1998.
Agency: Water Quality Control Board, Division of Loans Grants
Phone Number: 9162274396
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

<u>Hist-Transportation</u>
Transportation Facilities
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites such as: Airports and other facilities that may handle hazardous materials and petroleum products.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

<u>Hist-TRIS-US</u>
Toxic Release Inventory System
Category: ERS Supplemental Govt Sources
Description: This database contains facilities who report to the Toxic Release Inventory System as required by the EPA. This reporting is from 1998.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

<u>Hist-Trucking</u>
Trucking, Shipping, Delivery, and/or Storage
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes sites such as: Trucking, Shipping, and/or Delivery Storage.
Agency: Environmental Record Search (ERS)

Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-US
Previously Listed Federal Sites
Category: ERS Supplemental Govt Sources
Description: ERS has compiled records that have been previously listed in other agency databases. When ERS updates an agency database, if there is a record that was in the older version but the record is not found in the newer version, it is put into this database. The site may have been completely removed, or there was a significant change in the record such as Name, ID, or Address. The information from the old listing is preserved in this database along with which database it was originally in, It is also possible that it was moved from one database to another such as a LUST Open site receiving closure and now being listed in the LUST Closed database.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-US-EC
Engineering Controls Sites List
Category: Federal Inst/Eng Controls
Description: This database contains a listing of Voluntary Action Program Sites with Engineering Controls placed on them and were identified by the Environmental Protection Agency.
Agency: Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

Hist-USGS-WaterWells-CA
Ground Water Site Inventory for California
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of wells, springs, test holes, tunnels, drains, and excavations in California.
Agency: United States Geological Survey, Water Resources Program

Phone Number: 9162783000
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-US-IC

Sites with Institutional Controls
Category: Federal Inst/Eng Controls
Description: This database contains a listing of Voluntary Action Program Sites with Institutional Controls placed on them and were identified by the Environmental Protection Agency.
Agency: Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

Hist-UST-CA

HISTORICAL HAZARDOUS SUBSTANCE STORAGE INFORMATION (aka Historical Underground Storage Tanks)
Category: State/Tribal UST
Description: The California State Water Resources Control Board (RWQCB) provides this archived historical database of storage containers. This database contains information collected in the 1980s from facilities that stored hazardous substances. The information was originally collected on paper forms and was later transferred to microfiche. The database is no longer updated.
Agency: California State Water Resources Control Board
Phone Number: 8664801028
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:

RAJINDER K GOYAL	MapID: 13	Listed
REGAL STATION 102	MapID: 28	Listed
CALIFORNIA HIGHWAY PATROL	MapID: 31	Listed
CALIFORNIA HIGHWAY PATROL	MapID: 31	Listed

Hist-UST-Cleanup-CA

Historic UST Cases Recommended for Closure under UST Cleanup Fund 5 Year Review (aka UST Cleanup Fund Cases)
Category: State/Tribal LUST

Description: This database contains leaking UST cases that have been recommended for closure under the State Water Board's authority to perform reviews of claims to the UST Cleanup Fund that have been open for 5 or more years (5 Year Review). This policy is no longer in effect as of 2012 and these listings will no longer be updated.
Agency: California State Water Resource Control Board
Phone Number: 9163415808
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:

Name not provided by Agency/Source	MapID: 43	Listed
Name not provided by Agency/Source	MapID: 47	Listed
Name not provided by Agency/Source	MapID: 50	Listed

Hist-USTReg-CA

Underground Storage Tank Registrations Database
Category: ERS Supplemental Govt Sources
Description: This database contains UST facilities listed on the Registrations Database from 1998.
Agency: State Water Resources Control Board
Phone Number: 9162274337
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Hist-Vehicle-Parts

Vehicle Parts
Category: ERS Exclusive Historic Sources
Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes Vehicle Parts Dealers.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-Vehicle-Washing

Vehicle/Truck Washing Facilities
Category: ERS Exclusive Historic Sources

Description: ERS has compiled proprietary lists of MILLIONS of records dating back to the 1800's that have shown up in historic resources and based on their classification, may have used hazardous materials or petroleum products. This listing includes vehicle washing facilities.
Agency: Environmental Record Search (ERS)
Phone Number: 8003772430
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:

BURLEYS DETAIL	MapID: 2	Listed

Hist-WaterWells-US
Public Community Water Supply/Well Head Protection Database
Category: ERS Supplemental Govt Sources
Description: This database contains the public community water supply wells as reported by the Geological Survey in 1998.
Agency: Geological Survey
Phone Number: 6092921185
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

Hist-WIP-Active-CA
Well Investigation Program Case List, Active Sites
Category: State/Tribal ASTM Other
Description: The Los Angeles Regional Water Quality Control Board maintains a listing under the San Gabriel-San Fernando Valley Cleanup Programs (Case List). The Well Investigation Program tracks these sites. These records are active and also on the California SLIC database. This database is no longer updated.
Agency: Los Angeles Regional Water Quality Control Board
Phone Number: 2135766725
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

Hist-WIP-Backlog-CA
Well Investigation Program Case List, Backlog Sites
Category: State/Tribal ASTM Other

Description: The Los Angeles Regional Water Quality Control Board maintains a listing under the San Gabriel-San Fernando Valley Cleanup Programs (Case List). The records on this database have not been currently assigned to a staff member and/or has very low priority in terms of contamination. This database is no longer updated.
Agency: Los Angeles Regional Water Quality Control Board
Phone Number: 2135766725
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

Hist-WIP-Historical-CA
Well Investigation Program Case List, Historical Sites
Category: State/Tribal ASTM Other
Description: The Los Angeles Regional Water Quality Control Board maintains a listing under the San Gabriel-San Fernando Valley Cleanup Programs (Case List). The records in this database have received a No Further Action Letter. This database is no longer updated.
Agency: Los Angeles Regional Water Quality Control Board
Phone Number: 2135766725
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

Hist-WMUDS-CA
Waste Management Unit Database System
Category: ERS Supplemental Govt Sources
Description: This database from 1998 contains information from: Facility, Waste Management Unit, SWAT Program and Report Summary Information, Chapter 15 (formerly Subchapter 15), TPCA and RCRA Program Information, Closure Information; also some information from the WDS (Waste Discharge System).
Agency: State Water Resources Control Board
Phone Number: 9168920323
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

HMIS-US
Hazardous Materials Information System
Category: Federal Emergency Release Reports

Description: Data includes spills, releases, or other incidents involving hazardous materials in commerce during the course of transportation. All modes of transportation are included except pipeline and bulk marine transportation. Data represent a census of all incidents reportable to the U.S. Department of Transportation This database contains a listing of spills. (DOT). U.S. federal regulations require all spills meeting the following criteria to be reported, in writing, to DOT's Office of Hazardous Materials Safety.
Agency: US Department of Transportation Pipeline and Hazardous Materials Safety Administration
Phone Number: 2023664433
Date last updated: 5/26/2017
Date last checked: 4/21/2017
Distance searched: 0.063 miles
Sites:
None Found

HWIS-CA
Hazardous Waste Information Summary
Category: State/Tribal RCRA Equivalent
Description: The Hazardous Waste Summary Report (formerly the Tanner Report) is prepared from data extracted from the copies of hazardous waste manifests received each year by DTSC. The volume of manifests is typically 900,000 - 1,000,000 annually, representing approximately 450,000 - 500,000 shipments. This database contains a listing of facilities extracted from the data.
Agency: California Department of Toxic Substances Control
Phone Number: 9162553745
Date last updated: 3/8/2017
Date last checked: 3/8/2017
Distance searched: 0.063 miles
Sites:

QUALITY TUNE UP #35	MapID: 1	Listed
DISCOUNT AUTO CENTER	MapID: 4	Listed

HWT-CA
Hazardous Waste Transporters
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of Registered Hazardous Waste Transporters in California defined by the Department of Toxic Substance Control. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number. The database current active, inactive, and closed facilities.
Agency: California Department of Toxic of Substance Control
Phone Number: 9164407145
Date last updated: 5/19/2016
Date last checked: 5/12/2016
Distance searched: 0.25 miles
Sites:
None Found

ICE-CA
Inspection, Compliance, and Enforcement
Category: State/Tribal ASTM Other
Description: This database contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.
Agency: California State Water Resources Control Board
Phone Number: 9163415808
Date last updated: 3/16/2017
Date last checked: 3/8/2017
Distance searched: 0.25 miles
Sites:
None Found

ICIS-Air-US
Integrated Compliance Information System for Air
Category: ERS Supplemental Govt Sources
Description: The Integrated Compliance Information System for Air (ICIS-Air) data exchange allows all State, Local, and Tribal Air agencies providing air stationary source enforcement and compliance data to submit their data to EPA via the Exchange Network.
Agency: United States Environmental Protection Agency
Phone Number: 2025645962
Date last updated: 2/3/2017
Date last checked: 12/20/2016
Distance searched: 0.063 miles
Sites:
None Found

ICIS-NPDES-US
National Pollutant Discharge Elimination System (NPDES)
Category: ERS Supplemental Govt Sources
Description: The National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. This database contains a listing of permit holders.
Agency: United States Environmental Protection Agency
Phone Number: 2022720167
Date last updated: 5/5/2016
Date last checked: 4/7/2016
Distance searched: 0.063 miles
Sites:
None Found

LA-LF-CA
Los Angeles County Landfills

Category: State/Tribal Solid Waste
Description: This database contains the property boundaries of Los Angeles county landfills and solid waste sites.
Agency: Department of Public Works
Phone Number: 8882532652
Date last updated: 3/13/2017
Date last checked: 3/13/2017
Distance searched: 1 mile
Sites:
None Found

Land-Disposal-CA
Land Disposal-Landfill
Category: State/Tribal Landfill/Solid Waste
Description: This database contains a listing of Land Disposal Sites managed by RWQCB. Cleanup status is included on data.
Agency: California Regional Water Quality Control Board
Phone Number: 9163415455
Date last updated: 3/16/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:
None Found

LA-Waste-Haulers-CA
Waste Haulers
Category: ERS Supplemental Govt Sources
Description: This database contains waste haulers as reported by the Los Angeles Department of Public Works.
Agency: Department of Public Works
Phone Number: 8882532652
Date last updated: 5/20/2016
Date last checked: 5/11/2016
Distance searched: 0.063 miles
Sites:
None Found

Lead-Smelter-2-US
Lead Smelter Sites
Category: ERS Supplemental Govt Sources
Description: This database contains 464 sites that were reported as potential lead smelters sites in research conducted by the EPA Superfund Program and other sources. The sites are listed on the 2007 published report by the EPA Superfund Program.
Agency: United States Environmental Protection Agency

Phone Number: 7034129810
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Lead-US
Lead Smelter Sites
Category: ERS Supplemental Govt Sources
Description: This database contains lead smelter sites reported by the Environmental Protection Agency. This database is provided by the Superfund Enterprise Management System (SEMS).
Agency: United States Environmental Protection Agency
Phone Number: 2025645962
Date last updated: 1/13/2017
Date last checked: 1/10/2017
Distance searched: 0.25 miles
Sites:
None Found

Liens-CA
California Liens
Category: State/Tribal Inst/Eng Controls
Description: This database identifies sites that have liens reported by the California Department of Toxic and Substance Control.
Agency: California Department of Toxic and Substance Control.
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/10/2017
Distance searched: 0.063 miles
Sites:
None Found

LIENS-US
Federal LIEN Sites
Category: Federal Inst/Eng Controls
Description: This database contains sites that have had Federal Liens filed on them as reported by the EPA.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 4/10/2017
Date last checked: 4/10/2017
Distance searched: 0.063 miles
Sites:

None Found

LMOP-US

Landfill Methane Outreach Program

Category: ERS Supplemental Govt Sources

Description: The U.S. Environmental Protection Agency's Landfill Methane Outreach Program (LMOP) is a voluntary assistance program that helps to reduce methane emissions from landfills by encouraging the recovery and beneficial use of landfill gas (LFG) as a renewable energy resource.

Agency: Environmental Protection Agency

Phone Number: 2025647873

Date last updated: 8/12/2016

Date last checked: 7/19/2016

Distance searched: 0.5 miles

Sites:

None Found

LUST-Closed-CA

Geotracker - Leaking Underground Storage Tanks, Closed Cases

Category: State/Tribal LUST

Description: GeoTracker is the California State Water Resources Control Board's data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. The system is used by the State Board, regional boards, and local agencies to track and archive compliance data from authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. This database contains a subset of sites that have received closure and now have a status of Case Closed.

Agency: California State Water Resources Control Board

Phone Number: 8664801028

Date last updated: 3/20/2017

Date last checked: 3/8/2017

Distance searched: 0.5 miles

Sites:

NEIGHBORHOOD LAUNDROMAT	MapID: 11	Completed - Case Closed
RD MINER COMPANY	MapID: 14	Completed - Case Closed
BART PROPERTY	MapID: 17	Completed - Case Closed
REGAL #120 / EAST BAY SURGERY CENTER	MapID: 28	Completed - Case Closed
SHELL #12-9452	MapID: 34	Completed - Case Closed
SUMMIT MEDICAL CENTER	MapID: 37	Completed - Case Closed
UNOCAL #3538	MapID: 39	Completed - Case Closed
SIMPSON, RONN	MapID: 40	Completed - Case Closed
WALTER BLUMERT COMPANY	MapID: 42	Completed - Case Closed
CALIFORNIA LINEN SUPPLY CO	MapID: 43	Completed - Case Closed
BLAZIC INDUSTRIAL BALANCING	MapID: 44	Completed - Case Closed
SHELL #13-9619	MapID: 45	Completed - Case Closed
LOOMIS ARMORED INC	MapID: 46	Completed - Case Closed
THRIFTY OIL #49	MapID: 47	Completed - Case Closed

KELLY AUTO PARTS	MapID: 48	Completed - Case Closed
FIDELITY ROOF COMPANY	MapID: 50	Completed - Case Closed
ARCO	MapID: 52	Completed - Case Closed

LUST-Open-CA

Geotracker - Leaking Underground Storage Tanks, Open Cases

Category: State/Tribal LUST

Description: GeoTracker is the California State Water Resources Control Board's data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. The system is used by the State Board, regional boards, and local agencies to track and archive compliance data from authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. This database contains a subset of sites that have not yet been cleaned up and have a status of Case Open.

Agency: California State Water Resources Control Board

Phone Number: 8664801028

Date last updated: 3/20/2017

Date last checked: 3/8/2017

Distance searched: 0.5 miles

Sites:

J&H AUTO REPAIR AND GAS STATION	MapID: 6	Open - Site Assessment
GROVE STREET WASH RACK	MapID: 9	Open - Assessment & Interim Remedial Action
ARCO #04931	MapID: 13	Open - Site Assessment
CHP - OAKLAND	MapID: 31	Open - Inactive
CHEVRON #9-2029	MapID: 33	Open - Assessment & Interim Remedial Action
SAN FRANCISCO FRENCH BREAD	MapID: 36	Open - Site Assessment
FORMER FG GASOLINE	MapID: 49	Open - Eligible for Closure

Manifest2-RI

Hazardous Waste Manifest

Category: State/Tribal RCRA Equivalent

Description: The Rhode Island Department of Environmental Management, Hazardous Waste Manifest System lists sites from all over the country, not just Rhode Island. To be thorough, ERS has searched the data subset that includes listings on or near the subject site that are listed in the Rhode Island Department of Environmental Management, Hazardous Waste Manifest System.

Agency: Rhode Island Department of Environmental Management

Phone Number: 4012222797

Date last updated: 12/23/2016

Date last checked: 12/23/2016

Distance searched: 0.063 miles

Sites:

None Found

MethaneLF-CA
Methane Producing Landfills
Category: State/Tribal Other
Description: This database represents known disposal sites in Los Angeles County that may produce and emanate methane gas. The database contains disposal sites within Los Angeles County that once accepted degradable refuse material.
Agency: Los Angeles County GIS Portal
Phone Number: 6264585189
Date last updated: 3/15/2017
Date last checked: 3/15/2017
Distance searched: 1 mile
Sites:
None Found

Military-Bases-US
Military Base Boundaries
Category: ERS Supplemental Govt Sources
Description: United States Military Installations is a polygon theme representing the boundaries and location information for important military installations in the United States and Puerto Rico. The database includes records for 405 military installations.
Agency: Research and Innovative Technology Administration's Bureau of Transportation Statistics
Phone Number: 2023663828
Date last updated: 8/9/2016
Date last checked: 7/22/2016
Distance searched: 1 mile
Sites:
None Found

Mines2-CA
California Mines
Category: ERS Supplemental Govt Sources
Description: This database contains Mines reported by the California Department of Conservation. These include, active, closed, exempt, newly permitted, and idle.
Agency: California Department of Conservation
Phone Number: 9163239198
Date last updated: 3/31/2017
Date last checked: 3/27/2017
Distance searched: 0.063 miles
Sites:
None Found

Mines-CA

Death Valley Mines
Category: ERS Supplemental Govt Sources
Description: This database contains death valley mines as reported by the California Department of Conservation.
Agency: California Department of Conservation
Phone Number: 9163239198
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

MINES-US
Mines Master Index File
Category: ERS Supplemental Govt Sources
Description: The Master Index file contains mine identification numbers issued for mines active or opened since 1971.
Agency: United States Department of Labor
Phone Number: 8777786055
Date last updated: 2/3/2017
Date last checked: 1/9/2017
Distance searched: 0.063 miles
Sites:
None Found

MLTS-US
Material Licensing Tracking System
Category: ERS Supplemental Govt Sources
Description: This database contains facilities listed on the Material Licensing Tracking system that possess or use radioactive materials as reported by the U.S. Nuclear Regulatory Commission.
Agency: U.S. Nuclear Regulatory Commission
Phone Number: 3014157169
Date last updated: 3/2/2017
Date last checked: 3/2/2017
Distance searched: 0.063 miles
Sites:
None Found

MRDS-US
Mineral Resources Data System (MRDS)
Category: ERS Supplemental Govt Sources
Description: MRDS is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references.

Agency: U.S. Geologic Survey
Phone Number: 8882758747
Date last updated: 4/28/2016
Date last checked: 2/26/2016
Distance searched: 0.25 miles
Sites:
None Found

MWMP-CA
Medical Waste Management Program
Category: ERS Supplemental Govt Sources
Description: This database contains permitted transfer and treatment facilities reported by the California Department of Public Health.
Agency: California Department of Public Health
Phone Number: 9164495671
Date last updated: 12/8/2016
Date last checked: 12/1/2016
Distance searched: 0.25 miles
Sites:
None Found

NEI-LF-CA
NEI (National Emission Inventory) Landfill Point Sources
Category: ERS Supplemental Govt Sources
Description: This database contains National Emission Inventory Landfill Point Sources reported by the California Air Resources Board. ARB reported this data to the NEI back in 1999.
Agency: California Air Resources Board
Phone Number: 9163222990
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

NPDES-CA
National Pollutant Discharge Elimination System
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of National Pollutant Discharge Elimination System (NPDES) permits registered through the California EPA.
Agency: California Environmental Protection Agency
Phone Number: 8665633107
Date last updated: 12/16/2016
Date last checked: 12/6/2016
Distance searched: 0.063 miles

Sites:
None Found

NPDES-SW-CA
Notice of Intent Data
Category: ERS Supplemental Govt Sources
Description: This database contains dischargers that have submitted Notice of Intent (NOIs) as reported by the California State Water Resources Control Board.
Agency: California State Water Resources Control Board
Phone Number: 8665633107
Date last updated: 12/16/2016
Date last checked: 12/6/2016
Distance searched: 0.063 miles
Sites:
None Found

NPL-R9-US
NPL Region 9 Site Boundaries
Category: Federal NPL
Description: This database contains the boundaries of the NPL sites within the specified EPA region.
Agency: Environmental Protection Agency
Phone Number: 4159478000
Date last updated: 12/27/2016
Date last checked: 12/27/2016
Distance searched: 1 mile
Sites:
None Found

NPL-US
National Priorities List
Category: Federal NPL
Description: The National Priorities List is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation. This database contains a listing of NPL sites.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 5/22/2017
Date last checked: 5/15/2017
Distance searched: 1 mile
Sites:
None Found

OGM-CA
Oil and Gas Monitoring
Category: ERS Supplemental Govt Sources
Description: This database includes Oil and Gas Monitoring wells reported by the California State Water Resource Control Board.
Agency: California State Water Resource Control Board
Phone Number: 8665633107
Date last updated: 6/6/2016
Date last checked: 5/3/2016
Distance searched: 0.063 miles
Sites:
None Found

OGW-CA
California Oil and Gas Wells
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of Oil and Gas Wells maintained by the Department of Conservation.
Agency: California Department of Conservation
Phone Number: 9163231779
Date last updated: 4/7/2017
Date last checked: 3/29/2017
Distance searched: 0.063 miles
Sites:
None Found

OSCF-CA
Orphan Site Cleanup Fund
Category: ERS Supplemental Govt Sources
Description: This database contains sites listed under the Orphan Site Cleanup Fund. OSCF is a financial assistance program within the Division of Financial Assistance. OSCF was established to provide financial assistance to eligible applicants for the cleanup of brownfields sites contaminated by leaking petroleum underground storage tanks where there is no financially responsible party.
Agency: California State Water Resource Control Board
Phone Number: 9163415760
Date last updated: 11/23/2016
Date last checked: 11/16/2016
Distance searched: 0.5 miles
Sites:
None Found

PADS-US
PCB Registration Database System
Category: Federal ASTM Other

Description: This database contains a listing of generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.
Agency: United States Environmental Protection Agency
Phone Number: 2025660500
Date last updated: 5/4/2017
Date last checked: 4/25/2017
Distance searched: 0.063 miles
Sites:
None Found

PCB-US
PCB Transformers
Category: Federal ASTM Other
Description: PCB Transformer Registration Database. This database indicates the best known current status of registered PCB transformers
Agency: United States Environmental Protection Agency
Phone Number: 7033088404
Date last updated: 4/25/2017
Date last checked: 4/25/2017
Distance searched: 0.25 miles
Sites:
None Found

PCS-US
Permit Compliance System for Clean Water Act
Category: ERS Supplemental Govt Sources
Description: PCS is an information management system maintained by the Office of Compliance to track permit compliance and enforcement status of facilities regulated by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. PCS is designed to support the NPDES program at the state, regional, and national levels.
Agency: United States Environmental Protection Agency
Phone Number: 2025640221
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.25 miles
Sites:
None Found

Perch1-CA
Perchlorate Confirmed Contaminant Sites
Category: ERS Supplemental Govt Sources
Description: This database contains sites with perchlorate contamination as reported by the State Water Resource Control Board.
Agency: State Water Resource Control Board

Phone Number: 9517824902
Date last updated: 5/18/2016
Date last checked: 5/3/2016
Distance searched: 0.25 miles
Sites:
None Found

Perch2-CA
Perchlorate Confirmed Contaminant Sites
Category: ERS Supplemental Govt Sources
Description: This database contains sites with perchlorate contamination as reported by the State Water Resource Control Board.
Agency: State Water Resource Control Board
Phone Number: 9517824902
Date last updated: 5/18/2016
Date last checked: 5/3/2016
Distance searched: 0.25 miles
Sites:
None Found

PR-MOA-CA
Polanco Redevelopment
Category: State/Tribal ASTM Other
Description: This database contains the Polanco Redevelopment MOA sites reported by the Department of Toxic Substances Control.
Agency: California Department of Toxic Substances Control
Phone Number: 9162553586
Date last updated: 3/24/2017
Date last checked: 3/10/2017
Distance searched: 0.25 miles
Sites:
None Found

Proposed-NPL-US
Proposed NPL Sites
Category: Federal NPL
Description: The EPA provides information on the assessment and remediation of current hazardous waste sites. The site in this database have been proposed for the NPL list.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 4/28/2017
Date last checked: 4/28/2017
Distance searched: 1 mile
Sites:

None Found

RADINFO-US
Radiation Information Database
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of facilities that are regulated by the US EPA regulations for radiation and radioactivity.
Agency: United States Environmental Protection Agency
Phone Number: 2023439775
Date last updated: 5/11/2017
Date last checked: 5/11/2017
Distance searched: 0.063 miles
Sites:
None Found

RCRA-CESQG-US
Resource Conservation and Recovery Act, Conditionally Exempt Small Quantity Generators
Category: Federal RCRA Generators
Description: The primary goals of RCRA are to: Protect human health and the environment from the potential hazards of waste disposal. Conserve energy and natural resources. Reduce the amount of waste generated. Ensure that wastes are managed in an environmentally sound manner. This database contains a listing of Conditionally Exempt Small Quantity Generators.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 1/20/2017
Date last checked: 4/21/2017
Distance searched: 0.25 miles
Sites:
None Found

RCRA-COR-US
Resource Conservation and Recovery Act - Corrective Actions
Category: Federal RCRA CORRACTS
Description: The primary goals of RCRA are to: Protect human health and the environment from the potential hazards of waste disposal. Conserve energy and natural resources. Reduce the amount of waste generated. Ensure that wastes are managed in an environmentally sound manner.
EPA estimates that between 50 and 70 percent of all TSDFs have some degree of environmental contamination requiring detailed investigation and perhaps cleanup. Under a program entitled Corrective Action, EPA has the statutory authority to require permitted and interim status TSDFs to clean up hazardous waste contamination. This database contains a listing of sites that have had corrective action.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 1/20/2017
Date last checked: 4/21/2017

Distance searched: 1 mile
Sites:
None Found

RCRA-LQG-US
Resource Conservation and Recovery Act, Large Quantity Generators
Category: Federal RCRA Generators
Description: The primary goals of RCRA are to: Protect human health and the environment from the potential hazards of waste disposal. Conserve energy and natural resources. Reduce the amount of waste generated. Ensure that wastes are managed in an environmentally sound manner. This database contains a listing of Large Quantity Generators.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 1/20/2017
Date last checked: 4/21/2017
Distance searched: 0.25 miles
Sites:
None Found

RCRA-NON-US
Resource Conservation and Recovery Act
Category: Federal RCRA Generators
Description: The primary goals of RCRA are to: Protect human health and the environment from the potential hazards of waste disposal. Conserve energy and natural resources. Reduce the amount of waste generated. Ensure that wastes are managed in an environmentally sound manner. This database contains a listing of RCRA Non-Hazardous generators.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 1/20/2017
Date last checked: 4/21/2017
Distance searched: 0.25 miles
Sites:
None Found

RCRA-SQG-US
Resource Conservation and Recovery Act, Small Quantity Generators
Category: Federal RCRA Generators
Description: The primary goals of RCRA are to: Protect human health and the environment from the potential hazards of waste disposal. Conserve energy and natural resources. Reduce the amount of waste generated. Ensure that wastes are managed in an environmentally sound manner. This database contains a listing of Small Quantity Generators.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 1/20/2017

Date last checked: 4/21/2017
Distance searched: 0.25 miles
Sites:
None Found

RCRA-TSDF-US
Resource Conservation and Recovery Act - Treatment, Storage, and Disposal sites
Category: Federal RCRA non-CORRACTS TSD
Description: The primary goals of RCRA are to: Protect human health and the environment from the potential hazards of waste disposal. Conserve energy and natural resources. Reduce the amount of waste generated. Ensure that wastes are managed in an environmentally sound manner.
This database contains a listing of Treatment, Storage and Disposal Facilities - Facilities that receive hazardous waste from generators or other facilities for treatment, storage or disposal of waste are known as TSDFs.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 1/20/2017
Date last checked: 4/21/2017
Distance searched: 0.5 miles
Sites:
None Found

Response-CA
State Response Sites
Category: State/Tribal NPL
Description: This database identifies confirmed release sites where DTSC is involved in remediation, either in a lead role or oversight capacity.
Agency: California Department of Toxic Substances Control
Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/10/2017
Distance searched: 1 mile
Sites:

CAL TECH METALS	MapID: 53	ACTIVE
LANE METAL FINISHERS	MapID: 54	ACTIVE
HARRIS DRY CLEANERS	MapID: 55	ACTIVE

Response-CA
State Response Sites
Category: State/Tribal NPL
Description: This database identifies confirmed release sites where DTSC is involved in remediation, either in a lead role or oversight capacity.
Agency: California Department of Toxic Substances Control

Phone Number: 9163233400
Date last updated: 3/24/2017
Date last checked: 3/10/2017
Distance searched: 1 mile
Sites:

CAL TECH METALS	MapID: 53	ACTIVE
LANE METAL FINISHERS	MapID: 54	ACTIVE
HARRIS DRY CLEANERS	MapID: 55	ACTIVE

RFG-Lab-US
Reformulated Gasoline (RFG)
Category: ERS Supplemental Govt Sources
Description: This database includes the list of registered Reformulated Gasoline Laboratories.
Agency: Environmental Protection Agency, United States
Phone Number: 2023439303
Date last updated: 1/13/2017
Date last checked: 1/6/2017
Distance searched: 0.25 miles
Sites:
None Found

RMP-US
Risk Management Plans
Category: ERS Supplemental Govt Sources
Description: This database contains facilities that have developed risk management plans as reported by the Environmental Protection Agency. The System for Risk Management Plans (SRMP) is a suite of electronic systems containing information relating to risk management plans submitted by facilities in accordance with the Clean Air Act, Section 112(r). Affected facilities are to develop risk management programs which will prevent and minimize consequences of accidental releases of certain hazardous chemicals that could harm public health and the environment.
Agency: United States Environmental Protection Agency
Phone Number: 2025642491
Date last updated: 4/22/2016
Date last checked: 2/23/2016
Distance searched: 0.063 miles
Sites:
None Found

ROD-US
Records of Decision
Category: ERS Supplemental Govt Sources

Description: The Record of Decision (ROD) is a public document that explains which cleanup alternatives will be used to clean up a Superfund site. The ROD for sites listed on the NPL (NPL Site Listing Process) is created from information generated during the Remedial Investigation/Feasibility Study (RI/FS).A ROD contains site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, scope and role of response action and the remedy selected for cleanup. This database contains a listing of sites with RODs.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 4/28/2017
Date last checked: 4/20/2017
Distance searched: 0.5 miles
Sites:
None Found

SAA-Agreements-US
Sites with Superfund Alternative Approach Agreements
Category: Federal ASTM Other
Description: This database contains sites that have a Superfund Alternative agreement. The Superfund alternative (SA) approach uses the same investigation and cleanup process and standards that are used for sites listed on the NPL. The SA approach is an alternative to listing a site on the NPL; it is not an alternative to Superfund or the Superfund process.
Agency: United States Environmental Protection Agency
Phone Number: 2025645110
Date last updated: 4/28/2017
Date last checked: 4/20/2017
Distance searched: 1 mile
Sites:
None Found

SDWIS-US
Safe Drinking Water Information System
Category: ERS Supplemental Govt Sources
Description: This database contains the Safe Drinking Water Information including Public Water, Source and Treatment, Enforcements and Violations reported by the United States Environmental Protection Agency.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 6/20/2016
Date last checked: 4/6/2016
Distance searched: 0.25 miles
Sites:
None Found

SGV-Deep-Plumes-CA

San Gabriel Valley Deep Plumes
Category: State/Tribal Solid Waste
Description: Contamination plume boundaries that are part of the San Gabriel Valley Superfund areas.
Agency: Environmental Protection Agency
Phone Number: 4159478000
Date last updated: 3/30/2017
Date last checked: 3/17/2017
Distance searched: 1 mile
Sites:
None Found

SGV-Shallow-Plumes-CA

San Gabriel Valley Shallow Plumes
Category: State/Tribal Solid Waste
Description: Contamination plume boundaries that are part of the San Gabriel Valley Superfund areas.
Agency: Environmental Protection Agency
Phone Number: 4159478000
Date last updated: 3/30/2017
Date last checked: 3/17/2017
Distance searched: 1 mile
Sites:
None Found

SGV-Shallow-Plumes-Puente-Valley-CA

Puente Valley Shallow Plumes
Category: State/Tribal Solid Waste
Description: Contamination plume boundaries that are part of the San Gabriel Valley Superfund areas.
Agency: Environmental Protection Agency
Phone Number: 4159478000
Date last updated: 10/10/2016
Date last checked: 10/25/2016
Distance searched: 1 mile
Sites:
None Found

SLIC-Closed-CA

The Spills, Leaks, Investigation & Cleanup, Closed Cases
Category: Emergency Release Reports
Description: The Spills, Leaks, Investigation & Cleanup (SLIC) Program deals with site investigation and corrective action involving sites not overseen by the Underground Tank Program and the Well Investigation Program. These particular sites have had all remediation completed and are now considered closed by the agency.
Agency: California State Water Resources Control Board
Phone Number: 9163415808

Date last updated: 3/20/2017
Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:

SHATTUCK AVE PROPERTY	MapID: [51]()	Completed - Case Closed

SLIC-CV-CLOSED-CA

List of Spills and Leak Sites
Category: Emergency Release Reports
Description: This database contains a List of Spill and Leak Sites (SL) and Department of Defense (DOD) and Department of Energy (DOE) cleanup cases in the central portion of the Central Valley Region as reported by the Central Valley Regional Quality Board. The database has not been updated since 2005
Agency: Central Valley Regional Quality Board
Phone Number: 9164644712
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

SLIC-CV-OPEN-CA

List of Spills and Leak Sites
Category: Emergency Release Reports
Description: This database contains a List of Spill and Leak Sites (SL) and Department of Defense (DOD) and Department of Energy (DOE) cleanup cases in the central portion of the Central Valley Region as reported by the Central Valley Regional Quality Board. The database has not been updated since 2005.
Agency: Central Valley Regional Quality Board
Phone Number: 9164644712
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

SLIC-Open-CA

The Spills, Leaks, Investigation & Cleanup, Open Cases
Category: Emergency Release Reports
Description: The Spills, Leaks, Investigation & Cleanup (SLIC) Program deals with site investigation and corrective action involving sites not overseen by the Underground Tank Program and the Well Investigation Program.
Agency: California State Water Resources Control Board
Phone Number: 9163415808
Date last updated: 3/20/2017

Date last checked: 3/8/2017
Distance searched: 0.5 miles
Sites:

MacArthur BART Transit Village	MapID: 32	Open - Remediation
411 MACARTHUR REDEVELOPMENT	MapID: 39	Open - Site Assessment

SML-CA
Site Mitigation List
Category: State/Tribal ASTM Other
Description: This database contains sites listed by the Site Mitigation Unit program at the Los Angeles County Fire Department. SMU voluntary oversight and corrective action oversight programs are options in addition to DTSC and Regional Water Quality Control Board (RWQCB) oversight programs for residents and businesses of Los Angeles County seeking oversight in a cost effective and timely manner for cleanup of their contaminated properties. A (Y) abated column in data does not always mean the site is closed. Please contact the SMU department for a file review.
Agency: Los Angeles County Fire Department
Phone Number: 3238904106
Date last updated: 3/8/2017
Date last checked: 2/23/2017
Distance searched: 0.5 miles
Sites:
None Found

Spills-SSO-CA
Sanitary Sewer System
Category: ERS Supplemental Govt Sources
Description: This database contains private lateral sewage discharges contained in the State Water Resources Control Board's SSO database.
Agency: State Water Resource Control Board
Phone Number: 8667924977
Date last updated: 5/18/2016
Date last checked: 5/4/2016
Distance searched: 0.25 miles
Sites:

37th St and West MacArthur Blvd	MapID: 19	Listed

SSTS-US
Section 7 Tracking System
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of EPA-registered domestic pesticide-producing and device producing establishments and the pesticides produced based on data in the Section Seven Tracking System.

Agency: United States Environmental Protection Agency
Phone Number: 2025644203
Date last updated: 6/27/2016
Date last checked: 6/9/2016
Distance searched: 0.063 miles
Sites:
None Found

SWIS-CA
Solid Waste Information System
Category: State/Tribal Landfill/Solid Waste
Description: The Solid Waste Information System (SWIS) database contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites. Includes basic information on each facility in the database such as site, enforcement agency, operator, land owner, throughput, capacity, acreage, permit date, waste types, activity type, regulatory status and operational status.
Agency: California Department of Resources Recycling and Recovery
Phone Number: 9163416320
Date last updated: 12/13/2016
Date last checked: 3/14/2017
Distance searched: 0.5 miles
Sites:
None Found

SWLF-US
Solid Waste Facilities
Category: Federal Solid Waste
Description: This dataset represents verified locations of ACTIVE permitted Municipal Solid Waste facilities as well as ACTIVE permitted Construction and Demolition waste facilities. It is not intended to be a comprehensive inventory of all permitted solid waste facilities. Specifically excluded from this collection are facilities that accept hazardous waste, industrial waste facilities, waste collection/transfer sites and other specialty waste facilities.
Agency: Oak Ridge National Laboratory, GIST
Phone Number: 8652413976
Date last updated: 4/20/2017
Date last checked: 4/20/2017
Distance searched: 0.5 miles
Sites:
None Found

SWRCY-CA
Recycler Database
Category: State/Tribal ASTM Other

Description: A listing of all operational Recycling Centers identified by their Certification Number.
Agency: California Department of Resources Recycling and Recovery
Phone Number: 9163233836
Date last updated: 3/24/2017
Date last checked: 3/7/2017
Distance searched: 0.5 miles
Sites:
None Found

<u>Tribal-Air-US</u>
Tribal Air Permitted Facilities
Category: ERS Supplemental Govt Sources
Description: This database contains tribal locations that have been issued air permits as reported by the US Environmental Protection Agency. At this time the database includes region 2, 5, 7, 8, 9, 10.
Agency: United States Environmental Protection Agency
Phone Number: 3123532000
Date last updated: 4/21/2017
Date last checked: 3/20/2017
Distance searched: 0.25 miles
Sites:
None Found

<u>Tribal-BF-US</u>
Tribal Brownfields
Category: Federal Brownfield
Description: This database contains a listing of Brownfields on Native American Land identified by the United States Environmental Protection Agency. The data was pulled from the old ECHO database and no longer available.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.5 miles
Sites:
None Found

<u>Tribal-LUST-Closed-Reg9</u>
Tribal Leaking Underground Storage Tanks
Category: Federal LUST
Description: This database contains a listing of Leaking Underground Storage Tanks on Native American Land identified by the United States Environmental Protection Agency in Region 9.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 1/18/2017

Date last checked: 12/23/2016
Distance searched: 0.5 miles
Sites:
None Found

<u>Tribal-LUST-Open-Reg9</u>
Tribal Leaking Underground Storage Tanks
Category: Federal LUST
Description: This database contains a listing of Leaking Underground Storage Tanks on Native American Land identified by the United States Environmental Protection Agency in Region 9.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 1/18/2017
Date last checked: 12/23/2016
Distance searched: 0.5 miles
Sites:
None Found

<u>Tribal-ODI-US</u>
Tribal Open Dump Sites
Category: Federal Solid Waste
Description: This database contains a listing of Open Dump Sites on Native American Land identified by the Indian Health Service
Agency: Indian Health Service
Phone Number: 3014431046
Date last updated: 4/20/2017
Date last checked: 4/20/2017
Distance searched: 0.5 miles
Sites:
None Found

<u>Tribal-UST-Reg9</u>
Tribal Underground Storage Tanks
Category: Federal UST
Description: This database contains a listing of Underground Storage Tanks on Native American Land identified by the United States Environmental Protection Agency in Region 9.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 1/19/2017
Date last checked: 12/23/2016
Distance searched: 0.25 miles
Sites:
None Found

Tribal-VCP-US
Tribal VCP
Category: Federal Tribal VCP
Description: This database contains voluntary cleanup sites located in tribal land as reported by the United States Environmental Protection Agency.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 4/5/2017
Date last checked: 4/5/2017
Distance searched: 0.5 miles
Sites:
None Found

TRIS2000-US
Toxics Release Inventory System
Category: ERS Supplemental Govt Sources
Description: TRIS is a EPA database reported annually by certain covered industry groups, as well as federal facilities. It contains information about more than 650 toxic chemicals that are being used, manufactured, treated, transported, or released into the environment, and includes information about waste management and pollution prevention activities. This database contains a listing of facilities that reported in the years between 2000-2009.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

TRIS2010-US
Toxics Release Inventory System
Category: ERS Supplemental Govt Sources
Description: TRIS is a EPA database reported annually by certain covered industry groups, as well as federal facilities. It contains information about more than 650 toxic chemicals that are being used, manufactured, treated, transported, or released into the environment, and includes information about waste management and pollution prevention activities. This database contains a listing of facilities that reported in the years between 2010-2014. 2014 is currently the most recent year available in the TRI.NET program.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: 1/27/2017
Date last checked: 1/10/2017
Distance searched: 0.063 miles
Sites:
None Found

<u>TRIS80-US</u>
Toxics Release Inventory System
Category: ERS Supplemental Govt Sources
Description: TRIS is a EPA database reported annually by certain covered industry groups, as well as federal facilities. It contains information about more than 650 toxic chemicals that are being used, manufactured, treated, transported, or released into the environment, and includes information about waste management and pollution prevention activities. This database contains a listing of facilities that reported in the years between 1987-1989.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

<u>TRIS90-US</u>
Toxics Release Inventory System
Category: ERS Supplemental Govt Sources
Description: TRIS is a EPA database reported annually by certain covered industry groups, as well as federal facilities. It contains information about more than 650 toxic chemicals that are being used, manufactured, treated, transported, or released into the environment, and includes information about waste management and pollution prevention activities. This database contains a listing of facilities that reported in the years between 1990-1999.
Agency: United States Environmental Protection Agency
Phone Number: 8004249346
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

<u>TSCA-US</u>
Toxics Substance Control Sites
Category: ERS Supplemental Govt Sources
Description: TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon and lead-based paint. This database contains a listing of these facilities.
Agency: United States Environmental Protection Agency
Phone Number: 2025642501
Date last updated: 4/27/2017
Date last checked: 4/27/2017
Distance searched: 0.063 miles

Sites:
None Found

UIC2-CA
Injection Wells
Category: ERS Supplemental Govt Sources
Description: This database contains Injection Wells as reported by the State Water Resource Control Board.
Agency: California State Water Resources Control Board
Phone Number: 8665633107
Date last updated: 12/8/2016
Date last checked: 12/5/2016
Distance searched: 0.063 miles
Sites:
None Found

UIC-CA
Underground Injection Control Wells
Category: ERS Supplemental Govt Sources
Description: This database contains Underground Injection Control Wells regulated by the California Department of Conservation.
Agency: California Department of Conservation
Phone Number: 9163231779
Date last updated: 12/16/2016
Date last checked: 12/1/2016
Distance searched: 0.063 miles
Sites:
None Found

UMTRA-US
Uranium Mill Tailings Remedial Action Sites
Category: ERS Supplemental Govt Sources
Description: The Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978 gave the U.S. Department of Energy (DOE) the responsibility of stabilizing, disposing, and controlling uranium mill tailings and other contaminated material at twenty-four uranium mill processing sites located across ten states and at approximately 5,200 associated properties.
Agency: Department of Energy
Phone Number: 5058450011
Date last updated: Historical Database
Date last checked: N/A
Distance searched: 0.063 miles
Sites:
None Found

USGS-Waterwells-US
Ground Water Site Inventory
Category: ERS Supplemental Govt Sources
Description: This database contains a listing of wells, springs, test holes, tunnels, drains, and excavations reported by the United States Geological Survey, Water Resources Program.
Agency: United States Geological Survey, Water Resources Program
Phone Number: 9162783000
Date last updated: 2/10/2017
Date last checked: 1/17/2017
Distance searched: 0.063 miles
Sites:
None Found

UST-Abandoned-CA
Abandoned UST Initiative (aka Inventory of Abandoned Tank Sites)
Category: State/Tribal UST
Description: Since November 2012, the California State Water Resources Control Board (State Water Board) and the U.S. Environmental Protection Agency (U.S. EPA), in collaboration with Sullivan International Group, Inc., have been working with the Unified Program Agencies (UPAs) to address the abandoned or improperly closed USTs across the State of California. USTs are considered abandoned when regulated substances are no longer stored within those USTs and/or when monitoring requirements of the Operating Permit, Title 23 of California Code or Regulations, and California Health and Safety Code 25298 are not being implemented. This database contains an inventory of abandoned UST sites reported by the California State Water Resources Control Board.
Agency: California State Water Resources Control Board
Phone Number: 9163415808
Date last updated: 6/2/2017
Date last checked: 5/4/2017
Distance searched: 0.25 miles
Sites:
None Found

UST-CA
Geotracker - Underground Storage Tanks
Category: State/Tribal UST
Description: GeoTracker is the California State Water Resources Control Board's data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. The system is used by the State Board, regional boards, and local agencies to track and archive compliance data from authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. This database contains permitted USTs that have been extracted from Geotracker.
Agency: California State Water Resources Control Board
Phone Number: 8664801028
Date last updated: 3/24/2017

Date last checked: 3/13/2017
Distance searched: 0.25 miles
Sites:
Westco Gas Food MapID: 13 Listed

UST-Closed-CA
UST Case Closure Review Denials and Approved Orders (aka Closure of Underground Storage Tank (UST) Cases)
Category: State/Tribal UST
Description: The Underground Storage Tank Cleanup Fund provides a means for petroleum UST owners and operators to meet the federal and state requirements of maintaining financial responsibility to pay for any damages arising from their tank operations. The Fund assists a large number of small businesses and individuals by providing reimbursement for expenses associated with the cleanup of leaking USTs. The Fund also provides money to the Regional Water Boards and local regulatory agencies to abate emergency situations or to cleanup abandoned sites that pose a threat to human health, safety, and the environment, as a result of a UST petroleum release. This database contains UST tanks that have been closed under the Underground Storage Tank Cleanup Fund as reported by the California State Water Resource Control Board.
Agency: California State Water Resource Control Board
Phone Number: 8008133863
Date last updated: 3/31/2017
Date last checked: 3/27/2017
Distance searched: 0.25 miles
Sites:
None Found

USTComp-CA
Previously Abandoned Tanks Now in Compliance (aka Compliance UST)
Category: State/Tribal UST
Description: Since November 2012, the California State Water Resources Control Board (State Water Board) and the U.S. Environmental Protection Agency (U.S. EPA), in collaboration with Sullivan International Group, Inc., have been working with the Unified Program Agencies (UPAs) to address the abandoned or improperly closed USTs across the State of California. USTs are considered abandoned when regulated substances are no longer stored within those USTs and/or when monitoring requirements of the Operating Permit, Title 23 of California Code or Regulations, and California Health and Safety Code 25298 are not being implemented. This database contains previously abandoned UST sites that are now in compliance as reported by the California State Water Resources Control Board.
Agency: California State Water Resources Control Board
Phone Number: 9163415808
Date last updated: 6/2/2017
Date last checked: 5/4/2017
Distance searched: 0.25 miles
Sites:
None Found

UST-CRSP-CA
Underground Storage Tanks
Category: State/Tribal UST
Description: Aboveground Storage Tanks listed on the CalEPA Regulated Site Portal. The portal is a website that combines data about environmentally regulated sites and facilities in California into a single, searchable database and interactive map. For information on a particular site, contact the appropriate agency:
California Environmental Reporting System (CERS): cers@calepa.ca.gov
California Integrated Water Quality System (CIWQS): 866-79-CIWQS
EnviroStor Cleanup/Haz Waste: 877-786-9427
GeoTracker: 866-480-1028
Agency: Cal EPA
Phone Number: 9164455049
Date last updated: 3/17/2017
Date last checked: 2/14/2017
Distance searched: 0.25 miles
Sites:

Westco Gas Food	MapID: 13	Listed

UST-Priority-CA
UST Cleanup Fund Priority List
Category: State/Tribal UST
Description: The Underground Storage Tank Cleanup Fund provides a means for petroleum UST owners and operators to meet the federal and state requirements of maintaining financial responsibility to pay for any damages arising from their tank operations. The UST Cleanup Fund places all eligible claims on the Priority List until funding is available to reimburse their corrective action costs. Claims are placed and ranked on the Priority List by the assigned priority class and the date the UST Cleanup Fund received a complete application. This database includes current cleanup cases that are listed on the Cleanup Fund Priority List.
Agency: California State Water Resources Control Board
Phone Number: 8008133863
Date last updated: 3/31/2017
Date last checked: 3/27/2017
Distance searched: 0.5 miles
Sites:

CHEVRON STATION #9-2029	MapID: 33	Listed
FORMER SHELL STATION #129452	MapID: 34	Listed
FORMER SHELL #139619	MapID: 45	Listed

UST-Proposed-CA
Proposed Closure of UST Cases (aka UST Proposed for Closure)

Category: State/Tribal UST
Description: The Underground Storage Tank Cleanup Fund provides a means for petroleum UST owners and operators to meet the federal and state requirements of maintaining financial responsibility to pay for any damages arising from their tank operations. The Fund assists a large number of small businesses and individuals by providing reimbursement for expenses associated with the cleanup of leaking USTs. This database contains UST's that are being considered for closure by the SWRCB or the Executive Director.
Agency: California State Water Resources Control Board
Phone Number: 8008133863
Date last updated: 3/31/2017
Date last checked: 3/27/2017
Distance searched: 0.25 miles
Sites:
Arco Station #04931 MapID: 13 Listed

Vapor-Intrusions-US
Vapor Intrusion Database
Category: ERS Supplemental Govt Sources
Description: This database contains the vapor intrusion database as reported by the Environmental Protection Agency.
Agency: United States Environmental Protection Agency
Phone Number: 7033057411
Date last updated: 8/17/2016
Date last checked: 12/19/2016
Distance searched: 0.5 miles
Sites:
None Found

WDR-CA
Waste Discharge Requirements
Category: ERS Supplemental Govt Sources
Description: This database contains sites in the Waste Discharge Requirements (WDRs) Program that regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act as reported by the California State Water Resource Control Board.
Agency: California State Water Resource Control Board
Phone Number: 8667924977
Date last updated: 5/18/2016
Date last checked: 5/3/2016
Distance searched: 0.25 miles
Sites:
None Found

Wells-CA
California Wells

Category: ERS Supplemental Govt Sources
Description: This database includes wells identified by well completed reports. The agency has notified us not this database does not include all wells in california as this is still a work in progress. The database includes approximately 500K wells.
Agency: California Department of Water Resources
Phone Number: 9166535791
Date last updated: 7/15/2016
Date last checked: 6/24/2016
Distance searched: 0.063 miles
Sites:
None Found

UN-MAPPABLE OCCURRENCES

The following occurrences were not mapped primarily due to incomplete or inaccurate address information. All of the following occurrences were determined to share the same zip code as the area searched. General status information is given with each occurrence along with any address information entered by the agency responsible for the list.

ID	Facility Name	Address	Database	Status
No "un-mapped" sites requested.				

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The data presented in this report should only be interpreted by an experienced environmental professional, as per EPA definition, that completely understands the potential inaccuracy of the data derived from others, the possible existence of contaminated occurrences that have not been listed, and the possibility that the governmental database misrepresents the actual status of an occurrence or listing. Prior to relying completely on any of the data within this report, an environmental professional should verify the accuracy of the information presented unless one of ERS's Environmental Professionals has interpreted the data and/or report.

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APPENDIX C
CITY DIRECTORIES
CHRONOLOGICAL SUMMARY

CHRONOLOGICAL CITY DIRECTORY SUMMARY
ORGANIZED BY STREET ADDRESS AND YEAR

ADDRESS	YEAR									
	1920	1930-40	1946	1951-56	1961	1969-70	1980-85	1990-96	2000	2005
621 W. MacArthur Blvd			John E. Anthon res	Leo Alexander res No listing (1956)	No listing	No listing	No listing	No listing	No listing	No listing
625 W. MacArthur Blvd 3740 Grove St			No listing	No listing (1951-56) Standard Station	No listing Standard Oil	No listing No listing	No listing ('80) Gd Samaritan ('85) No listing	Good Samaritan Church No listing	Good Samaritan Church No listing	Good Samaritan Church No listing
657 W. MacArthur Blvd.			Signal Service	Signal Service	Calhoun's Signal Service	ENCO service station	Burely's Detail Center	Burley's Detail Center	Burley's Detail Center	Downtown Glass Tinting
663-65 W. MacArthur Blvd			T.W. Helli res	T.W. Helli res (1951) Richard Egan (1956)	Mrs. M.R. Silva	Frank M. Woodyard Preston Ealy	Preston Ealy	Preston Ealy	Lavolia Baker	No listing
634 W. MacArthur Blvd			W.F. Kuhnle res L.J. Valerga res	Michael Martin res Elsie E. Dodd (1956)	W. Tiffieney	No listing	No listing	No listing	Richard Van Camp	No listing
640-46 W. MacArthur Blvd			No listing	No listing (1951-56)	Tri-Bay Construction	No listing	Vacant XXXX ('80) Quality Tune-('85)	Quality Tune-Up	Quality Tune-Up	Quality Tune-Up
652 W. MacArthur Blvd			Mrs. Jean Voit res	Shirley Jordan res Robert L. Hooper ('56)	Rose Bud Studio J. H. Hooper	Estelle Hughes	Eva Tucker ('80) XXXX ('85)	XXXX	XXXX	No listing
654 W. MacArthur Blvd			No listing	No listing (1951) Rose Daniels (1956)	Rose Daniels	Rose S. Daniels	Elouise Rawlins	Elouise Rawlins	XXXX	Brenda Appleby
656 W. MacArthur Blvd			James A Ford res	Raul Valencia res ('51) No listing (1956)	No listing	Frances & Reuben Land	No listing ('80) XXXX ('85)	XXXX	Nettie Lee Brandon	No listing
3801 Grove Street		Rose-Waterman Drug Co.	Pacific Telephone & Tel Waterman Drug Store #3	Burnett's Pharmacy	Burnett's Pharmacy	Vacant	Terry's Sound House	Terry's Sound House	Terry's Sound House	Terry's Sound House
3807 Grove Street			No listing	No listing (1951) Bush's Barber Sh ('56)	Louise's Well Groomed	Louise's Well Groomed	Vacant XXXX	XXXX (1990) Ishmallah's Hats	Ishmallah's Famous Hats	No listing
3813 Grove Street			New Bridge Inn	Johnny Curtin ('51-'56) New Bridge Inn (1956)	New Bridge Inn	Champagne Club	No listing	No listing	No listing	No listing
3817 Grove Street			Freada Jones res	Mary Boyes Clementina Carbone	Alice Ryia H. Nishita	Apartments	No listing	No listing	No listing	No listing
3819 Grove Street			No listing	No listing	Bush's Barber Shop	Mr. H's Barber Service	Vacant XXXX	No listing	No listing	No listing
3823 Grove Street			Simon's Moving Co.	Simon's Moving Co.	Simon's Moving Co	Percy Tucker	No listing	No listing	No listing	No listing
3829 Grove Street		Jacob Pearlman clothes presser	Olga Johnson residence	Olga Johnson residence	No listing	Rosie Mae Chiles	Rosie Mae Chiles	XXXX	Loyce Kelley	No listing
3831-33 Grove St			New Lake Liquor Store	Gallagher's Liquor S	No listing	Rosie's Little House U C Cleaners	Rosie's Little House	Rosie's Little House	XXXX	Joni McFarlin
3802 Grove Street	Rose-Waterman Drug Co.	No listing	No listing	No listing	No listing	No listing	No listing	No listing	No listing	No listing
3806 Grove Street			C.E. Black res	C.E. Black res T.T. Valerga res	T. Calarifi	No listing	No listing	No listing	Larry Armstrong	No listing
3810 Grove Street			Frank L. Burns res	No listing (1951) Joyce Jackson ('56)	No listing	Elnora Banks	Lionell Clark	No listing	Mohamed Mosleh	XXXX

CHRONOLOGICAL CITY DIRECTORY SUMMARY
ORGANIZED BY STREET ADDRESS AND YEAR

ADDRESS	YEAR									
	1928	1930-40	1946	1951-56	1961	1969-70	1980-85	1990-96	2000	2005
3812 Grove Street						Hunter Realty & Larry Jones Insuran	Velma Robinson ('85)	Douglas Blakey ('96)	Saad Awadalla	Doretha Jackson
3820 Grove Street			Central Shade Factory	Central Shade Factory Distinctive Interiors	Creative Promotions	Creative Promotions	Vacant XXXX	No listing	Roosevelt Thompson	No listing
3828 Grove Street			Clara's Beauty Shop	No listing (1951-56)	Top Flight Bldg Maintenance	Photography	Vacant XXXX	Bibleway Fellowship	Christian Bibleway Church	Christian Bibleway Church
3830-32 Grove St			A & B Furniture Co.	Gwendolyn Whitlow res	Service Beauty Supply	Esirg's Hair Food Company	Vacant XXXX	No listing	Vacant XXXX	No listing
3834 Grove Street			No listing	No Listing (1956)	Allied Sales Co.	New & Used Clothing	V. Robinson ('80) XXXX ('85)	No listing	No listing	No listing
3884 Grove Street	D.R. Hart gas station	D.R. Hart gas station	Dean's Expert Auto Repair	Gowan's Mobil service	Grove St Wash Rack	Luckett's Phillips 66 Grove St Wash	Grove St Wash Rack	Grove St Wash Rack	Grove St Wash Rack	Grove St Wash Rack
3701 Grove Street		A.F. McAllen gas station	Portz Bros. service station	Portz Bros. service station	Halls Service Sta	Hammond's Service	Hammond's Services	Hammond Services	Bernadine Hammond	No listing
3740 Grove Street			No listing	Standard Stations Inc.	Standard Station	Elbert Kimbrough Chevron	No listing	No listing	No listing	No listing
668 W. MacArthur Blvd			No listing	No listing (1951) David Williams	A.Hilliard	No listing	No listing	To Chi Tran	Long Nguyen Justin Vo	Justin Vo
670 W. MacArthur Blvd.			Mrs. E. L. Thornton	Mrs. E. L. Thornton	No listing	No listing	No listing ('80) XXXX ('85)	Vacant XXXX	Allen Jones	Suzette Nubie
674 W. MacArthur Blvd.			Walter E. Blakey res	No listing (1951) Allan D. Henderson	Ivory Ford	Ivory Ford	Ivory Ford	Vacant XXXX	James McConville	Li Li

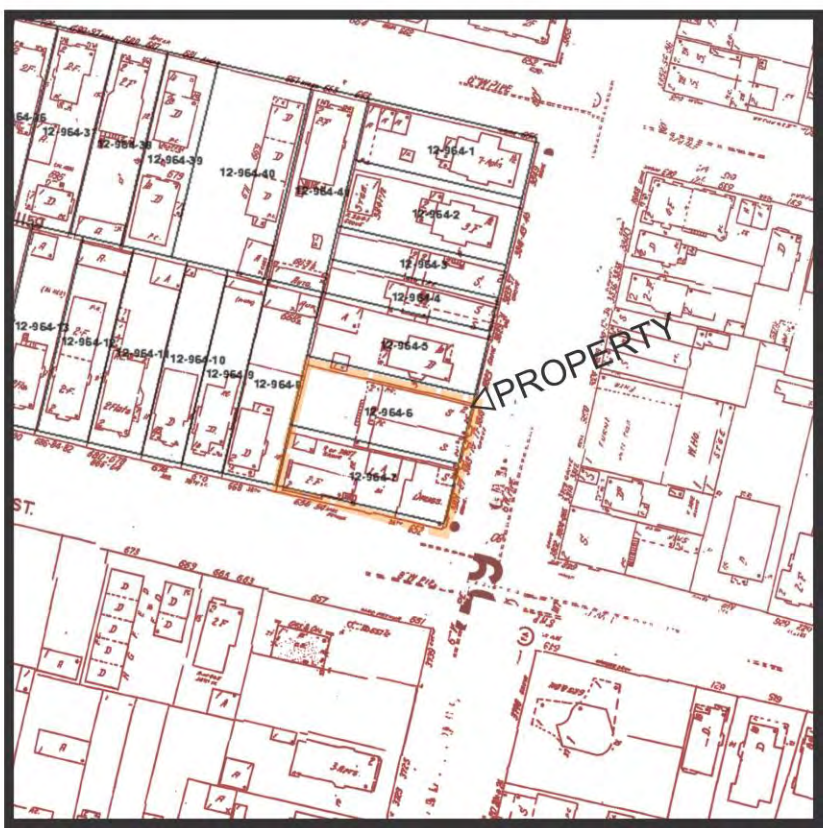
APPENDIX D
SANBORN MAPS


APGAR
1159
12-964-1
12-964-2
12-964-3
12-964-4
12-964-5
12-964-6
12-964-7
12-964-40
12-964-41
12-964-10
PROPERTY
38TH ST.
GROVE
1160
60 ST.

1902


PGAR
GROVE
12-964-1
12-964-2
12-964-3
12-964-4
12-964-5
12-964-6
12-964-7
12-964-9
12-964-10
12-964-38
12-964-39
12-964-40
12-964-41
PROPERTY
Scale of Feet.

1911


12-964-1
12-964-2
12-964-3
12-964-4
12-964-5
12-964-6
12-964-7
12-964-9
12-964-10
12-964-11
12-964-12
12-964-13
12-964-37
12-964-38
12-964-39
12-964-40
12-964-41
PROPERTY
ST.

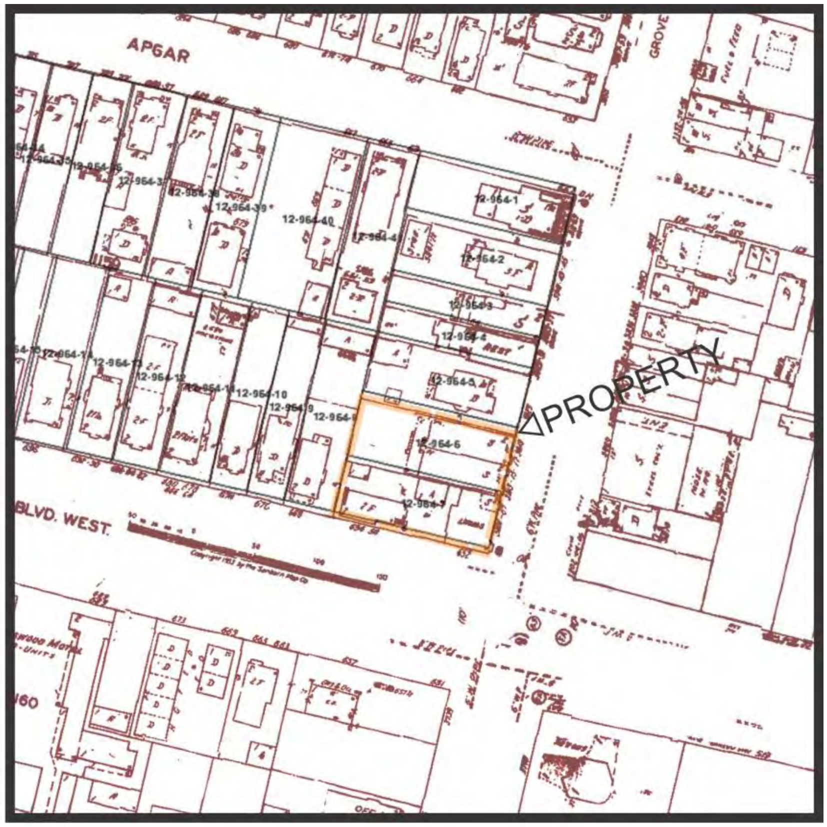
1951


APGAR
ARTHUR BLVD. WEST
(36TH ST.)
GROVE
PROPERTY

1952-54


LVD WEST
PROPERTY

1967



1969-70

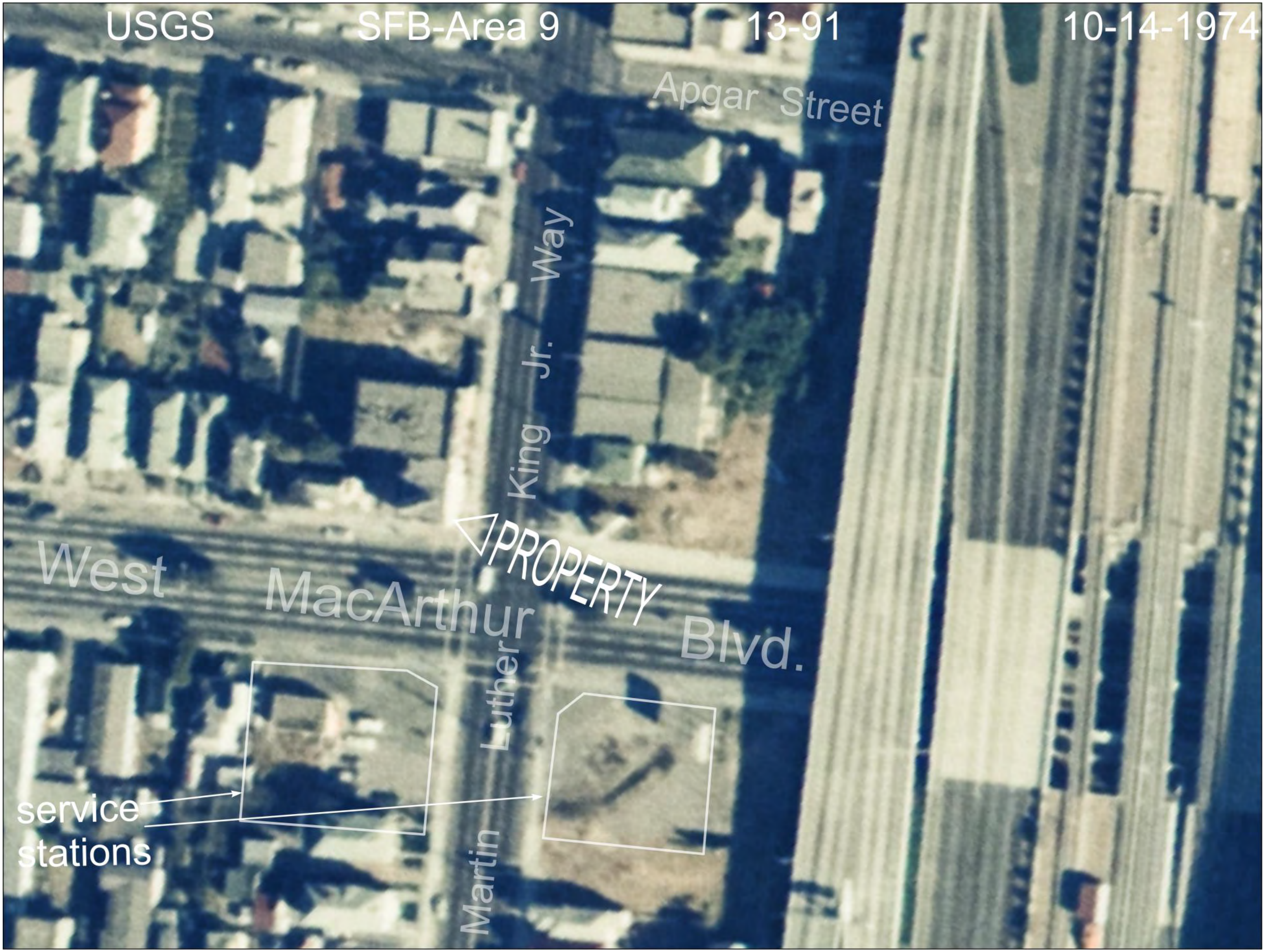
NO IMAGE

APPENDIX E
AERIAL PHOTOGRAPHIC IMAGES


USGS
GS-CP
6-40
10-28-1946
service stations
PROPERTY
39th Street
Apgar Street
W. MacArthur Blvd.
38th Street
service stations
West Street
Martin Luther King Jr. Way
Telegraph Ave.


USGS
GS-VUO
1-184
7-25-1958
39th Street
service stations
Apgar Street
Martin Luther King Jr. Way
W. MacArthur Blvd.
PROPERTY
service stations


USGS
GS-VBZJ
2-98
4-20-1968
Apgar Street
W. MacArthur Blvd.
Martin Luther King Jr. Way
PROPERTY
service
stations


USGS
SFB-Area 9
13-91
10-14-1974
Apgar Street
Martin Luther King Jr. Way
West MacArthur Blvd.
PROPERTY
service stations


USGS
GS-VEZR
1-41
10-1-1980
Apgar Street
Martin Luther King Jr. Way
West MacArthur Blvd.
PROPERTY
service station


USGS
GS-VFNZ-C
2-53
6-5-1991
Apgar Street
W. MacArthur Blvd.
Martin Luther King Jr. Way
PROPERTY
former
service
stations

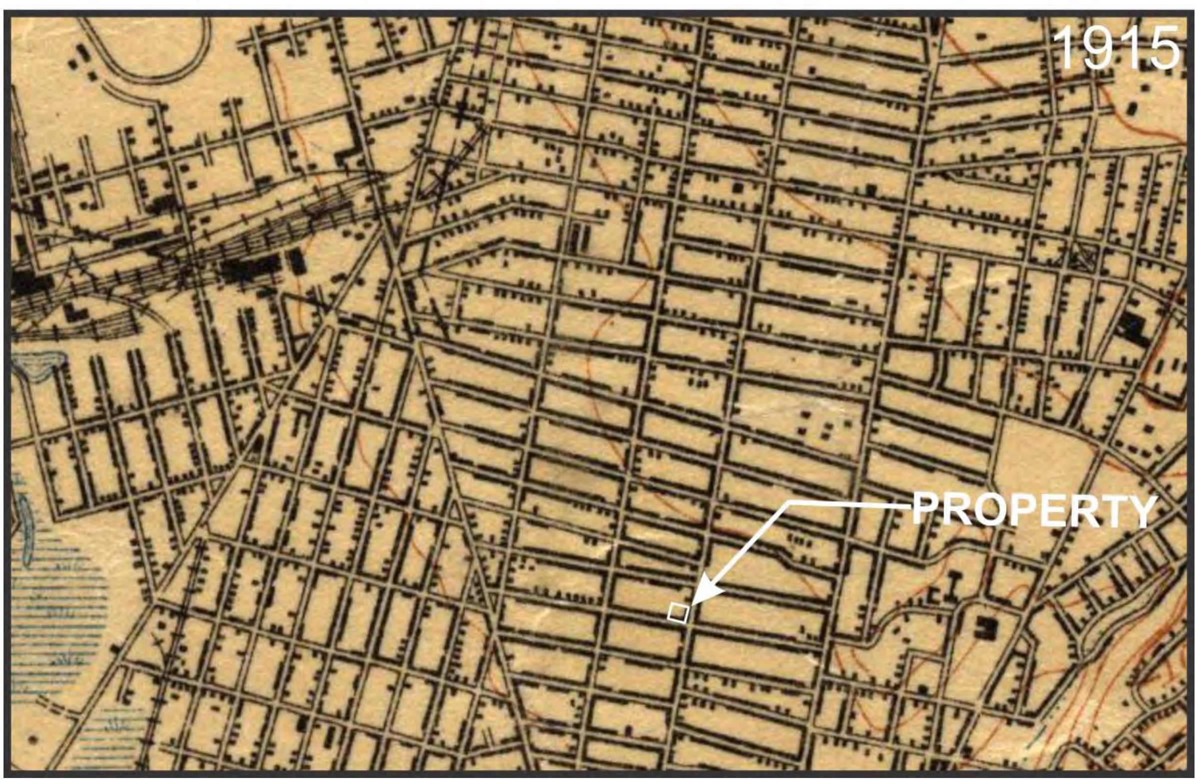

USGS
in Google Earth
12-31-2002
Apgar Street
Martin Luther King Jr. Way
W. MacArthur Blvd.
PROPERTY
former service stations
Image U.S. Geological Survey


USGS in Google Earth
5-31-2007
Apgar Street
Martin Luther King Jr. Way
W. MacArthur Blvd.
PROPERTY
former service stations


USGS
in Google Earth
8-6-2012
Apgar Street
Martin Luther King Jr. Way
W. MacArthur Blvd.
PROPERTY
former service stations

APPENDIX F
TOPOGRAPHIC MAPS


1895
PROPERTY

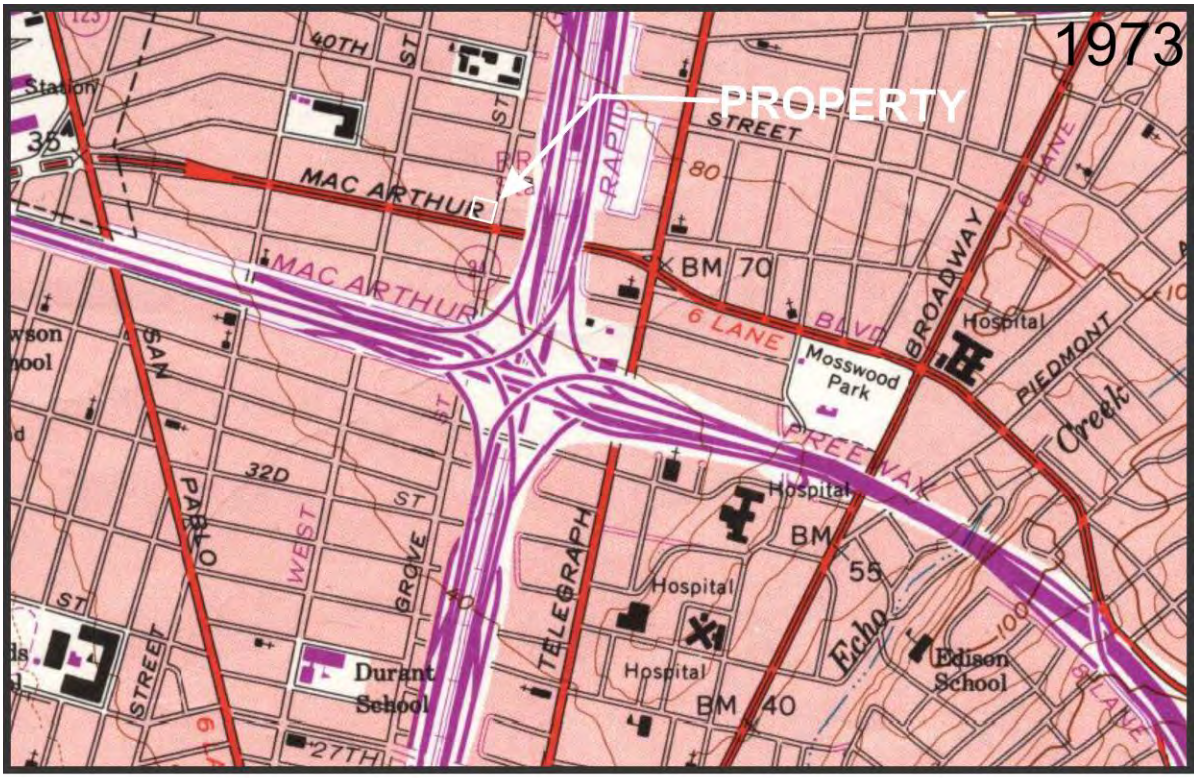

1915
PROPERTY

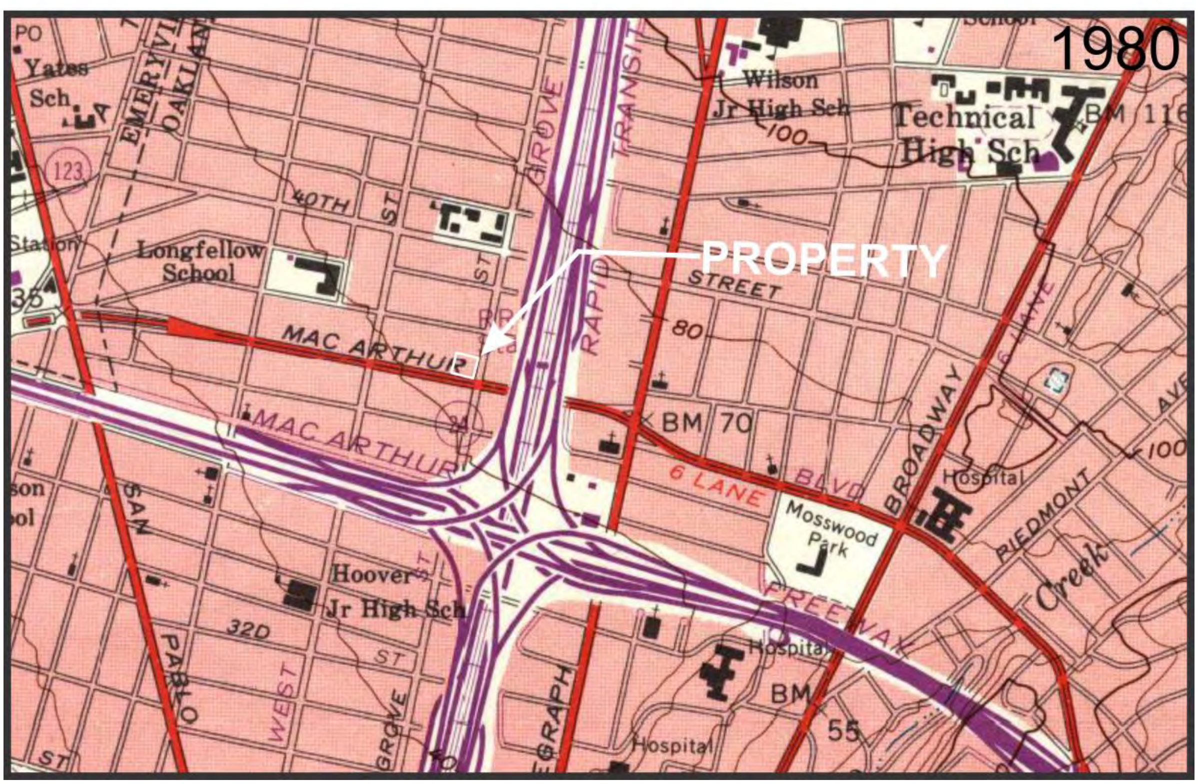

1942
PROPERTY


1948
PROPERTY
SACRAMENTO
BROADWAY
AVENUE


1959
PROPERTY
Temescal
Emery High Sch
Yates Sch
City Hall
EMERYVILLE
OAKLAND
Emerson School
Wilson Jr High Sch
Technical High Sch
Sacred Heart School
Longfellow School
40TH ST
STREET
MAC ARTHUR BLVD
6 LANE
4 LANE
BM 35
BM 43
BM 70
BM 116
Clawson School
Poplar Playground
Hoover Jr High Sch
Mosswood Park
BROADWAY
PIEDMONT AVE
Hospital
Creek
SAN PABLO
WEST ST
GROVE
28TH
32D
BM 55


1968
PROPERTY
55TH
Santa Fe School
52D
Temescal
Emery High Sch
Yates Sch
City Hall
EMERYVILLE
OAKLAND
Emerson School
Wilson Jr High Sch
Technical High Sch
Sacred Heart School
Longfellow School
40TH ST
STREET
MAC ARTHUR BLVD
MAC ARTHUR
RAPID TRANSIT
GROVE
580
BM 35
BM 70
6 LANE
Clawson School
Poplar Playground
Hoover Jr High Sch
Mosswood Park
BROADWAY
PIEDMONT
Hospital


1973
PROPERTY
40TH
ST
STREET
MAC ARTHUR
MAC ARTHUR
6 LANE
BLVD
BM 70
BROADWAY
Hospital
Mosswood
Park
PIEDMONT
Creek
FREEWAY
Hospital
BM
55
32D
ST
SAN
PABLO
WEST
GROVE
TELEGRAPH
Hospital
Hospital
Echo
Edison
School
Durant
School
BM 40
27TH
STREET
Station
35


1980
PROPERTY
Yates
Sch.
EMERYVILLE
OAKLAND
Wilson
Jr High Sch
Technical
High Sch
40TH
ST
Longfellow
School
STREET
MAC ARTHUR
MAC ARTHUR
BM 70
6 LANE
BLVD
BROADWAY
Hospital
Mosswood
Park
PIEDMONT
Creek
FREEWAY
Hoover
Jr High Sch
32D
ST
SAN
PABLO
WEST
GROVE
RAPID
TRANSIT
Hospital
BM
55
Hospital
Station
35

APPENDIX G
LABORATORY TEST RESULTS

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder:	1706881	**Amended:**	07/13/2017

Report Created for: Environmental Service

2220 Oxford Street
Berkeley, CA 94704

Project Contact: Marc Papineau
Project P.O.:
Project Name: 2017-28; 3801-07 MLK

Project Received: 06/16/2017

Analytical Report reviewed & approved for release on 06/23/2017 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Environmental Service
Project: 2017-28; 3801-07 MLK
WorkOrder: 1706881

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 μm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Environmental Service
Project: 2017-28; 3801-07 MLK
WorkOrder: 1706881

Analytical Qualifiers

J	Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
P	Agreement between quantitative confirmation results exceed method recommended limits

Quality Control Qualifiers

F2	LCS/LCSD recovery and/or RPD is out of acceptance criteria.
F13	Indigenous sample results too high for a representative matrix spike analysis.

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B
Date Prepared:	6/19/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS4-0.5	1706881-004A	Soil	06/14/2017 10:52	GC22	140676

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	06/22/2017 23:16
a-BHC	ND	0.00010	0.0010	1	06/22/2017 23:16
b-BHC	ND	0.00025	0.0010	1	06/22/2017 23:16
d-BHC	ND	0.00037	0.0010	1	06/22/2017 23:16
g-BHC	ND	0.000097	0.0010	1	06/22/2017 23:16
Chlordane (Technical)	**0.035**	0.016	0.025	1	06/22/2017 23:16
a-Chlordane	**0.0051**	0.00047	0.0010	1	06/22/2017 23:16
g-Chlordane	**0.0029**	0.00021	0.0010	1	06/22/2017 23:16
p,p-DDD	**0.0013**	0.00014	0.0010	1	06/22/2017 23:16
p,p-DDE	**0.0041**	0.00032	0.0010	1	06/22/2017 23:16
p,p-DDT	**0.048**	0.00043	0.0010	1	06/22/2017 23:16
Dieldrin	**0.041**	0.00033	0.0010	1	06/22/2017 23:16
Endosulfan I	ND	0.00065	0.0010	1	06/22/2017 23:16
Endosulfan II	ND	0.00020	0.0010	1	06/22/2017 23:16
Endosulfan sulfate	ND	0.00063	0.0010	1	06/22/2017 23:16
Endrin	**0.0020**	0.00097	0.0010	1	06/22/2017 23:16
Endrin aldehyde	ND	0.00020	0.0010	1	06/22/2017 23:16
Endrin ketone	ND	0.00013	0.0010	1	06/22/2017 23:16
Heptachlor	ND	0.00021	0.0010	1	06/22/2017 23:16
Heptachlor epoxide	ND	0.00020	0.0010	1	06/22/2017 23:16
Hexachlorobenzene	ND	0.00027	0.010	1	06/22/2017 23:16
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	06/22/2017 23:16
Methoxychlor	**0.012**	0.00089	0.0010	1	06/22/2017 23:16
Toxaphene	ND	0.035	0.050	1	06/22/2017 23:16

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	104	70-130	06/22/2017 23:16

Analyst(s): CK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B
Date Prepared:	6/19/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS9-0.5	**1706881-009A**	**Soil**	**06/14/2017 11:16**	**GC22**	**140678**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	06/23/2017 09:27
a-BHC	ND	0.00010	0.0010	1	06/23/2017 09:27
b-BHC	ND	0.00025	0.0010	1	06/23/2017 09:27
d-BHC	ND	0.00037	0.0010	1	06/23/2017 09:27
g-BHC	ND	0.000097	0.0010	1	06/23/2017 09:27
Chlordane (Technical)	ND	0.016	0.025	1	06/23/2017 09:27
a-Chlordane	**0.0022**	0.00047	0.0010	1	06/23/2017 09:27
g-Chlordane	**0.0014**	0.00021	0.0010	1	06/23/2017 09:27
p,p-DDD	ND	0.00014	0.0010	1	06/23/2017 09:27
p,p-DDE	**0.0024**	0.00032	0.0010	1	06/23/2017 09:27
p,p-DDT	**0.0073**	0.00043	0.0010	1	06/23/2017 09:27
Dieldrin	**0.015**	0.00033	0.0010	1	06/23/2017 09:27
Endosulfan I	ND	0.00065	0.0010	1	06/23/2017 09:27
Endosulfan II	ND	0.00020	0.0010	1	06/23/2017 09:27
Endosulfan sulfate	ND	0.00063	0.0010	1	06/23/2017 09:27
Endrin	ND	0.00042	0.0010	1	06/23/2017 09:27
Endrin aldehyde	ND	0.00020	0.0010	1	06/23/2017 09:27
Endrin ketone	ND	0.00013	0.0010	1	06/23/2017 09:27
Heptachlor	ND	0.00021	0.0010	1	06/23/2017 09:27
Heptachlor epoxide	ND	0.00020	0.0010	1	06/23/2017 09:27
Hexachlorobenzene	ND	0.00027	0.010	1	06/23/2017 09:27
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	06/23/2017 09:27
Methoxychlor	ND	0.00089	0.0010	1	06/23/2017 09:27
Toxaphene	ND	0.035	0.050	1	06/23/2017 09:27

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	116	70-130	06/23/2017 09:27

Analyst(s): CK

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NELAP 4033ORELAP

Angela Rydelius, Lab Manager

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B
Date Prepared:	6/19/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS10-0.5	1706881-010A	Soil	06/14/2017 11:19	GC22	140678

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	**0.00045**	J	0.00027	0.0010	1	06/23/2017 10:02
a-BHC	ND		0.00010	0.0010	1	06/23/2017 10:02
b-BHC	ND		0.00025	0.0010	1	06/23/2017 10:02
d-BHC	ND		0.00037	0.0010	1	06/23/2017 10:02
g-BHC	ND		0.000097	0.0010	1	06/23/2017 10:02
Chlordane (Technical)	**0.10**		0.016	0.025	1	06/23/2017 10:02
a-Chlordane	**0.019**		0.00047	0.0010	1	06/23/2017 10:02
g-Chlordane	**0.0096**		0.00021	0.0010	1	06/23/2017 10:02
p,p-DDD	**0.0011**		0.00014	0.0010	1	06/23/2017 10:02
p,p-DDE	**0.020**		0.00032	0.0010	1	06/23/2017 10:02
p,p-DDT	**0.040**		0.00043	0.0010	1	06/23/2017 10:02
Dieldrin	**0.16**		0.00033	0.0010	1	06/23/2017 10:02
Endosulfan I	ND		0.00065	0.0010	1	06/23/2017 10:02
Endosulfan II	ND		0.00020	0.0010	1	06/23/2017 10:02
Endosulfan sulfate	ND		0.00063	0.0010	1	06/23/2017 10:02
Endrin	**0.0022**		0.00042	0.0010	1	06/23/2017 10:02
Endrin aldehyde	ND		0.00020	0.0010	1	06/23/2017 10:02
Endrin ketone	ND		0.00013	0.0010	1	06/23/2017 10:02
Heptachlor	ND		0.00021	0.0010	1	06/23/2017 10:02
Heptachlor epoxide	**0.0028**		0.00020	0.0010	1	06/23/2017 10:02
Hexachlorobenzene	**0.00076**	J	0.00027	0.010	1	06/23/2017 10:02
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	06/23/2017 10:02
Methoxychlor	ND		0.00089	0.0010	1	06/23/2017 10:02
Toxaphene	ND		0.035	0.050	1	06/23/2017 10:02

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	105	70-130	06/23/2017 10:02

Analyst(s): CK

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NELAP 4033ORELAP

Angela Rydelius, Lab Manager

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B
Date Prepared:	6/19/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS11-0.5	1706881-011A	Soil	06/14/2017 11:23	GC22	140678

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	06/23/2017 10:36
a-BHC	ND		0.00010	0.0010	1	06/23/2017 10:36
b-BHC	ND		0.00025	0.0010	1	06/23/2017 10:36
d-BHC	ND		0.00037	0.0010	1	06/23/2017 10:36
g-BHC	ND		0.000097	0.0010	1	06/23/2017 10:36
Chlordane (Technical)	**0.051**		0.016	0.025	1	06/23/2017 10:36
a-Chlordane	**0.0049**		0.00047	0.0010	1	06/23/2017 10:36
g-Chlordane	**0.0041**		0.00021	0.0010	1	06/23/2017 10:36
p,p-DDD	**0.00054**	J	0.00014	0.0010	1	06/23/2017 10:36
p,p-DDE	**0.0059**		0.00032	0.0010	1	06/23/2017 10:36
p,p-DDT	**0.039**		0.00043	0.0010	1	06/23/2017 10:36
Dieldrin	**0.0020**		0.00033	0.0010	1	06/23/2017 10:36
Endosulfan I	ND		0.00065	0.0010	1	06/23/2017 10:36
Endosulfan II	ND		0.00020	0.0010	1	06/23/2017 10:36
Endosulfan sulfate	ND		0.00063	0.0010	1	06/23/2017 10:36
Endrin	ND		0.00097	0.0010	1	06/23/2017 10:36
Endrin aldehyde	ND		0.00020	0.0010	1	06/23/2017 10:36
Endrin ketone	ND		0.00013	0.0010	1	06/23/2017 10:36
Heptachlor	ND		0.00021	0.0010	1	06/23/2017 10:36
Heptachlor epoxide	ND		0.00020	0.0010	1	06/23/2017 10:36
Hexachlorobenzene	ND		0.00027	0.010	1	06/23/2017 10:36
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	06/23/2017 10:36
Methoxychlor	**0.0024**		0.00089	0.0010	1	06/23/2017 10:36
Toxaphene	ND		0.035	0.050	1	06/23/2017 10:36

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	111	70-130	06/23/2017 10:36

Analyst(s): CK

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1-0.5	**1706881-001A**	**Soil**	**06/14/2017 10:37**	**GC22**	**141965**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	07/11/2017 14:45
a-BHC	ND		0.00010	0.0010	1	07/11/2017 14:45
b-BHC	ND		0.00025	0.0010	1	07/11/2017 14:45
d-BHC	ND		0.00037	0.0010	1	07/11/2017 14:45
g-BHC	ND		0.000097	0.0010	1	07/11/2017 14:45
Chlordane (Technical)	**0.083**		0.016	0.025	1	07/11/2017 14:45
a-Chlordane	**0.012**		0.00047	0.0010	1	07/11/2017 14:45
g-Chlordane	**0.0097**		0.00021	0.0010	1	07/11/2017 14:45
p,p-DDD	**0.015**		0.00014	0.0010	1	07/11/2017 14:45
p,p-DDE	**0.011**		0.00032	0.0010	1	07/11/2017 14:45
p,p-DDT	**0.11**		0.00043	0.0010	1	07/11/2017 14:45
Dieldrin	**0.014**		0.00033	0.0010	1	07/11/2017 14:45
Endosulfan I	ND		0.00065	0.0010	1	07/11/2017 14:45
Endosulfan II	ND		0.00020	0.0010	1	07/11/2017 14:45
Endosulfan sulfate	ND		0.00063	0.0010	1	07/11/2017 14:45
Endrin	**0.0025**		0.00042	0.0010	1	07/11/2017 14:45
Endrin aldehyde	ND		0.00020	0.0010	1	07/11/2017 14:45
Endrin ketone	ND		0.00013	0.0010	1	07/11/2017 14:45
Heptachlor	ND		0.00021	0.0010	1	07/11/2017 14:45
Heptachlor epoxide	**0.00080**	JP	0.00020	0.0010	1	07/11/2017 14:45
Hexachlorobenzene	**0.00036**	J	0.00027	0.010	1	07/11/2017 14:45
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	07/11/2017 14:45
Methoxychlor	ND		0.00089	0.0010	1	07/11/2017 14:45
Toxaphene	ND		0.035	0.050	1	07/11/2017 14:45

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	106	70-130	07/11/2017 14:45

Analyst(s): CK

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NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS2-0.5	**1706881-002A**	**Soil**	**06/14/2017 10:43**	**GC22**	**141965**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	07/11/2017 15:20
a-BHC	ND		0.00010	0.0010	1	07/11/2017 15:20
b-BHC	ND		0.00025	0.0010	1	07/11/2017 15:20
d-BHC	ND		0.00037	0.0010	1	07/11/2017 15:20
g-BHC	ND		0.000097	0.0010	1	07/11/2017 15:20
Chlordane (Technical)	**0.21**		0.016	0.025	1	07/11/2017 15:20
a-Chlordane	**0.035**		0.00047	0.0010	1	07/11/2017 15:20
g-Chlordane	**0.027**		0.00021	0.0010	1	07/11/2017 15:20
p,p-DDD	**0.041**		0.00014	0.0010	1	07/11/2017 15:20
p,p-DDE	**0.016**		0.00032	0.0010	1	07/11/2017 15:20
p,p-DDT	**0.36**		0.00043	0.0010	1	07/11/2017 15:20
Dieldrin	**0.019**	P	0.00033	0.0010	1	07/11/2017 15:20
Endosulfan I	ND		0.00065	0.0010	1	07/11/2017 15:20
Endosulfan II	ND		0.00020	0.0010	1	07/11/2017 15:20
Endosulfan sulfate	ND		0.00063	0.0010	1	07/11/2017 15:20
Endrin	ND		0.00042	0.0010	1	07/11/2017 15:20
Endrin aldehyde	ND		0.00020	0.0010	1	07/11/2017 15:20
Endrin ketone	ND		0.00013	0.0010	1	07/11/2017 15:20
Heptachlor	ND		0.00021	0.0010	1	07/11/2017 15:20
Heptachlor epoxide	**0.0019**	P	0.00020	0.0010	1	07/11/2017 15:20
Hexachlorobenzene	ND		0.00027	0.010	1	07/11/2017 15:20
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	07/11/2017 15:20
Methoxychlor	ND		0.00089	0.0010	1	07/11/2017 15:20
Toxaphene	ND		0.035	0.050	1	07/11/2017 15:20

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	116	70-130	07/11/2017 15:20

Analyst(s): CK

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NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS3-0.5	1706881-003A	Soil	06/14/2017 10:47	GC22	141965

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	07/11/2017 15:54
a-BHC	ND		0.00010	0.0010	1	07/11/2017 15:54
b-BHC	ND		0.00025	0.0010	1	07/11/2017 15:54
d-BHC	ND		0.00037	0.0010	1	07/11/2017 15:54
g-BHC	ND		0.000097	0.0010	1	07/11/2017 15:54
Chlordane (Technical)	**1.2**		0.080	0.12	5	07/11/2017 19:58
a-Chlordane	**0.19**		0.00047	0.0010	1	07/11/2017 15:54
g-Chlordane	**0.16**		0.00021	0.0010	1	07/11/2017 15:54
p,p-DDD	**0.091**		0.00014	0.0010	1	07/11/2017 15:54
p,p-DDE	**0.048**		0.00032	0.0010	1	07/11/2017 15:54
p,p-DDT	**0.84**		0.0022	0.0050	5	07/11/2017 19:58
Dieldrin	**0.031**	P	0.00033	0.0010	1	07/11/2017 15:54
Endosulfan I	ND		0.00065	0.0010	1	07/11/2017 15:54
Endosulfan II	ND		0.00020	0.0010	1	07/11/2017 15:54
Endosulfan sulfate	ND		0.00063	0.0010	1	07/11/2017 15:54
Endrin	ND		0.00042	0.0010	1	07/11/2017 15:54
Endrin aldehyde	ND		0.00020	0.0010	1	07/11/2017 15:54
Endrin ketone	ND		0.00013	0.0010	1	07/11/2017 15:54
Heptachlor	**0.0021**		0.00021	0.0010	1	07/11/2017 15:54
Heptachlor epoxide	**0.0063**	P	0.00020	0.0010	1	07/11/2017 15:54
Hexachlorobenzene	ND		0.00027	0.010	1	07/11/2017 15:54
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	07/11/2017 15:54
Methoxychlor	ND		0.00089	0.0010	1	07/11/2017 15:54
Toxaphene	ND		0.035	0.050	1	07/11/2017 15:54

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	130	70-130	07/11/2017 15:54

Analyst(s): CK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS5-0.5	**1706881-005A**	**Soil**	**06/14/2017 10:56**	**GC22**	**141965**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	07/11/2017 16:30
a-BHC	ND		0.00010	0.0010	1	07/11/2017 16:30
b-BHC	ND		0.00025	0.0010	1	07/11/2017 16:30
d-BHC	ND		0.00037	0.0010	1	07/11/2017 16:30
g-BHC	ND		0.000097	0.0010	1	07/11/2017 16:30
Chlordane (Technical)	**0.28**		0.016	0.025	1	07/11/2017 16:30
a-Chlordane	**0.046**		0.00047	0.0010	1	07/11/2017 16:30
g-Chlordane	**0.041**		0.00021	0.0010	1	07/11/2017 16:30
p,p-DDD	**0.028**		0.00014	0.0010	1	07/11/2017 16:30
p,p-DDE	**0.0092**		0.00032	0.0010	1	07/11/2017 16:30
p,p-DDT	**0.42**		0.00043	0.0010	1	07/11/2017 16:30
Dieldrin	**0.010**	P	0.00033	0.0010	1	07/11/2017 16:30
Endosulfan I	ND		0.00065	0.0010	1	07/11/2017 16:30
Endosulfan II	ND		0.00020	0.0010	1	07/11/2017 16:30
Endosulfan sulfate	ND		0.00063	0.0010	1	07/11/2017 16:30
Endrin	ND		0.00042	0.0010	1	07/11/2017 16:30
Endrin aldehyde	ND		0.00020	0.0010	1	07/11/2017 16:30
Endrin ketone	ND		0.00013	0.0010	1	07/11/2017 16:30
Heptachlor	ND		0.00021	0.0010	1	07/11/2017 16:30
Heptachlor epoxide	**0.0022**	P	0.00020	0.0010	1	07/11/2017 16:30
Hexachlorobenzene	**0.00040**	J	0.00027	0.010	1	07/11/2017 16:30
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	07/11/2017 16:30
Methoxychlor	ND		0.00089	0.0010	1	07/11/2017 16:30
Toxaphene	ND		0.035	0.050	1	07/11/2017 16:30

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	100	70-130	07/11/2017 16:30

Analyst(s): CK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS6-0.5	**1706881-006A**	**Soil**	**06/14/2017 11:00**	**GC22**	**140811**

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	06/21/2017 21:34
a-BHC	ND	0.00010	0.0010	1	06/21/2017 21:34
b-BHC	ND	0.00025	0.0010	1	06/21/2017 21:34
d-BHC	ND	0.00037	0.0010	1	06/21/2017 21:34
g-BHC	ND	0.000097	0.0010	1	06/21/2017 21:34
Chlordane (Technical)	**0.10**	0.016	0.025	1	06/21/2017 21:34
a-Chlordane	**0.019**	0.00047	0.0010	1	06/21/2017 21:34
g-Chlordane	**0.018**	0.00021	0.0010	1	06/21/2017 21:34
p,p-DDD	**0.0030**	0.00014	0.0010	1	06/21/2017 21:34
p,p-DDE	**0.010**	0.00032	0.0010	1	06/21/2017 21:34
p,p-DDT	**0.040**	0.00043	0.0010	1	06/21/2017 21:34
Dieldrin	**0.016**	0.00033	0.0010	1	06/21/2017 21:34
Endosulfan I	ND	0.00065	0.0010	1	06/21/2017 21:34
Endosulfan II	ND	0.00020	0.0010	1	06/21/2017 21:34
Endosulfan sulfate	ND	0.00063	0.0010	1	06/21/2017 21:34
Endrin	ND	0.00042	0.0010	1	06/21/2017 21:34
Endrin aldehyde	ND	0.00020	0.0010	1	06/21/2017 21:34
Endrin ketone	ND	0.00013	0.0010	1	06/21/2017 21:34
Heptachlor	ND	0.00021	0.0010	1	06/21/2017 21:34
Heptachlor epoxide	ND	0.00020	0.0010	1	06/21/2017 21:34
Hexachlorobenzene	ND	0.00027	0.010	1	06/21/2017 21:34
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	06/21/2017 21:34
Methoxychlor	ND	0.00089	0.0010	1	06/21/2017 21:34
Toxaphene	ND	0.035	0.050	1	06/21/2017 21:34

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	101	70-130	06/21/2017 21:34

Analyst(s): CK

(Cont.)

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS7-0.5	**1706881-007A**	**Soil**	**06/14/2017 11:06**	**GC22**	**140811**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	06/21/2017 19:48
a-BHC	ND		0.00010	0.0010	1	06/21/2017 19:48
b-BHC	ND		0.00025	0.0010	1	06/21/2017 19:48
d-BHC	ND		0.00037	0.0010	1	06/21/2017 19:48
g-BHC	ND		0.000097	0.0010	1	06/21/2017 19:48
Chlordane (Technical)	**0.074**		0.016	0.025	1	06/21/2017 19:48
a-Chlordane	**0.0066**		0.00047	0.0010	1	06/21/2017 19:48
g-Chlordane	**0.0075**		0.00021	0.0010	1	06/21/2017 19:48
p,p-DDD	**0.0019**		0.00014	0.0010	1	06/21/2017 19:48
p,p-DDE	**0.0038**	P	0.00032	0.0010	1	06/21/2017 19:48
p,p-DDT	**0.052**		0.00043	0.0010	1	06/21/2017 19:48
Dieldrin	**0.0021**		0.00033	0.0010	1	06/21/2017 19:48
Endosulfan I	ND		0.00065	0.0010	1	06/21/2017 19:48
Endosulfan II	ND		0.00020	0.0010	1	06/21/2017 19:48
Endosulfan sulfate	ND		0.00063	0.0010	1	06/21/2017 19:48
Endrin	ND		0.00042	0.0010	1	06/21/2017 19:48
Endrin aldehyde	ND		0.00020	0.0010	1	06/21/2017 19:48
Endrin ketone	ND		0.00013	0.0010	1	06/21/2017 19:48
Heptachlor	ND		0.00021	0.0010	1	06/21/2017 19:48
Heptachlor epoxide	ND		0.00020	0.0010	1	06/21/2017 19:48
Hexachlorobenzene	ND		0.00027	0.010	1	06/21/2017 19:48
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	06/21/2017 19:48
Methoxychlor	ND		0.00089	0.0010	1	06/21/2017 19:48
Toxaphene	ND		0.035	0.050	1	06/21/2017 19:48

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	123	70-130	06/21/2017 19:48

Analyst(s): CK

(Cont.)

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1534 Willow Pass Road, Pittsburg, CA 94565-1701
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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3550B/3620B/3640A
Date Prepared:	6/19/17-7/7/17	**Analytical Method:**	SW8081A
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/kg

Organochlorine Pesticides w/ GPC & Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS8-0.5	**1706881-008A**	**Soil**	**06/14/2017 11:09**	**GC22**	**141965**

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	ND		0.00027	0.0010	1	07/11/2017 14:10
a-BHC	ND		0.00010	0.0010	1	07/11/2017 14:10
b-BHC	ND		0.00025	0.0010	1	07/11/2017 14:10
d-BHC	ND		0.00037	0.0010	1	07/11/2017 14:10
g-BHC	ND		0.000097	0.0010	1	07/11/2017 14:10
Chlordane (Technical)	**0.27**		0.016	0.025	1	07/11/2017 14:10
a-Chlordane	**0.052**		0.00047	0.0010	1	07/11/2017 14:10
g-Chlordane	**0.035**		0.00021	0.0010	1	07/11/2017 14:10
p,p-DDD	**0.015**	P	0.00014	0.0010	1	07/11/2017 14:10
p,p-DDE	**0.025**		0.00032	0.0010	1	07/11/2017 14:10
p,p-DDT	**0.12**		0.00043	0.0010	1	07/11/2017 14:10
Dieldrin	**0.012**	P	0.00033	0.0010	1	07/11/2017 14:10
Endosulfan I	ND		0.00065	0.0010	1	07/11/2017 14:10
Endosulfan II	ND		0.00020	0.0010	1	07/11/2017 14:10
Endosulfan sulfate	ND		0.00063	0.0010	1	07/11/2017 14:10
Endrin	ND		0.00042	0.0010	1	07/11/2017 14:10
Endrin aldehyde	ND		0.00020	0.0010	1	07/11/2017 14:10
Endrin ketone	ND		0.00013	0.0010	1	07/11/2017 14:10
Heptachlor	**0.0011**		0.00021	0.0010	1	07/11/2017 14:10
Heptachlor epoxide	**0.0029**	P	0.00020	0.0010	1	07/11/2017 14:10
Hexachlorobenzene	ND		0.00027	0.010	1	07/11/2017 14:10
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	07/11/2017 14:10
Methoxychlor	ND		0.00089	0.0010	1	07/11/2017 14:10
Toxaphene	ND		0.035	0.050	1	07/11/2017 14:10

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	120	70-130	07/11/2017 14:10

Analyst(s): CK

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3050B
Date Prepared:	6/19/17	**Analytical Method:**	SW6020
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS1-0.5	**1706881-001A**	**Soil**	**06/14/2017 10:37**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**2300**	5.0	10	06/20/2017 13:04

Surrogates	REC (%)	Limits	
Terbium	94	70-130	06/20/2017 13:04

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS2-0.5	**1706881-002A**	**Soil**	**06/14/2017 10:43**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**2600**	5.0	10	06/21/2017 12:59

Surrogates	REC (%)	Limits	
Terbium	101	70-130	06/21/2017 12:59

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS3-0.5	**1706881-003A**	**Soil**	**06/14/2017 10:47**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**1400**	5.0	10	06/21/2017 13:05

Surrogates	REC (%)	Limits	
Terbium	97	70-130	06/21/2017 13:05

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS4-0.5	**1706881-004A**	**Soil**	**06/14/2017 10:52**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**160**	0.50	1	06/20/2017 18:40

Surrogates	REC (%)	Limits	
Terbium	113	70-130	06/20/2017 18:40

Analyst(s): JC

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Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3050B
Date Prepared:	6/19/17	**Analytical Method:**	SW6020
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS5-0.5	**1706881-005A**	**Soil**	**06/14/2017 10:56**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**850**	5.0	10	06/21/2017 13:11

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	107	70-130	06/21/2017 13:11

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS6-0.5	**1706881-006A**	**Soil**	**06/14/2017 11:00**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**430**	0.50	1	06/20/2017 18:53

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	102	70-130	06/20/2017 18:53

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS7-0.5	**1706881-007A**	**Soil**	**06/14/2017 11:06**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**590**	5.0	10	06/21/2017 13:17

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	103	70-130	06/21/2017 13:17

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS8-0.5	**1706881-008A**	**Soil**	**06/14/2017 11:09**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**870**	5.0	10	06/21/2017 13:24

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	102	70-130	06/21/2017 13:24

Analyst(s): ND

(Cont.)

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Received:	6/16/17 18:30	**Extraction Method:**	SW3050B
Date Prepared:	6/19/17	**Analytical Method:**	SW6020
Project:	2017-28; 3801-07 MLK	**Unit:**	mg/Kg

Lead

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS9-0.5	**1706881-009A**	**Soil**	**06/14/2017 11:16**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**300**	0.50	1	06/20/2017 19:11

Surrogates	REC (%)	Limits		
Terbium	103	70-130		06/20/2017 19:11

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS10-0.5	**1706881-010A**	**Soil**	**06/14/2017 11:19**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**160**	0.50	1	06/20/2017 19:17

Surrogates	REC (%)	Limits		
Terbium	102	70-130		06/20/2017 19:17

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SS11-0.5	**1706881-011A**	**Soil**	**06/14/2017 11:23**	**ICP-MS3**	**140644**

Analytes	Result	RL	DF	Date Analyzed
Lead	**970**	5.0	10	06/21/2017 13:30

Surrogates	REC (%)	Limits		
Terbium	101	70-130		06/21/2017 13:30

Analyst(s): ND

Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Prepared:	6/19/17	**BatchID:**	140676
Date Analyzed:	6/22/17 - 6/26/17	**Extraction Method:**	SW3550B/3620B
Instrument:	GC20, GC22	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	2017-28; 3801-07 MLK	**Sample ID:**	MB/LCS-140676

QC Summary Report for SW8081A w/ Florisil Clean-up

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0556	0.00027	0.0010	0.050	-	111	70-130
a-BHC	ND	0.0615	0.00010	0.0010	0.050	-	123	70-130
b-BHC	ND	0.0532	0.00025	0.0010	0.050	-	106	70-130
d-BHC	ND	0.0588	0.00037	0.0010	0.050	-	118	70-130
g-BHC	ND	0.0573	0.000097	0.0010	0.050	-	115	70-130
Chlordane (Technical)	ND	-	0.016	0.025	-	-	-	-
a-Chlordane	ND	0.0553	0.00047	0.0010	0.050	-	111	70-130
g-Chlordane	ND	0.0576	0.00021	0.0010	0.050	-	115	70-130
p,p-DDD	ND	0.0557	0.00014	0.0010	0.050	-	111	70-130
p,p-DDE	ND	0.0577	0.00032	0.0010	0.050	-	115	70-130
p,p-DDT	ND	0.0536	0.00043	0.0010	0.050	-	107	70-130
Dieldrin	ND	0.0646	0.00033	0.0010	0.050	-	129	70-130
Endosulfan I	ND	0.0548	0.00065	0.0010	0.050	-	110	70-130
Endosulfan II	ND	0.0557	0.00020	0.0010	0.050	-	111	70-130
Endosulfan sulfate	ND	0.0597	0.00063	0.0010	0.050	-	119	70-130
Endrin	ND	0.0506	0.00042	0.0010	0.050	-	101	70-130
Endrin aldehyde	ND	0.0365	0.00020	0.0010	0.050	-	73	70-130
Endrin ketone	ND	0.0621	0.00013	0.0010	0.050	-	124	70-130
Heptachlor	ND	0.0525	0.00021	0.0010	0.050	-	105	70-130
Heptachlor epoxide	ND	0.0557	0.00020	0.0010	0.050	-	111	70-130
Hexachlorobenzene	ND	-	0.00027	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.00040	0.020	-	-	-	-
Methoxychlor	ND	0.0537	0.00089	0.0010	0.050	-	107	70-130
Toxaphene	ND	-	0.035	0.050	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	0.05826	0.0466			0.050	117	93	70-130

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Prepared:	6/19/17	**BatchID:**	140678
Date Analyzed:	6/23/17 - 6/26/17	**Extraction Method:**	SW3550B/3620B
Instrument:	GC20, GC22	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	2017-28; 3801-07 MLK	**Sample ID:**	MB/LCS-140678

QC Summary Report for SW8081A w/ Florisil Clean-up

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0553	0.00027	0.0010	0.050	-	111	70-130
a-BHC	ND	0.0605	0.00010	0.0010	0.050	-	121	70-130
b-BHC	ND	0.0530	0.00025	0.0010	0.050	-	106	70-130
d-BHC	ND	0.0578	0.00037	0.0010	0.050	-	116	70-130
g-BHC	ND	0.0562	0.000097	0.0010	0.050	-	112	70-130
Chlordane (Technical)	ND	-	0.016	0.025	-	-	-	-
a-Chlordane	ND	0.0553	0.00047	0.0010	0.050	-	111	70-130
g-Chlordane	ND	0.0577	0.00021	0.0010	0.050	-	115	70-130
p,p-DDD	ND	0.0555	0.00014	0.0010	0.050	-	111	70-130
p,p-DDE	ND	0.0583	0.00032	0.0010	0.050	-	117	70-130
p,p-DDT	ND	0.0536	0.00043	0.0010	0.050	-	107	70-130
Dieldrin	ND	0.0648	0.00033	0.0010	0.050	-	130	70-130
Endosulfan I	ND	0.0548	0.00065	0.0010	0.050	-	110	70-130
Endosulfan II	ND	0.0557	0.00020	0.0010	0.050	-	111	70-130
Endosulfan sulfate	ND	0.0594	0.00063	0.0010	0.050	-	119	70-130
Endrin	ND	0.0507	0.00042	0.0010	0.050	-	101	70-130
Endrin aldehyde	ND	0.0380	0.00020	0.0010	0.050	-	76	70-130
Endrin ketone	ND	0.0618	0.00013	0.0010	0.050	-	123	70-130
Heptachlor	ND	0.0521	0.00021	0.0010	0.050	-	104	70-130
Heptachlor epoxide	ND	0.0558	0.00020	0.0010	0.050	-	112	70-130
Hexachlorobenzene	ND	-	0.00027	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.00040	0.020	-	-	-	-
Methoxychlor	ND	0.0537	0.00089	0.0010	0.050	-	107	70-130
Toxaphene	ND	-	0.035	0.050	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	0.05847	0.0391			0.050	117	78	70-130

NELAP 4033ORELAP

QA/QC Officer

Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Prepared:	6/19/17	**BatchID:**	140811
Date Analyzed:	6/23/17 - 6/27/17	**Extraction Method:**	SW3550B/3620B/3640A
Instrument:	GC22, GC23	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	2017-28; 3801-07 MLK	**Sample ID:**	MB/LCS-140811

QC Summary Report OC Pesticides w/ GPC & Florisil

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0486	0.00027	0.0010	0.050	-	97	70-130
a-BHC	ND	0.0460	0.00010	0.0010	0.050	-	92	70-130
b-BHC	ND	0.0512	0.00025	0.0010	0.050	-	102	70-130
d-BHC	ND	0.0519	0.00037	0.0010	0.050	-	104	70-130
g-BHC	ND	0.0515	0.000097	0.0010	0.050	-	103	70-130
Chlordane (Technical)	ND	-	0.016	0.025	-	-	-	-
a-Chlordane	ND	0.0479	0.00047	0.0010	0.050	-	96	70-130
g-Chlordane	ND	0.0556	0.00021	0.0010	0.050	-	111	70-130
p,p-DDD	ND	0.0476	0.00014	0.0010	0.050	-	95	70-130
p,p-DDE	ND	0.0472	0.00032	0.0010	0.050	-	94	70-130
p,p-DDT	ND	0.0475	0.00043	0.0010	0.050	-	95	70-130
Dieldrin	ND	0.0529	0.00033	0.0010	0.050	-	106	70-130
Endosulfan I	ND	0.0466	0.00065	0.0010	0.050	-	93	70-130
Endosulfan II	ND	0.0466	0.00020	0.0010	0.050	-	93	70-130
Endosulfan sulfate	ND	0.0466	0.00063	0.0010	0.050	-	93	70-130
Endrin	ND	0.0470	0.00042	0.0010	0.050	-	94	70-130
Endrin aldehyde	ND	0.0472	0.00020	0.0010	0.050	-	94	70-130
Endrin ketone	ND	0.0476	0.00013	0.0010	0.050	-	95	70-130
Heptachlor	ND	0.0520	0.00021	0.0010	0.050	-	104	70-130
Heptachlor epoxide	ND	0.0489	0.00020	0.0010	0.050	-	98	70-130
Hexachlorobenzene	ND	-	0.00027	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.00040	0.020	-	-	-	-
Methoxychlor	ND	0.0475	0.00089	0.0010	0.050	-	95	70-130
Toxaphene	ND	-	0.035	0.050	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	0.06412	0.0492			0.050	128	98	70-130

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Prepared:	7/7/17	**BatchID:**	141965
Date Analyzed:	7/11/17	**Extraction Method:**	SW3550B/3620B/3640A
Instrument:	GC20	**Analytical Method:**	SW8081A
Matrix:	Soil	**Unit:**	mg/kg
Project:	2017-28; 3801-07 MLK	**Sample ID:**	MB/LCS-141965

QC Summary Report OC Pesticides w/ GPC & Florisil

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Aldrin	ND	0.0506	0.00027	0.0010	0.050	-	101	70-130
a-BHC	ND	0.0563	0.00010	0.0010	0.050	-	113	70-130
b-BHC	ND	0.0493	0.00025	0.0010	0.050	-	99	70-130
d-BHC	ND	0.0531	0.00037	0.0010	0.050	-	106	70-130
g-BHC	ND	0.0525	0.000097	0.0010	0.050	-	105	70-130
Chlordane (Technical)	ND	-	0.016	0.025	-	-	-	-
a-Chlordane	ND	0.0474	0.00047	0.0010	0.050	-	95	70-130
g-Chlordane	ND	0.0540	0.00021	0.0010	0.050	-	108	70-130
p,p-DDD	ND	0.0511	0.00014	0.0010	0.050	-	102	70-130
p,p-DDE	ND	0.0524	0.00032	0.0010	0.050	-	105	70-130
p,p-DDT	ND	0.0501	0.00043	0.0010	0.050	-	100	70-130
Dieldrin	ND	0.0572	0.00033	0.0010	0.050	-	114	70-130
Endosulfan I	ND	0.0502	0.00065	0.0010	0.050	-	100	70-130
Endosulfan II	ND	0.0519	0.00020	0.0010	0.050	-	104	70-130
Endosulfan sulfate	ND	0.0512	0.00063	0.0010	0.050	-	102	70-130
Endrin	ND	0.0544	0.00042	0.0010	0.050	-	109	70-130
Endrin aldehyde	ND	0.0518	0.00020	0.0010	0.050	-	104	70-130
Endrin ketone	ND	0.0559	0.00013	0.0010	0.050	-	112	70-130
Heptachlor	ND	0.0514	0.00021	0.0010	0.050	-	103	70-130
Heptachlor epoxide	ND	0.0503	0.00020	0.0010	0.050	-	101	70-130
Hexachlorobenzene	ND	-	0.00027	0.010	-	-	-	-
Hexachlorocyclopentadiene	ND	-	0.00040	0.020	-	-	-	-
Methoxychlor	ND	0.0512	0.00089	0.0010	0.050	-	102	70-130
Toxaphene	ND	-	0.035	0.050	-	-	-	-
Surrogate Recovery								
Decachlorobiphenyl	0.0463	0.0495			0.050	93	99	70-130

Quality Control Report

Client:	Environmental Service	**WorkOrder:**	1706881
Date Prepared:	6/19/17	**BatchID:**	140644
Date Analyzed:	6/19/17 - 6/20/17	**Extraction Method:**	SW3050B
Instrument:	ICP-MS2, ICP-MS3	**Analytical Method:**	SW6020
Matrix:	Soil	**Unit:**	mg/Kg
Project:	2017-28; 3801-07 MLK	**Sample ID:**	MB/LCS-140644 1706881-001AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Lead	ND	49.5	0.50	50	-	99	75-125
Surrogate Recovery							
Terbium	498.1	488		500	100	98	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Lead	2990	7520	50	2335	1300,F13	10400,F1	75-125	86.3,F13	20
Surrogate Recovery									
Terbium	480	428	500		96	86	70-130	11.6	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Lead	2350	2335	0.642	20

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1706881 **ClientCode: ENVC** **QuoteID: 7424**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Marc Papineau
Environmental Service
5789 Gold Creek Drive
Castro Valley, CA 94552
510-881-8574 FAX: 510-581-7204

Email: marc_p@sbcglobal.net
cc/3rd Party:
PO:
ProjectNo: 2017-28; 3801-07 MLK

Bill to:
Accounts Payable
Resources for Community Development
2220 Oxfard Street
Berkeley, CA 94704

Requested TAT: 5 days;

Date Received: 06/16/2017
Date Logged: 06/19/2017

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1706881-001	SS1-0.5	Soil	6/14/2017 10:37	☐	A	A	A	A								
1706881-002	SS2-0.5	Soil	6/14/2017 10:43	☐	A	A	A	A								
1706881-003	SS3-0.5	Soil	6/14/2017 10:47	☐	A	A	A	A								
1706881-004	SS4-0.5	Soil	6/14/2017 10:52	☐	A	A		A								
1706881-005	SS5-0.5	Soil	6/14/2017 10:56	☐	A	A	A	A								
1706881-006	SS6-0.5	Soil	6/14/2017 11:00	☐	A	A	A	A								
1706881-007	SS7-0.5	Soil	6/14/2017 11:06	☐	A	A	A	A								
1706881-008	SS8-0.5	Soil	6/14/2017 11:09	☐	A	A	A	A								
1706881-009	SS9-0.5	Soil	6/14/2017 11:16	☐	A	A		A								
1706881-010	SS10-0.5	Soil	6/14/2017 11:19	☐	A	A		A								
1706881-011	SS11-0.5	Soil	6/14/2017 11:23	☐	A	A		A								

Test Legend:

1	8081_ESL_S [J]	2	8081_FLORISIL_S [J]	3	8081_GPCFLSL_S [J]	4	PBMS_TTLC_S
5		6		7		8	
9		10		11		12	

Project Manager: Blake Brown **Prepared by: Jena Alfaro**

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: ENVIRONMENTAL SERVICE **Project:** 2017-28; 3801-07 MLK **Work Order:** 1706881

Client Contact: Marc Papineau **QC Level:**

Contact's Email: marc_p@sbcglobal.net **Comments:** **Date Logged:** 6/19/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1706881-001A	SS1-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 10:37	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-002A	SS2-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 10:43	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-003A	SS3-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 10:47	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-004A	SS4-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 10:52	5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☐	

NOTES: **- STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).**

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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WORK ORDER SUMMARY

Client Name: ENVIRONMENTAL SERVICE **Project:** 2017-28; 3801-07 MLK **Work Order:** 1706881
Client Contact: Marc Papineau **QC Level:**
Contact's Email: marc_p@sbcglobal.net **Comments:** **Date Logged:** 6/19/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1706881-004A	SS4-0.5	Soil	SW8081A (OC Pesticides)	1	4OZ GJ	☐	6/14/2017 10:52	5 days		☑	
1706881-005A	SS5-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 10:56	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-006A	SS6-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:00	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-007A	SS7-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:06	5 days		☐	
			SW8081A (OC Pesticides w/ GPC & Florisil)			☐		5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-008A	SS8-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:09	5 days		☐	

NOTES: **- STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).**

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http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: ENVIRONMENTAL SERVICE **Project:** 2017-28; 3801-07 MLK **Work Order:** 1706881

Client Contact: Marc Papineau **QC Level:**

Contact's Email: marc_p@sbcglobal.net **Comments:** **Date Logged:** 6/19/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1706881-008A	SS8-0.5	Soil	SW8081A (OC Pesticides w/ GPC & Florisil)	1	4OZ GJ	☐	6/14/2017 11:09	5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☑	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-009A	SS9-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:16	5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☐	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-010A	SS10-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:19	5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☐	
			SW8081A (OC Pesticides)			☐		5 days		☑	
1706881-011A	SS11-0.5	Soil	SW6020 (Lead)	1	4OZ GJ	☐	6/14/2017 11:23	5 days		☐	
			SW8081A (OC Pesticides w/ Florisil Clean-up)			☐		5 days		☐	
			SW8081A (OC Pesticides)			☐		5 days		☑	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1706881

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1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701
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Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☑ 5 DAY

☐ GeoTracker EDF ☑ PDF ☐ Excel ☐ Write On (DW)

QUOTE ID 7424

Report To: M. Papineau **Bill To:** Resources for Community Dev.
Company: Environmental Service 2220 Oxford Street
5789 Gold Creek Drive Berkeley, CA 94704
Castro Valley, CA e-mail: marc_p@sbcglobal.net
Tele: (510) 881-8574 **Fax:** (510) 581-7204
Project #: 2017-028 **QUOTE ID#:** 7424 **Project Name:** 3801-07 MLK
Location: 3801-07 Martin Luther King Jr. Way at W. MacArthur Blvd. in Oakland, CA
Sampler Signature: M. PAPINEAU MP

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	MTBE / BTEX & TPH as Gas (602 / 8021 + 8015)	MTBE / BTEX ONLY (EPA 602 / 8021)	TPH as Diesel / Motor Oil (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	Other: Composite	Other	Other: HOLD sample	Comments
SS1-0.5	SS1	6/14/2017	1037	1	J4		X				X										X									X				
SS2-0.5	SS2	6/14/2017	1043	1	J4		X				X										X									X				
SS3-0.5	SS3	6/14/2017	1047	1	J4		X				X										X									X				
SS4-0.5	SS4	6/14/2017	1052	1	J4		X				X										X									X				
SS5-0.5	SS5	6/14/2017	1056	1	J4		X				X										X									X				
SS6-0.5	SS6	6/14/2017	1100	1	J4		X				X										X									X				
SS7-0.5	SS7	6/14/2017	1106	1	J4		X				X										X									X				
SS8-0.5	SS8	6/14/2017	1109	1	J4		X				X										X									X				
SS9-0.5	SS9	6/14/2017	1116	1	J4		X				X										X									X				
SS10-0.5	SS10	6/14/2017	1119	1	J4		X				X										X									X				
SS11-0.5	SS11	6/14/2017	1123	1	J4		X				X										X									X				

Relinquished By:	Date:	Time:	Received By:
MP	6/16/17	1115	BA
BA	6/16/17	1830	[illegible]

ICE/t°______
GOOD CONDITION_____
HEAD SPACE ABSENT______
DECHLORINATED IN LAB______
APPROPRIATE CONTAINERS______
PRESERVED IN LAB_____
VOAS O&G METALS OTHER
PRESERVATION____________ pH<2____________

COMMENTS: J4 wide-mouth glass jar

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name:	**Environmental Service**	Date and Time Received	**6/16/2017 18:30**
Project Name:	**2017-28; 3801-07 MLK**	Date Logged:	**6/19/2017**
		Received by:	Jena Alfaro
WorkOrder №:	**1706881** Matrix: Soil	Logged by:	Jena Alfaro
Carrier:	Benjamin Yslas (MAI Courier)		

Chain of Custody (COC) Information

	Yes	No	NA
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Sample IDs noted by Client on COC?	☑	☐	
Date and Time of collection noted by Client on COC?	☑	☐	
Sampler's name noted on COC?	☑	☐	

Sample Receipt Information

	Yes	No	NA
Custody seals intact on shipping container/cooler?	☐	☐	☑
Shipping container/cooler in good condition?	☑	☐	
Samples in proper containers/bottles?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	

Sample Preservation and Hold Time (HT) Information

	Yes	No	NA
All samples received within holding time?	☑	☐	☐
Sample/Temp Blank temperature	Temp: 6.3°C		☐
Water - VOA vials have zero headspace / no bubbles?	☐	☐	☑
Sample labels checked for correct preservation?	☑	☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	☐	☐	☑
Samples Received on Ice?	☐	☑	

UCMR Samples:

	Yes	No	NA
Total Chlorine tested and acceptable upon receipt for EPA 522?	☐	☐	☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	☐	☐	☑

Comments:

APPENDIX H
QUALIFICATIONS OF ASSESSOR

MARC PAPINEAU

B.S., Mathematics and Physics, Haverford College, 1976
M.B.A., Finance, UC Berkeley, 1981

1995-2017 Environmental Service (Castro Valley, CA)
Founded Environmental Service in October 1995. Mr. Papineau offers specialized services in Phase I Environmental Site Assessment, community noise assessment, and air pollution impact assessment. His services have supported the land development projects of not-for-profit affordable housing developers and market-rate housing developers. Mr. Papineau has managed multidisciplinary teams preparing Environmental Impact Reports (EIRs) including a Redevelopment Plan Amendment EIR for the Turlock Redevelopment Agency, the Arbor Avenue Hotel and Alternatives EIR for Alameda County, and the Sky Ranch II 415-Unit Residential Subdivision and Alternatives for the City of Pittsburg.

1992-1995 Levine Fricke Recon (LFR), formerly Certified Engineering & Testing Co.
Mr. Papineau managed the Physical Sciences Department whose emphasis was Phase I environmental site assessments for developers and lenders.

1982-1991 Earth Metrics Incorporated (Burlingame, CA)
Managed the Physical Sciences Department that performed Phase I environmental site assessments, acoustical assessments, air pollution and odor assessments, and indoor air quality assessments, and also managed project teams preparing Environmental Impact Reports. Managed a smog trend study of the Livermore-Amador Valley and carbon monoxide monitoring, both conducted for the Hacienda Business Park, Pleasanton, CA. Services of the Physical Sciences Department supported the programs of cities, school districts and utility districts and also assisted private-sector developers.

1981-1982 Earth Metrics Incorporated (Houston, TX)
Mr. Papineau managed and implemented a community scale carbon monoxide monitoring study in Houston, TX, for a joint venture enterprise providing consulting services to the City of Houston and Urban Mass Transit Administration (UMTA) in regard to the "Spine Corridor," a commuter rail concept. He applied results of the monitoring to validate a microscale carbon monoxide model, which then was applied to predict future CO levels in transit station locations and feeder roads thereto**.**

1979-1981 Graduate Studies (Berkeley, CA)
During a leave of absence for one quarter, Mr. Papineau participated in environmental assessments for the Multnomah and Sunset light rail corridor alternatives in Portland, OR, including air quality and transportation noise measurements and analysis for METRO.

1978-1979 Earth Metrics Incorporated (Palo Alto, CA)
Mr. Papineau was an environmental scientist and technical writer for environmental impact statement (EIS) and report (EIR) documentation pursuant to the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). He performed air quality and transportation noise modeling using proprietary and Federal Highway Administration (FHWA) models. Conducted a statistical analysis ozone transport for the Butte County Air Pollution Control District. The study showed patterns consistent with ozone transport from outside Butte County.

1977-1978 Environmental Research & Technology (Westlake Village, CA)
Mr. Papineau performed statistical evaluations of basin-wide "CHAMPS" air pollution monitoring data for Dr. George Hidy, whose Los Angeles basin smog research was funded by the American Petroleum Institute.

CLIENTS

Allied Housing
Affordable Housing Associates
Eden Housing
EPA Can Do
Ford Street Project
JSM Enterprises, Inc.
Resources for Community Development
Rubicon Programs
Rural Communities Housing Development Corporation
Transitional Living and Community Support
Tri-Cities Homeless Coalition

Blacksmith Homes, LLC
Claremont Homes, Inc.
D.R. Horton
Granite Construction
Pinn Brothers Construction, Inc.
Ponderosa Homes II, Inc.
Swinerton Builders
W.L. Butler, Inc.

County of Alameda, Housing Authority
County of Alameda, Planning Department
City of Novato, Engineering Department
City of Pittsburg, Planning Department
City of San Jose, Housing Department
City of Turlock, Planning Department

AutoZone, Inc.
CW Capital
Davis Realty, Inc.
Eastmont Town Center, LLC
Kenel, Inc.
Korman & Ng
Liqua-Tech Corporation
Paramount
Prana Investments
St. Vincent Properties
World Pac

Borel Bank & Trust
Cupertino National Bank
Great Bay Bank
Mid-Peninsula Bank
The Summit National Bank (formerly, California Security Bank)
Washington Mutual Bank

PROFESSIONAL REGISTRATION

Mr. Papineau was a registered with Cal/EPA as a Registered Environmental Assessor from program inception in 1987 through program cessation in 2012.

20 Years

1995-2015

environmental service

by Papineau

5789 Gold Creek Drive Castro Valley, California 94552 (510) 881-8574

Longfellow Corner - 3801-3829 MLK

Legend

Project Site

UCSF Benioff Children's Hospital

Kaiser Permanent Oakland Medical Center

Alta Bates Summit Medical Center

Radius

1 mile radius

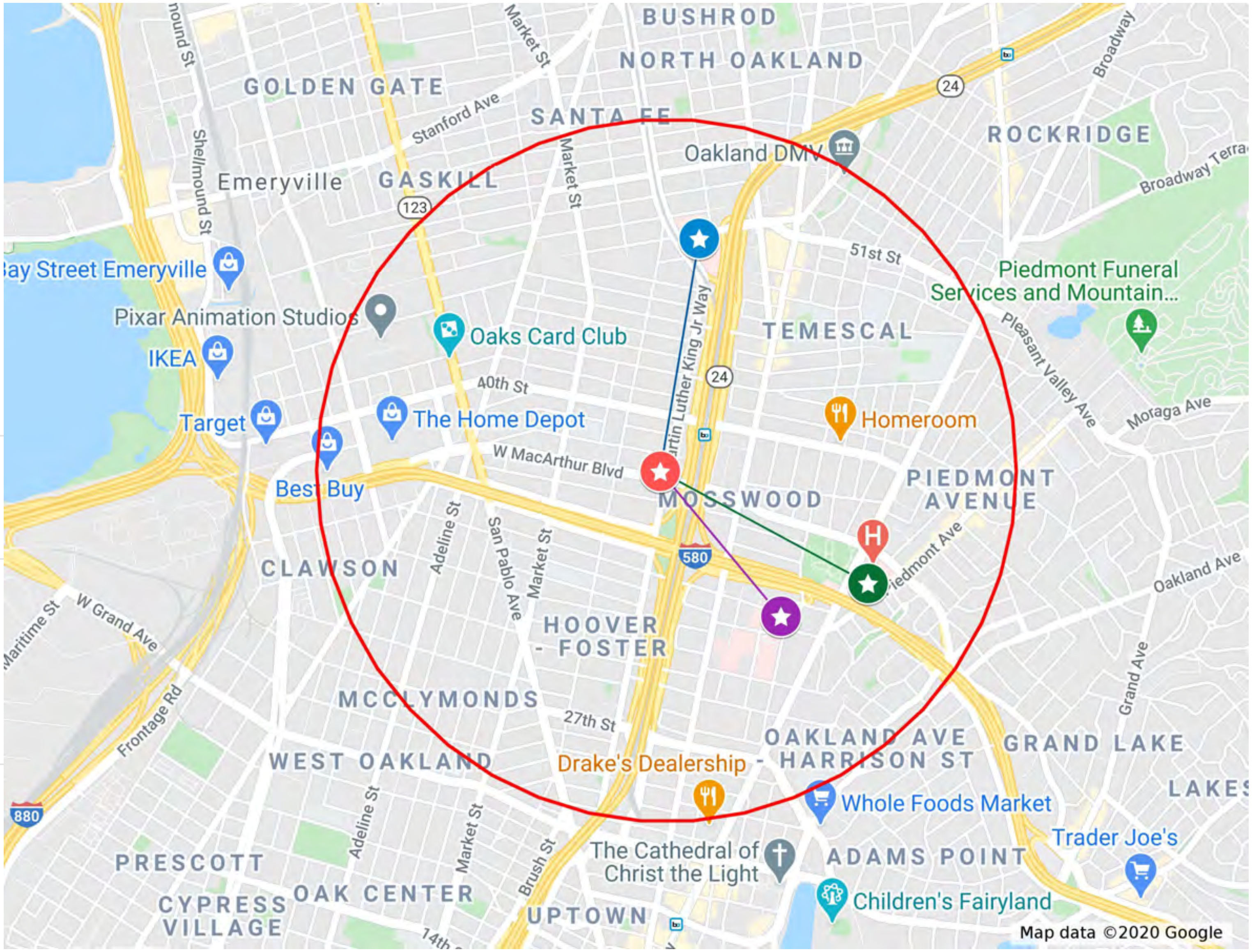
Distance

Distance - 3558 ft

Distance - 3537 ft

Distance - 2851 ft

Acceptable Separation Distances per attached calculation:
UCSF Benioff - 583 ft
Kaiser - 2032 ft
Alta Bates - 1522 ft



N

1 mi

Home (/) > **Programs (/programs/)** > **Environmental Review (/programs/environmental-review/)** > ASD Calculator

UCSF Benioff Children's Hospital Oakland (747 52nd St. Oakland CA)

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft^2 - hr - people and 10,000 BTU/ft^2 - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Sitting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	6000
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	

ASD for Thermal Radiation for People (ASDPPU)	583.42
ASD for Thermal Radiation for Buildings (ASDBPU)	115.12
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us (https://www.hudexchange.info/contact-us/)** form.

Related Information

- **ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)**
- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

Kaiser Permanente Hospital Oakland
(3459 Piedmont Ave., Oakland CA)

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft^2 - hr - people and 10,000 BTU/ft^2 - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Sitting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	119999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	

ASD for Thermal Radiation for People (ASDPPU)	2032.29
ASD for Thermal Radiation for Buildings (ASDBPU)	459.84
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us (https://www.hudexchange.info/contact-us/)** form.

Related Information

- **ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)**
- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

Alta Bates Summit Medical Center (350 Hawthorne Ave., Oakland CA)

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft^2 - hr - people and 10,000 BTU/ft^2 - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Sitting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	59999
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	

ASD for Thermal Radiation for People (ASDPPU)	1522.56
ASD for Thermal Radiation for Buildings (ASDBPU)	333.76
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us (https://www.hudexchange.info/contact-us/)** form.

Related Information

- **ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)**
- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-1000

This Worksheet was designed to be used by those "Partners" (including Public Housing Authorities, consultants, contractors, and nonprofits) who assist Responsible Entities and HUD in preparing environmental reviews, but legally cannot take full responsibilities for these reviews themselves. Responsible Entities and HUD should use the RE/HUD version of the Worksheet.

Explosive and Flammable Hazards (CEST and EA) – PARTNER

https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities

1. **Is the proposed HUD-assisted project itself the development of a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?**

   ☒ No
   → *Continue to Question 2.*

   ☐ Yes
   Explain:
   Click here to enter text.
   → *Go directly to Question 5.*

2. **Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?**

   ☐ No → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☒ Yes → *Continue to Question 3.*

3. **Within 1 mile of the project site, are there any current *or planned* stationary aboveground storage containers that are covered by 24 CFR 51C? Containers that are NOT covered under the regulation include:**
   - **Containers 100 gallons or less in capacity, containing common liquid industrial fuels OR**
   - **Containers of liquified petroleum gas (LPG) or propane with a water volume capacity of 1,000 gallons or less that meet the requirements of the 2017 or later version of National Fire Protection Association (NFPA) Code 58.**

   If all containers within the search area fit the above criteria, answer "no." For any other type of aboveground storage container within the search area that holds one of the flammable or explosive materials listed in Appendix I of 24 CFR part 51 subpart C, answer "yes."

   ☐ No
   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.*

   ☒ Yes
   → *Continue to Question 4.*

4. **Visit HUD's website to identify the appropriate tank or tanks to assess and to calculate the required separation distance using the electronic assessment tool. To document this step in the analysis, please attach the following supporting documents to this screen:**
   - **Map identifying the tank selected for assessment, and showing the distance from the tank to the proposed HUD-assisted project site; and**
   - **Electronic assessment tool calculation of the required separation distance.**

   Based on the analysis, is the proposed HUD-assisted project site located at or beyond the required separation distance from all covered tanks?

   ☒ Yes
   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☐ No
   → *Go directly to Question 6.*

5. **Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?**
   Please visit HUD's website for information on calculating Acceptable Separation Distance.

   ☐ Yes
   → *If the RE/HUD agrees with this recommendation, the review is in compliance with this section. Continue to the Worksheet Summary below.*
   Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

   ☐ No
   → *Continue to Question 6.*
   Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

6. **For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Mitigation measures may include both natural and manmade barriers, modification of the project design, burial or removal of the hazard, or other engineered solutions. Describe selected mitigation measures, including the timeline for implementation, and attach an implementation plan. If negative effects cannot be mitigated, cancel the project at this location.**
   Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an unacceptable separation distance, provide approval from a licensed professional engineer.
   Click here to enter text.

Worksheet Summary

My determination is that there are no ASTs within 1 mile of the project that are less than the required separation distance from all covered tanks. No mitigation or additional measures are required. This determination was made through use of the CalEPA Regulated Site Portal as directed by Alameda

County Environmental Health Department on 9/2/20 as well as review of Google Maps satellite imagery. Additionally, a review of the City of Oakland Zoning Map dated 8/31/2018 showed no industrial zoning areas in a 1 mile radius of the site.

Include all documentation supporting your findings in your submission to HUD.
Attached documentation shows the site and three ASTs within 1-mile radius. As demonstrated by the scaled map and three calculations, all ASTs are an acceptable separated distance away from the site.

Appendix F – Historic Preservation

- **Crake, Cinnamon.** *Memorandum to File in re: Section 106 Review Process for the Longfellow Corner project, 3801-3829 Martin Luther King, Jr. Way Oakland, Alameda County, California 94609.* s.l. : AEM Consulting, November 25, 2019.
- **Federal Express.** *Signature Proof of Delivery.* Sacramento, CA : FEDEX, Delivery Date October 17, 2019. Tracking Number 776716016620.
- **Marvin, Betty.** *Letter to Julianne Polanco, State Historic Preservation Officer in re: Longfellow Corner, 3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California 94609 - U.S. HUD Funds - Project-Based Section 8 Vouchers.* s.l. : City of Oakland, Department of Plannning and Building, October 11, 2019.
- **AEM Consulting.** *Historic & Cultural Resources Evaluation, Historic Resources Evaluation for Section 106 Review: Longfellow Corner.* October 2019.
- **Evans & De Shazo, Inc.** *A Cultural Resource Monitoring Plan for the proposed Longfellow Corner project at 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.* Sebastopol, CA : s.n., September 24, 2019.
- **Evans & De Shazo, Inc.** *A Historic Resources Evaluation for the proposed Longfellow Corner project at 3801 Martin Luther King, Jr. Way, Oakland, Alameda County, California.* Sebastopol, CA : s.n., September 20, 2019.
- **vans & De Shazo, Inc.** *A Historic Property Survey for the Proposed Longfellow Corner project at 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.* Sebastopol, CA : s.n., September 12, 2019.
- **Totton, Gayle.** *Letter to Cinnamon Crake, AEM Consulting in re: Longfellow Corner Affordable Housing Project, City of Oakland, Oakland West USGS Quadrangle, Alameda County, California.* West Sacramento, CA : State of California, Native American Heritage Commission, July 24, 2019.
- **Crake, Cinnamon.** *Letter to Native American Heritage Commission.* s.l. : AEM Consulting, July 19, 2019.
- **Marvin, Betty.** *Letter to Chairperson Burley, California Valley Miwok Tribe in re: Longfellow Corner, 3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California 94606, U.S. HUD Funds - Project-Based Section 8 Vouchers.* s.l. : City of Oakland, Department of Planning and Building, July 19, 2019.
- **U.S. Department of Housing and Urban Development.** Tribal Directory Assessment Information. [Online] [Cited: July 19, 2019.] https://egis.hud.gov/tdat/.

AEM CONSULTING
Planning, Public Policy & Environmental Studies

MEMORANDUM

TO: File/Closing Memo

FROM: Cinnamon Crake, Associate, AEM Consulting CC

DATE: November 25, 2019

RE: Section 106 Review Process for the Longfellow Corner project, 3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California, 94609

Section 106 of the National Historic Preservation Act (NHPA) requires Federal Agencies and their Responsible Entities to identify and evaluate all historic properties in an Area of Potential Effects around projects that will receive Federal Funds. The Longfellow Corner project is an "undertaking" proposed for HUD funding through the City of Oakland that must be reviewed per the requirements of the implementing regulations of the NHPA found in 36 CFR Part 800.

Accordingly, the City of Oakland requested that AEM Consulting complete studies and materials to address these requirements. AEM Consulting identified the Area of Potential Effects (APE) and evaluated historic resources in the APE, concluding that no historic properties will be affected by the undertaking.

The Agency Official for the City of Oakland, Betty Marvin, Historic Preservation Planner, then initiated the Section 106 Review process with an appropriate letter to the State Historic Preservation Officer, Julianne Polanco. She provided appropriate information as to the nature of the project and federal funding proposed, the Area of Potential Effects, research efforts to evaluate historic and archeological significance and finally, a determination as Agency Official that the undertaking will have no adverse effect on historic properties as defined in 36 CFR 800.16(i),

The Agency Official's letter and package of information was sent by AEM Consulting to the SHPO's office using Federal Express mail service on October 15, 2019. The SHPO's office received the Federal Express package on October 17, 2019. (Proof of delivery attached.)

Subsequently, 30 calendar days lapsed (on November 17, 2019) and the Agency Official received no response from the SHPO's office regarding Section 106 Review of the project. Therefore, per the regulations found in 36 CFR 800.4(d)(1), the Agency Official's findings conclude the Section 106 Review, because the SHPO did not object to his determination within 30 calendar days of receipt of an adequately documented finding of no historic properties adversely affected by the undertaking.

Attachment: FedEx Proof of Delivery (Tracking Number 776716076620)

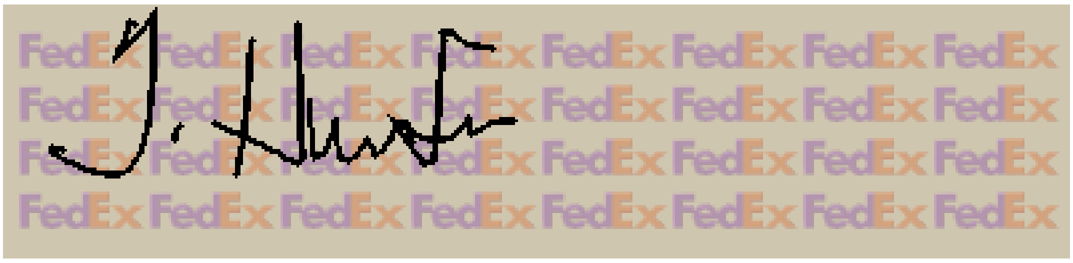
November 21,2019

Dear Customer:

The following is the proof-of-delivery for tracking number **776716016620**.

Delivery Information:

Status:	Delivered	**Delivered to:**	Receptionist/Front Desk
Signed for by:	T.HUNTER	**Delivery location:**	1725 23RD ST SACRAMENTO, CA 95816
Service type:	FedEx 2Day	**Delivery date:**	Oct 17, 2019 08:55
Special Handling:	Deliver Weekday		



Shipping Information:

Tracking number:	776716016620	**Ship date:**	Oct 15, 2019
		Weight:	3.0 lbs/1.4 kg

Recipient:
Julianne Polanco
Office of Historic Preservation
1725 23rd Street, Ste 100
SACRAMENTO, CA 95816 US

Shipper:
Cinnamon Crake
AEM Consulting
422 Larkfield Center #104
SANTA ROSA, CA 95403 US

Reference	RCD/Longfellow Corner
Purchase order number:	Request for Section 106 Review
Invoice number	RCD/Longfellow Corner
Department number	OAKLAND, CA

Thank you for choosing FedEx.

CITY OF OAKLAND

250 FRANK H. OGAWA PLAZA, SUITE 3315 • OAKLAND, CALIFORNIA 94612-2032

Department of Planning and Building (510) 238-3941
Bureau of Planning, Historic Preservation Division FAX 510) 238-6538
TDD (510) 839-6451

October 11, 2019

Julianne Polanco
Office of Historic Preservation
Department of Parks & Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Subject: **Longfellow Corner, 3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California 94609 - U.S. HUD Funds – Project-Based Section 8 Vouchers**

Dear Ms. Polanco:

Resources for Community Development (RCD) proposes to use funding from the U.S. Department of Housing and Urban Development (HUD) as administered by the Oakland Housing Authority to develop Longfellow Corner affordable housing project. In this case, the City of Oakland is acting as the Responsible Entity on behalf of the Oakland Housing Authority. To secure HUD release of funds for the project, the City of Oakland must provide a suitable federal Environmental Review Record to HUD prepared according to the requirements of the National Environmental Policy Act (NEPA) and HUD's own Environmental Regulations found in 24 CFR Part 58.

Enclosed are materials to identify and evaluate historic properties within the Area of Potential Effects of this undertaking under Section 106 of the Historic Preservation Act and its implementing regulations at 36 CFR Part 800. On behalf of William Gilchrist, Agency Official for this project, I request your views regarding the effect of the project upon historic properties.

AEM Consulting has been engaged to prepare the federal environmental review under NEPA and 24 CFR Part 58, HUD Environmental Review Regulations, prior to use of federal funds. AEM will be pursuing other related federal consultations necessary for the project on behalf the City of Oakland.

Upon reviewing the attached Historic and Cultural Resources Evaluation, I concur with the description of the undertaking and its Area of Potential Effects. I also concur with the determination recommended, which is no adverse effect to historic properties as defined for Section 106, i.e., eligible for the National Register of Historic Places. Please contact me if you have any questions or need additional information. I can be reached at (510) 238-6879 or bmarvin@oaklandnet.com.

Thank you.

Betty Marvin

Betty Marvin
Historic Preservation Planner

for
William Gilchrist, Agency Official

Enclosure: Historic and Cultural Resources Evaluation, Longfellow Corner

HISTORIC & CULTURAL RESOURCES EVALUATION
HISTORIC RESOURCES EVALUATION FOR SECTION 106 REVIEW: LONGFELLOW CORNER

3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California 94609

October 2019

AEM Consulting
422 Larkfield Center #104
Santa Rosa, California 95403
(707) 523-3710

Table of Contents

Figures:

Maps:

Background

This report will summarize the information necessary for Section 106 Review of the proposed Longfellow Corner project in Oakland, California. The project qualifies as a federal undertaking in that federal funds will be expended for its operation from the U.S. Department of Housing and Urban Development (HUD) Project-Based Section 8 Voucher Program, as administered by the Oakland Housing Authority. In this case, the City of Oakland is acting as the Responsible Entity on behalf of the Oakland Housing Authority. A federal environmental review is required and is being prepared pursuant to 24 CFR Part 58 HUD environmental regulations.

To achieve a Finding of No Significant Impact or FONSI, HUD requires that the Environmental Assessment demonstrate that the project complies with all applicable federal laws and regulations, including Section 106 of the National Historic Preservation Act. Regulations pertaining to Section 106 Review are found in 36 CFR Part 800.

Regulatory Context for Evaluation of Historical and Architectural Significance

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties. The section 106 process seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation among the agency official and other interested parties, beginning at the early stages of project planning. The goal of consultation is to identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate any adverse effects on historic properties. To evaluate the significance of an historical resource and its integrity, the ability of a property to convey that significance, a building is evaluated according to the National Register Criteria for Evaluation. According to the guidelines of the National Register Criteria for Evaluation, the quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That has yielded or may be likely to yield, information important in prehistory or history.

Section 106 compliance requires the City of Oakland to obtain the views of the State Historic Preservation Officer (SHPO) as to whether any of the project activities could have an “adverse effect” to the setting or character-defining features of any historically significant property in the Area of Potential Effects (APE). A historically significant property is one that would be eligible for listing on the National Register of Historic Places, whether it is currently listed or not.

Project Description/Undertaking

Longfellow Corner, 3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California 94609 (APNs 012-0964-007, -006, -005 and -004):

Resources for Community Development (RCD) proposes to acquire and develop the Longfellow Corner affordable housing project on four contiguous parcels (APNs 012-0964-007, -006, -005 and -004) with address 3801-3829 Martin Luther King, Jr. Way in Oakland, Alameda County, California 94609. The total site area is 0.48 acres. Two parcels are currently owned by RCD; two are owned by the City of Oakland. Three existing buildings at the corner of Martin Luther King, Jr. Way and MacArthur Boulevard will be demolished to construct the project. After demolition, RCD will construct a new, six-story building with 77 affordable apartments and 2,052 square feet of ground floor commercial/retail space. The unit mix will be 33 one-bedroom units, 19 two-bedroom units and 25 three-bedroom units for a total of 77 units. A total of 4,609 square feet of open space will be provided on site.

The ground floor will contain two retail spaces, parking, lobby, elevator, bicycle parking, mail boxes, trash room, management office, filing and storage room and maintenance and electrical rooms.

A total of 39 parking spaces will be provided in the ground floor parking garage and include 50 long term bicycle parking spaces with 10% or minimum four short-term bicycle parking spaces. Podium space will provide a courtyard shielded from noise that includes a BBQ, children's play area, outdoor dining and seating area.

The project is 100% affordable.

Table 1 Subject Property Information

Address	Assessor Parcel Number	Size in Acres
3801 & 3807 Martin Luther King, Jr. Way, Oakland, CA 94609	012-0964-007	0.13
Unassigned, Martin Luther King, Jr. Way, Oakland, CA 94609	012-0964-006	0.14
3823 Martin Luther King, Jr. Way, Oakland, CA 94609	012-0964-005	0.14
3829 Martin Luther King, Jr. Way, Oakland, CA 94609	012-0964-004	0.07
Total:	4 Contiguous Parcels	**0.48**

Please see attached narrative project description and plans/drawings.

Attachment (1) (2)

Figure 1 Site Plan

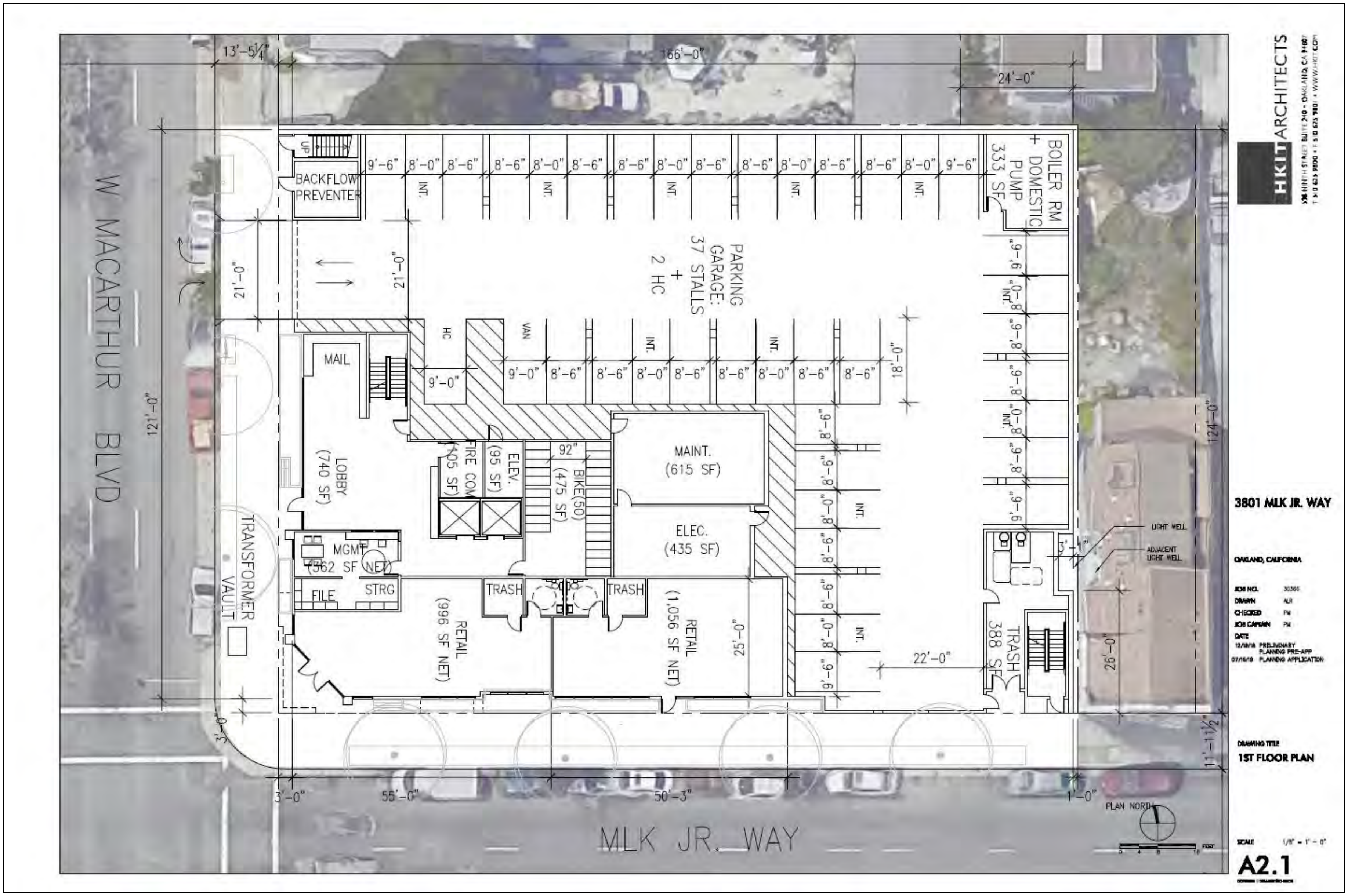


Figure 2 First Floor Plan

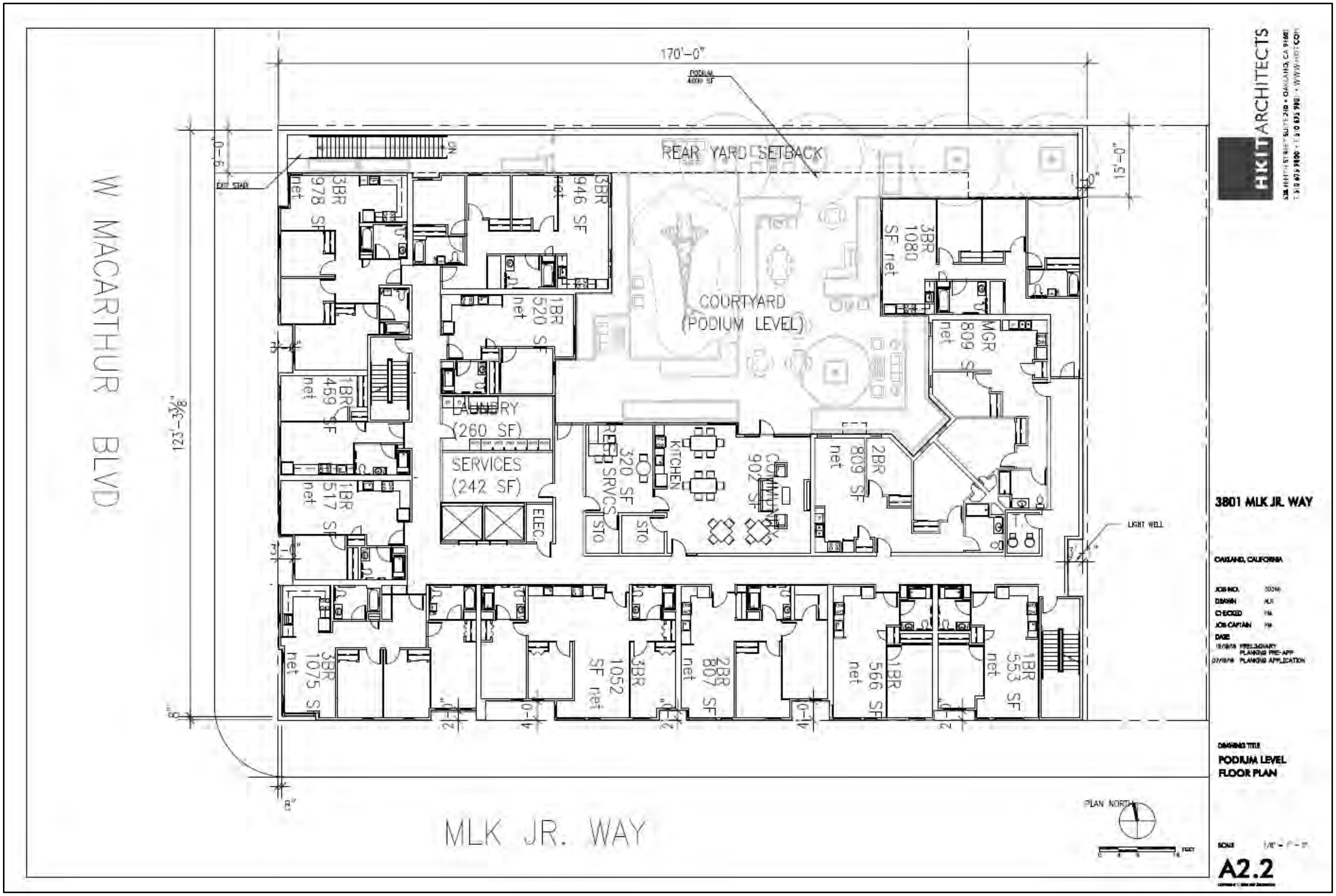


Figure 3 Podium Level Plan

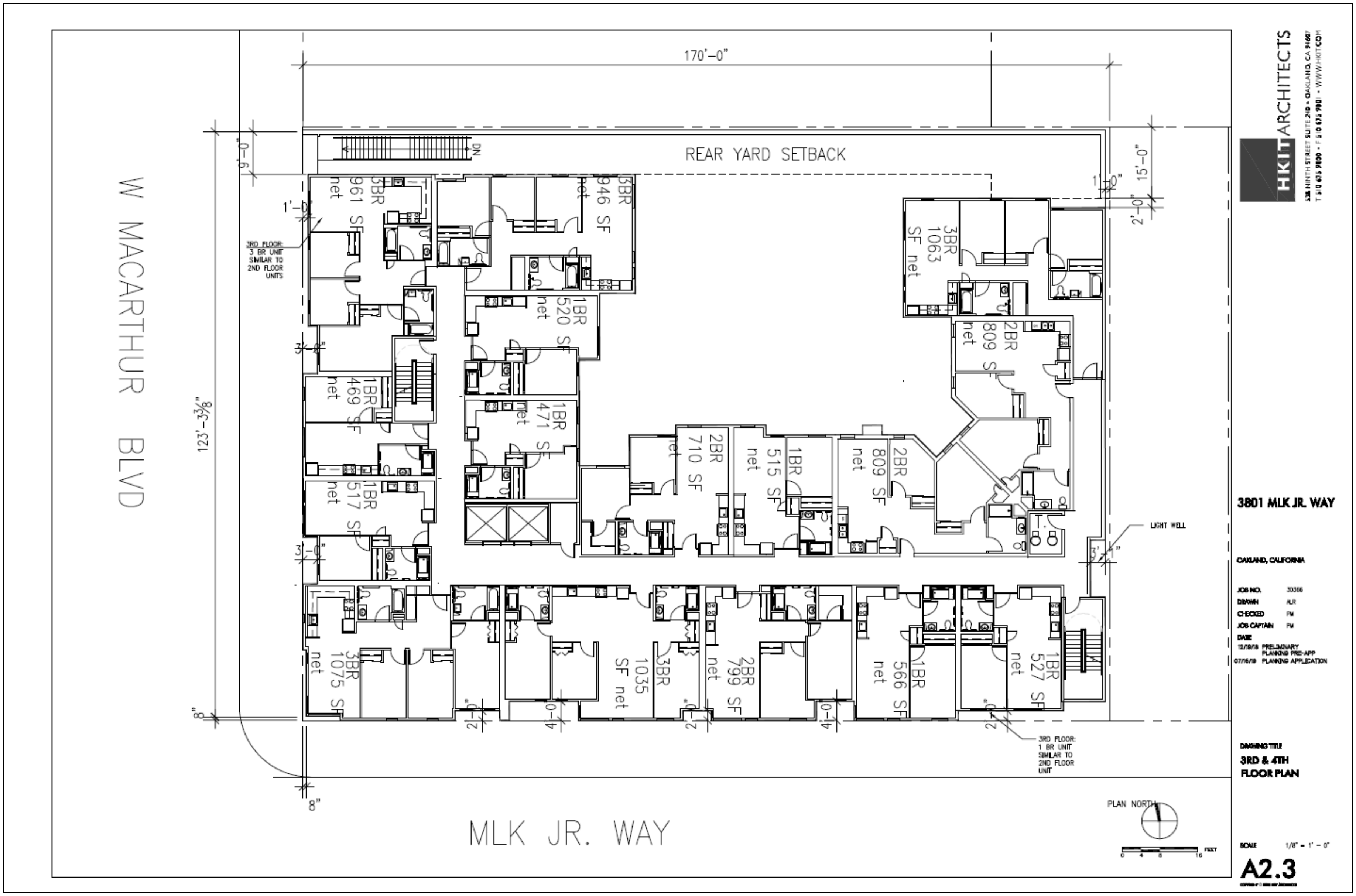


Figure 4 Third and Fourth Floor Plan

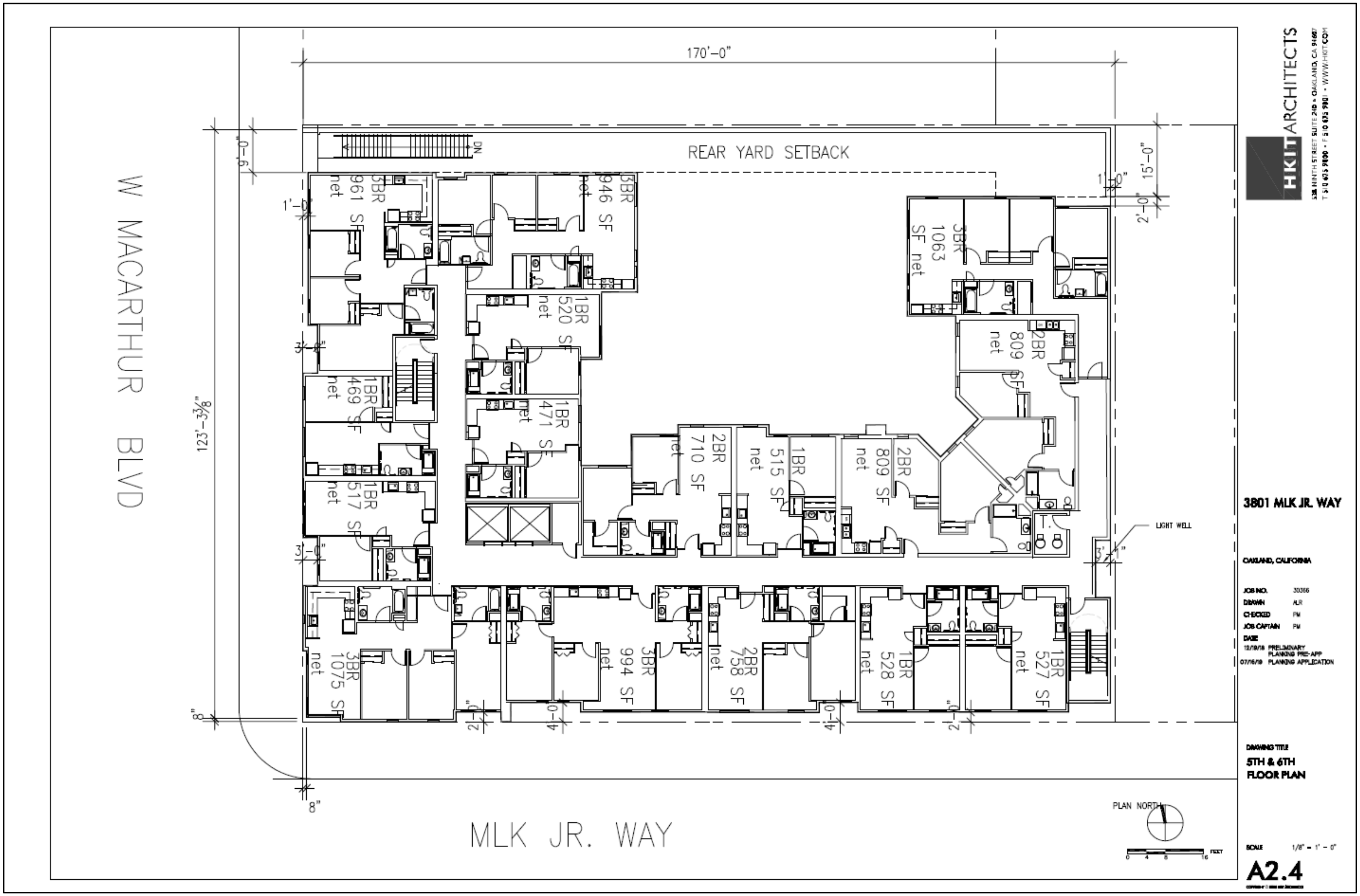


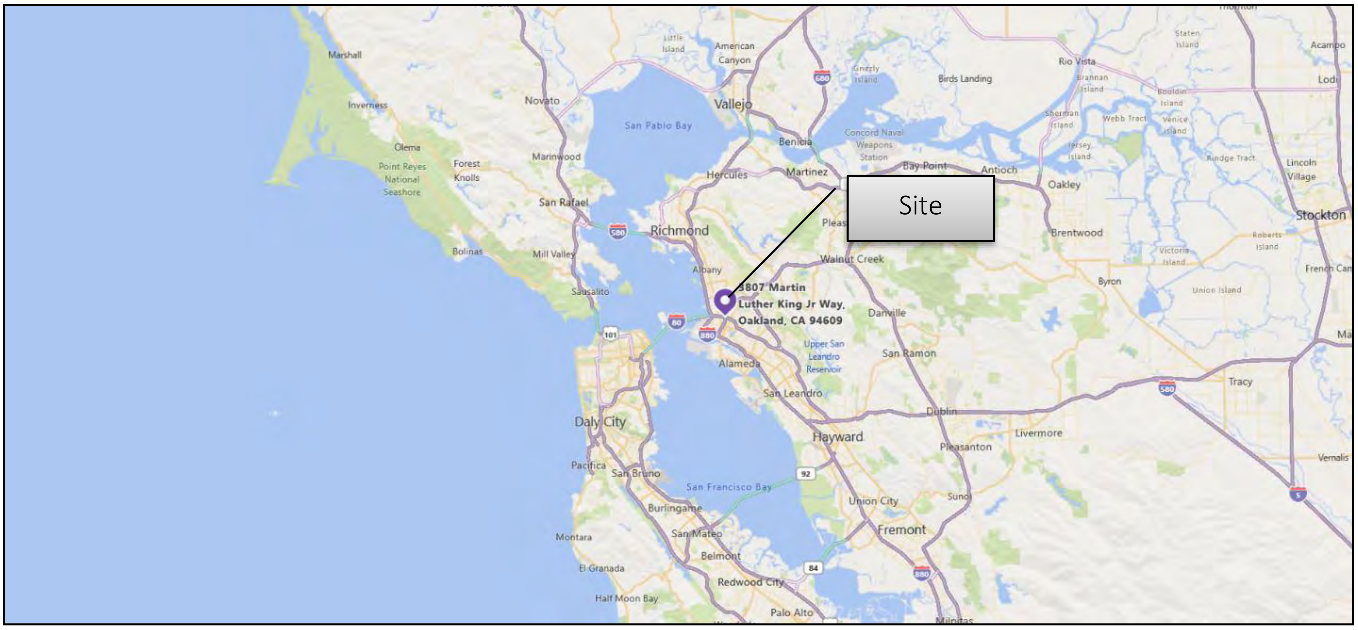
Figure 5 Fifth and Sixth Floor Plan

Figure 6 Elevations

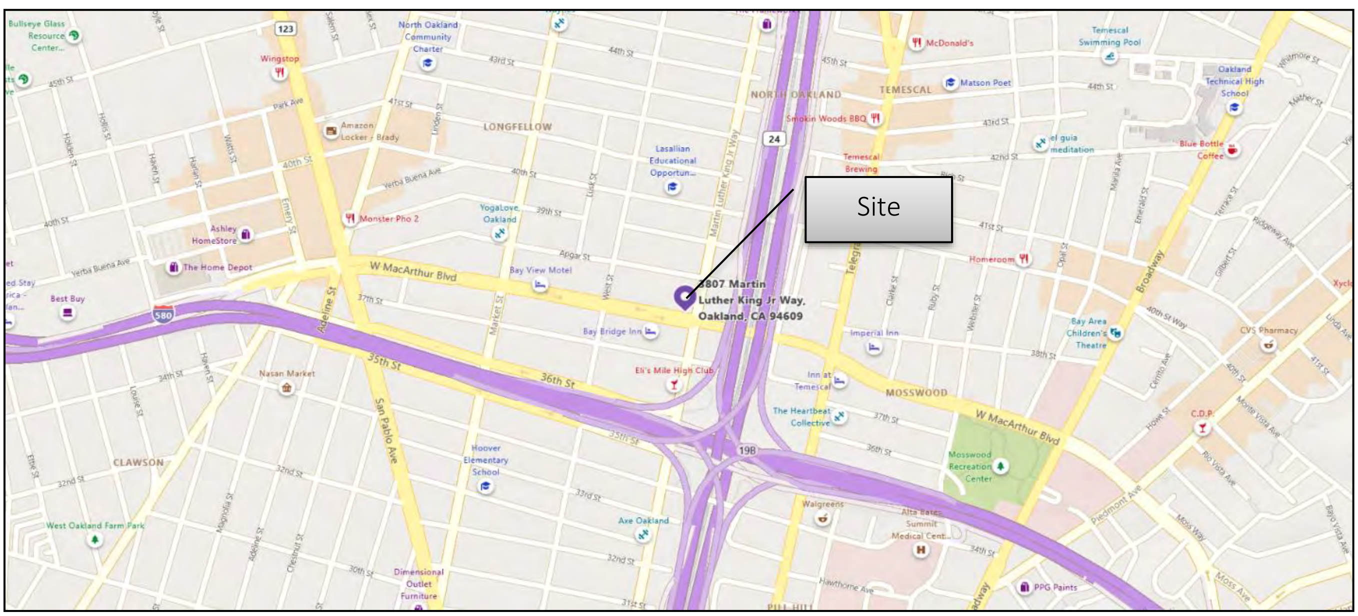
Figure 7 Elevations

Figure 8 Perspectives

Project Location



Map 1 Region



Map 2 Detail

Figure 9 Aerial View/Existing Conditions

Context

The project site is within the City of Oakland in Alameda County. As of the 2010 census, the population of Oakland was 397,011. Oakland is a major West Coast port city in the U.S. state of California. The Port of Oakland is the busiest port for San Francisco Bay and all of Northern California. Oakland is the third largest city in the San Francisco Bay Area, the eighth-largest city in California, and the 45th – largest city in the United States. Incorporated in 1852, Oakland is the county seat of Alameda County. It serves as a major transportation hub and trade center for the entire region and is also the principal city in the East Bay. The city is situated directly across the bay, six miles east of San Francisco.

A steady influx of immigrants during the 20th century, along with thousands of African-American war-industry workers who relocated from the Deep South during the 1940s, have made Oakland one of the most ethnically diverse major cities in the country. Oakland is known for its history of political activism, as well as its professional sports franchises and major corporations, which include health care, dot-com companies and manufacturers of household products. The city is a transportation hub for the greater Bay Area, and its shipping port is the fifth busiest in the United States.

Oakland has a Mediterranean like climate with an average of 260 sunny days per year. Lake Merritt, a large estuary centrally located east of Downtown, was designated the United States' first official wildlife refuge. Jack London Square, named for the author and former resident, is a tourist destination on the Oakland waterfront.

The United States Census Bureau says the City's total area is 78.0 square miles, including 55.8 square miles of land and 22.2 square miles of water. Oakland's highest point is near Grizzly Peak Blvd, east of Berkeley, just over 1,760 feet above sea level.

Oakland residents refer to their city's terrain as "the flatlands" and "the hills", which until recent waves of gentrification have also been a reference to Oakland's deep economic divide, with "the hills" being more affluent communities. About two-thirds of Oakland lies in the flat plain of the East Bay, with one-third rising into the foothills and hills of the East Bay range.

Site Conditions

The project site situated within a topographically flat area in the Longfellow neighborhood of northern Oakland at approximately 60 feet above mean sea level (amsl), and is bordered on the north by a commercial/residential building, on the south by MacArthur Boulevard, on the west by a residence, and on the east by Martin Luther King Jr. Way (historically known as Grove Street). The project site is located approximately 1.5 miles east of San Francisco Bay; however, prior to the reclamation of marshlands and subsequent urban development, the project site was situated approximately 1.1 miles east of the historical tidal marsh and bay lands boundary. The nearest waterways include Temescal Creek located 0.5 miles to the north and Glen Echo Creek located 0.6 miles to the east. Temescal Creek flows from the Berkeley hills west to San Francisco Bay, and Glen Echo Creek flows south from the Berkley hills and empties into Lake Merritt. According to the geologic map of the Oakland Metropolitan Area (Graymer 2000), the project site is located on a landform that consists of a Holocene-age (post 11,800 cal BP) alluvial fan and fluvial deposit (geologic unit: Qhaf) containing fine-grained Holocene alluvium. The soil throughout the project site is Urban land-Danville complex. Danville soil is alluvium derived from sedimentary rock and both urban and Danville soils occurs on alluvial fans and fan terraces. In a typical profile, Danville soil consist of clay loam to a depth of 21 inches, followed by sandy clay from 21 inches to 53 inches, and silty clay loam from 53 inches to 80 inches.

Area of Potential Effects

The Area of Potential Effects (APE) includes four subject parcels and 23 of the surrounding properties, or 27 properties in all. The APE Map shows all in greater detail. Results of an eligibility evaluation of the APE Properties are summarized on Table 1, which follows.

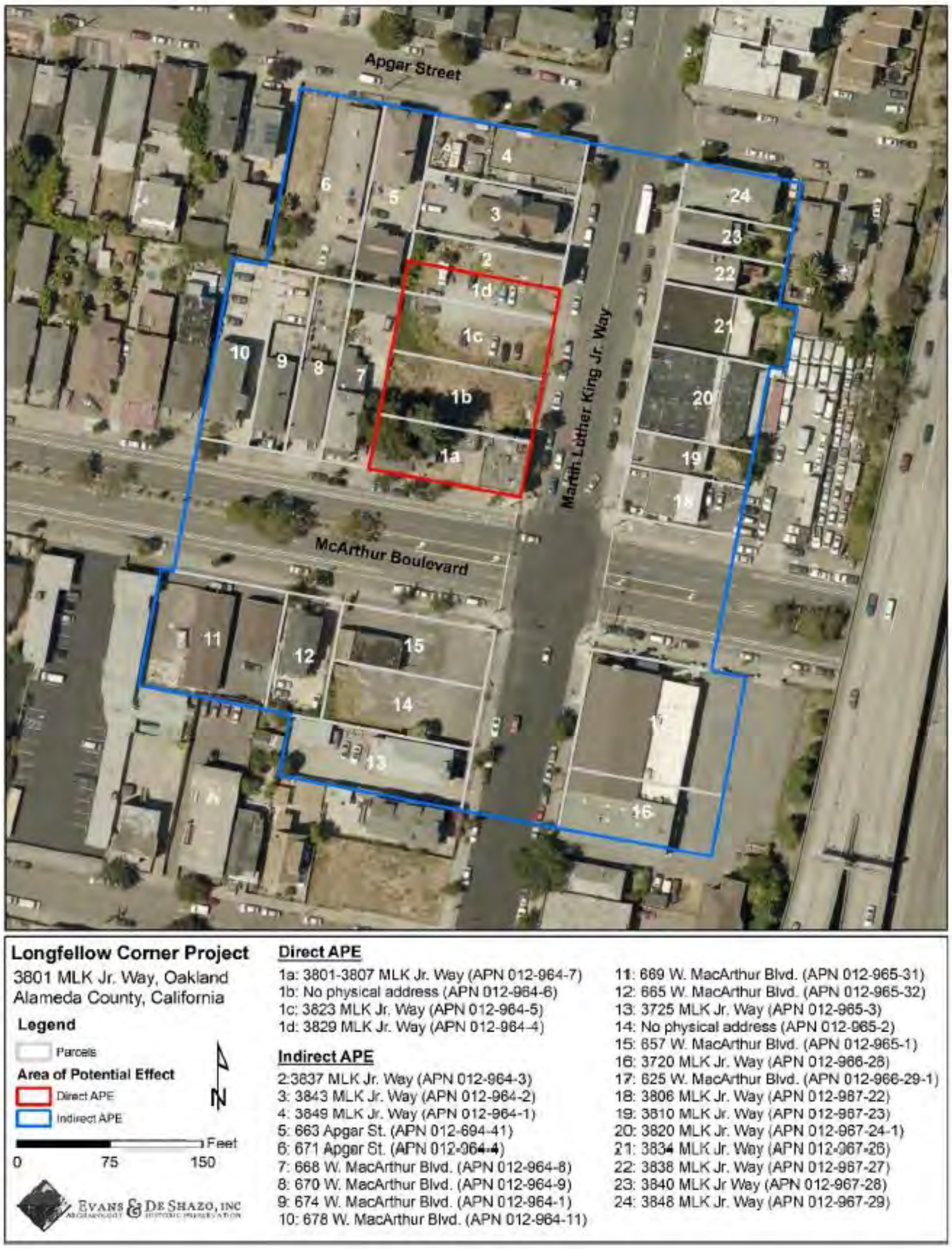
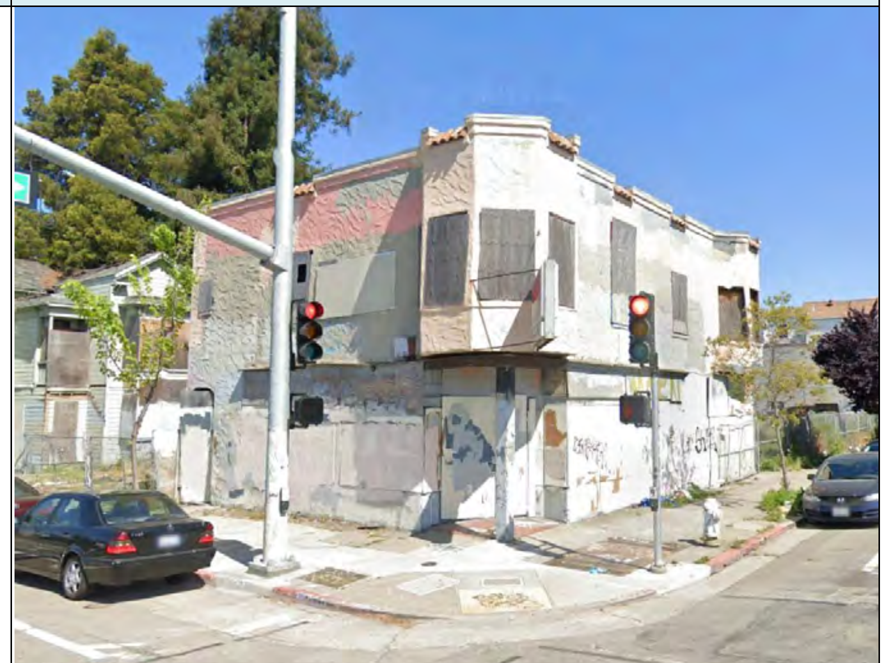


Figure 10 Area of Potential Effects

Table 2 Summary of Area of Potential Effects Properties – Longfellow Corner, 3801-3829 Martin Luther King, Jr. Way, Oakland, CA 94609

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
1a	012-0964-007	3801-3807 Martin Luther King, Jr. Way, Oakland, CA 94609	Longfellow Corner LP	1880 1907 1950	1880s Single family Residence (converted to three apartments) **OCHS Rating: C3, PDHP**	 Photo 1 Three unit flat

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
					1a., continued 1907 Commercial Building OCHS Rating: Dc3	 Photo 2 Commercial building

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
					1a., continued 1950s Shed OCHS Rating: Not rated	 Photo 3 Shed

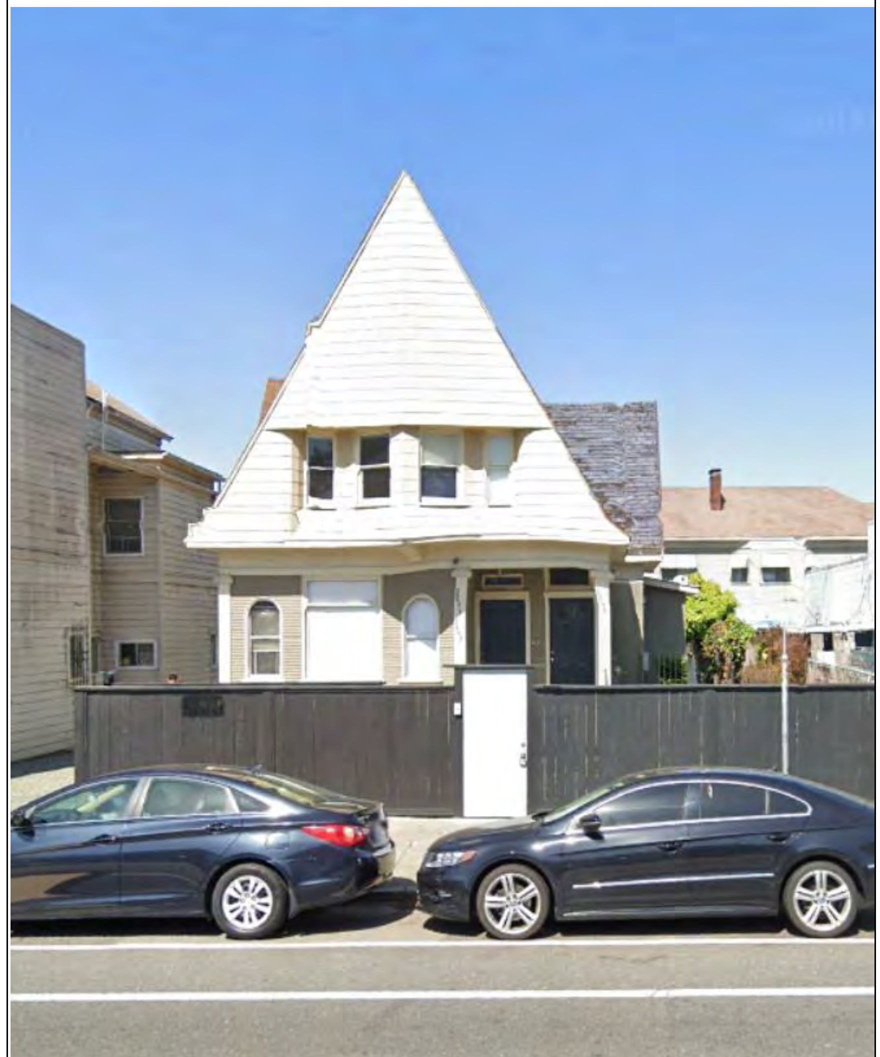
APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
1b	012-0964-006	Address unassigned, Martin Luther King, Jr. Way[1]	Longfellow Corner LP	n/a	Vacant Apartment Land **OCHS Rating: n/a**	

[1] *All of the APE addresses are located in the City of Oakland, California 94609*

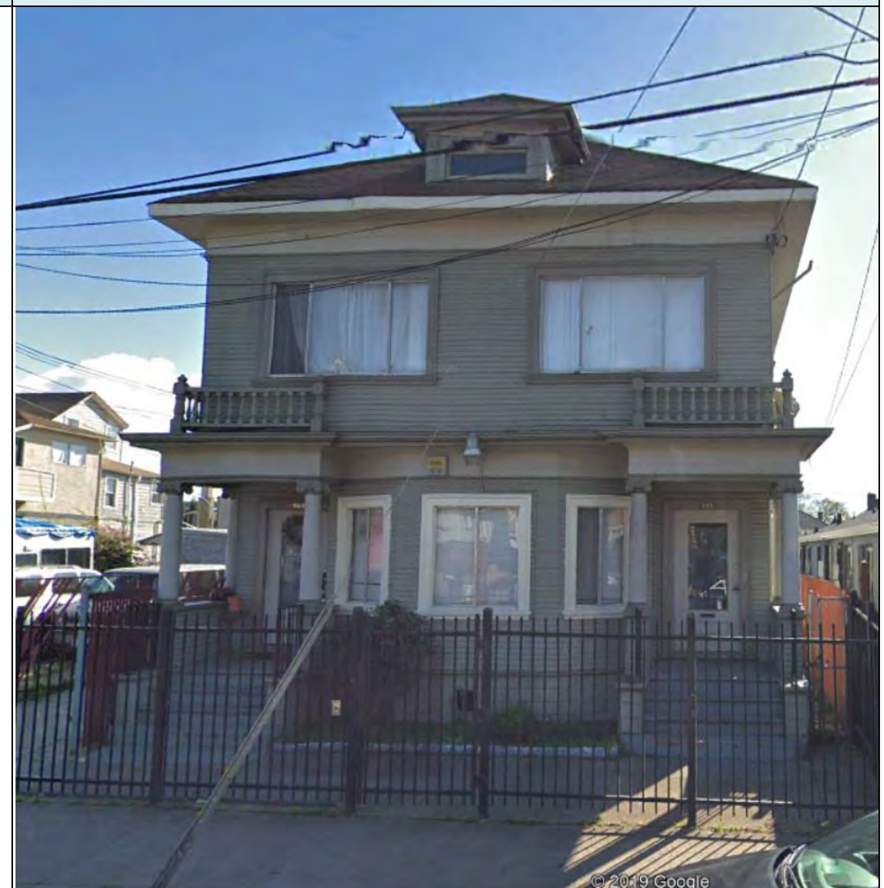
APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
1c	012-0964-005	3823 Martin Luther King, Jr. Way	City of Oakland	n/a	Exempt public agency OCHS Rating: n/a	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
1d	012-0964-004	3829 Martin Luther King, Jr. Way	City of Oakland	n/a	Exempt public agency **OCHS Rating: n/a**	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
2	012-0964-003	3837 Martin Luther King, Jr. Way	Asmerom Ghebremichael	1900	Triplex OCHS Rating: Dc3, PDHP	

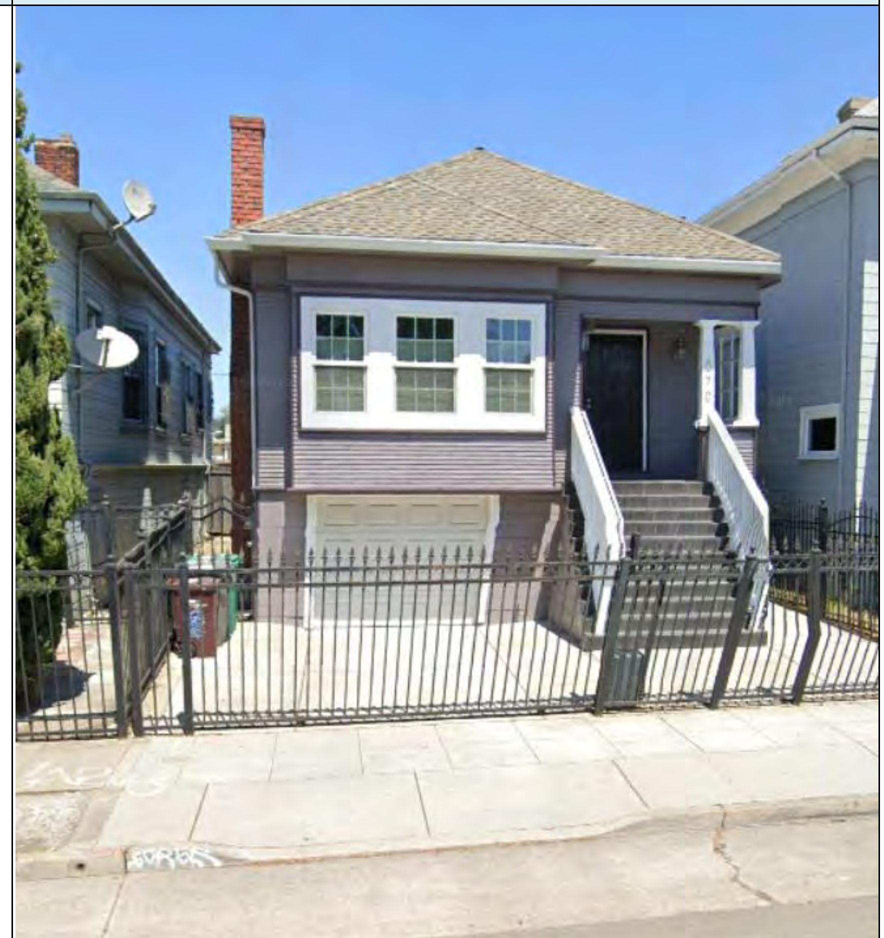
APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
3	012-0964-002	3843 Martin Luther King, Jr. Way	Peter Consos	1906	Triplex **OCHS Rating: Dc3, PDHP**	

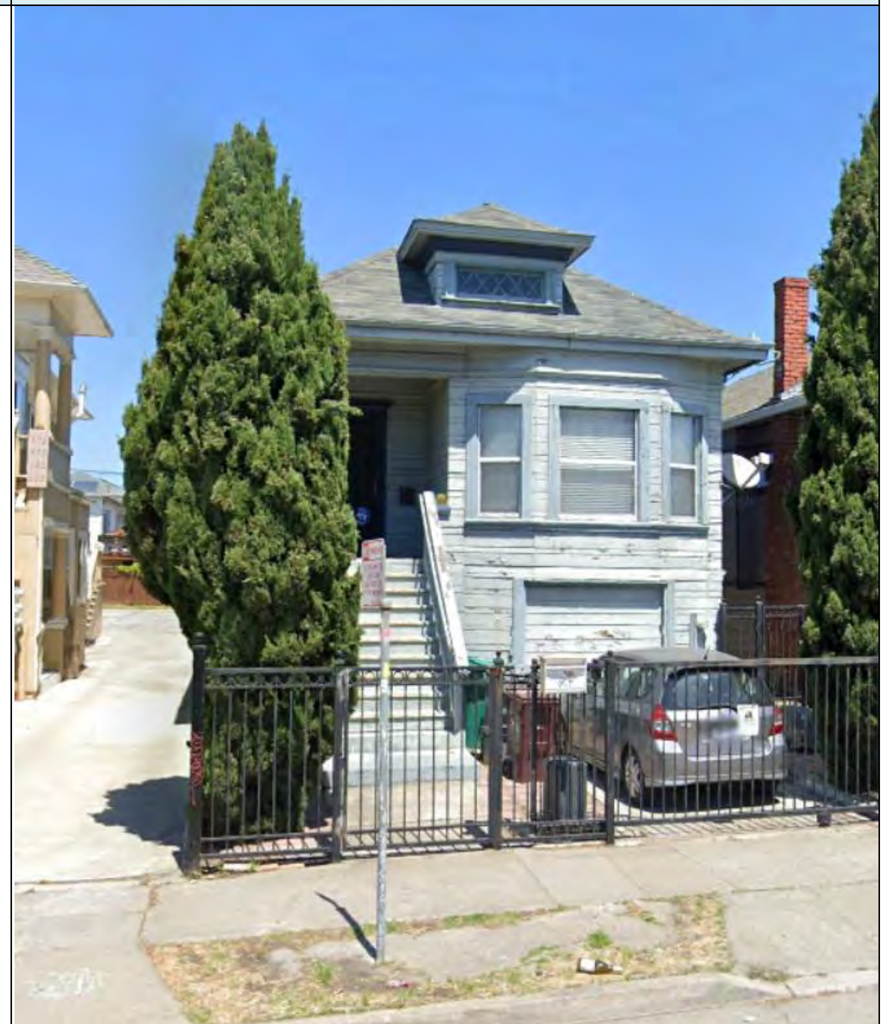
APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
4	012-0964-001	3849 Martin Luther King, Jr. Way	Nasir Mohamed	1969	Misc. Improved commercial **OCHS Rating: X**	

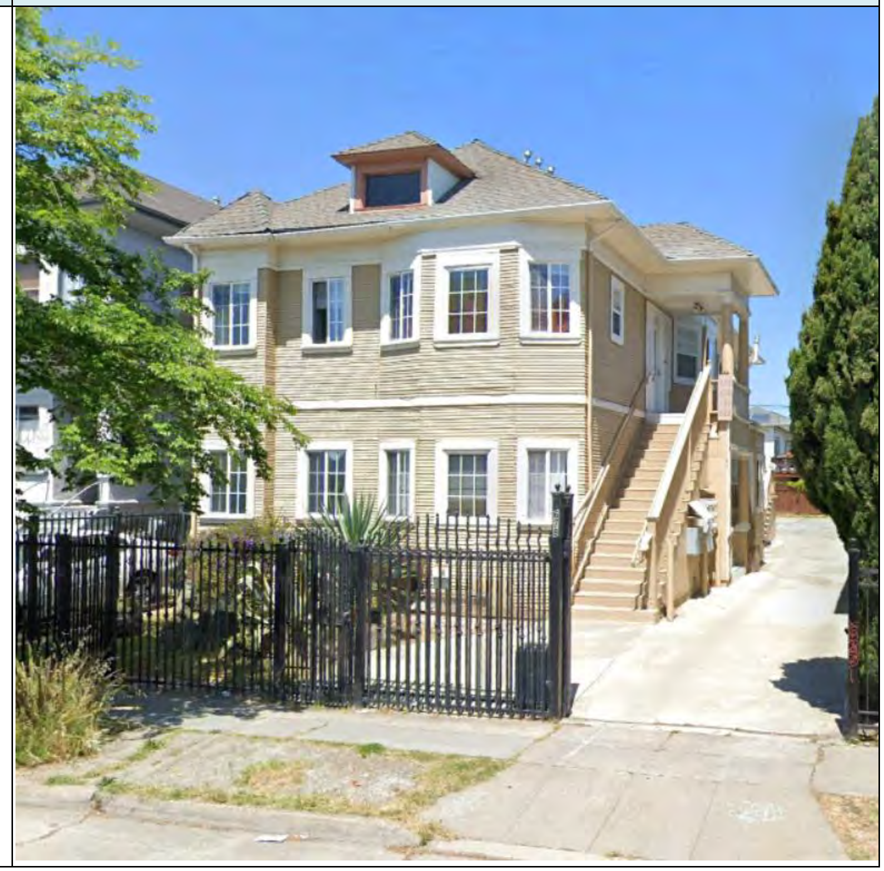
APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
5	012-0964-041	663 Apgar Street	Guiton Trust	1900	Four-plex OCHS Rating: Dc3, PDHP	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
6	012-0964-040	671 Apgar Street	Tegre Miles	1950	Triplex OCHS Rating: X	

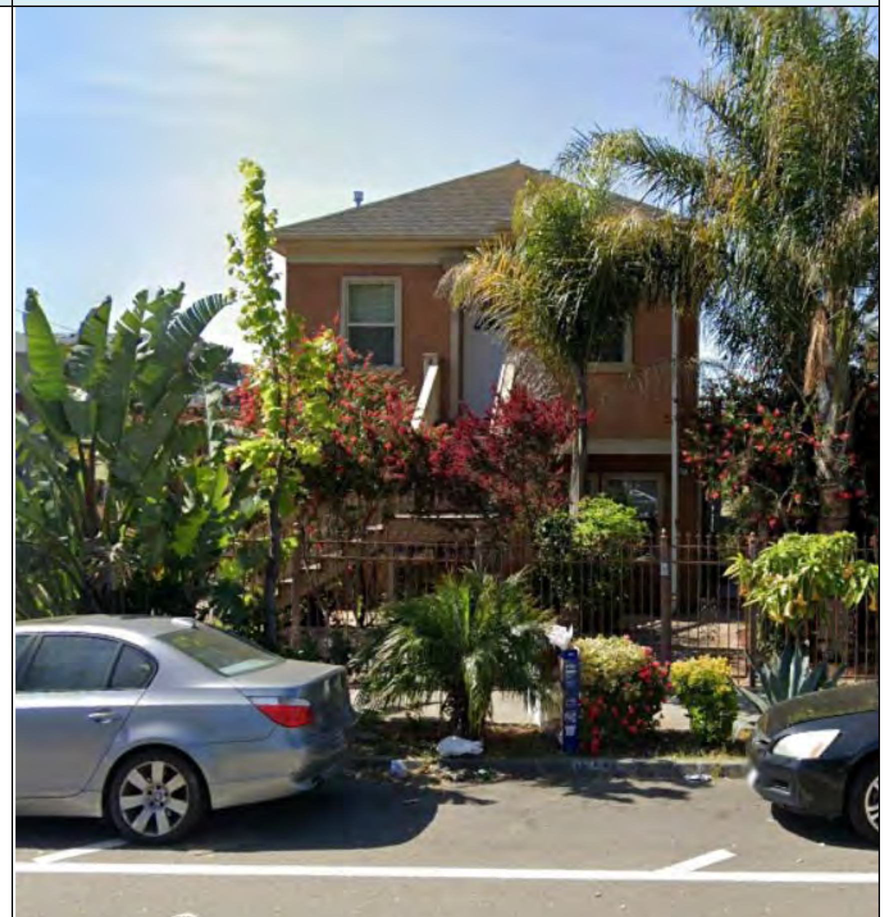
APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
7	012-0964-008	668 W MacArthur Blvd.	Dan Li	1908	Single family residence **OCHS Rating: X**	

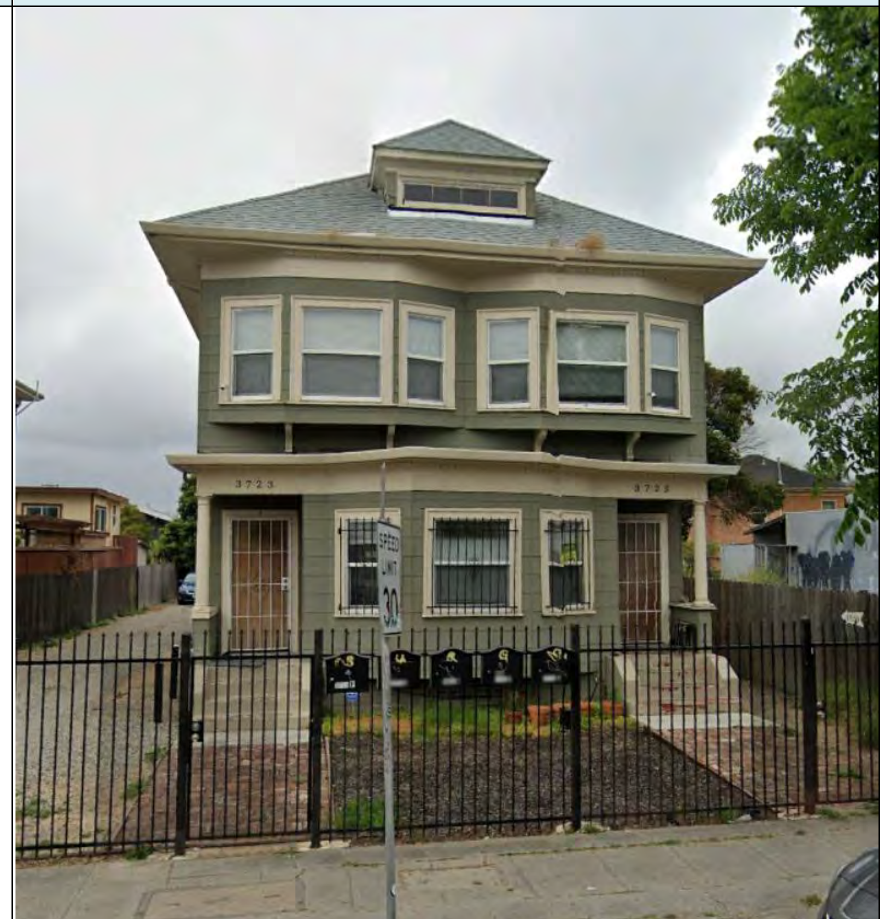
APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
8	012-0964-009	670 W MacArthur Blvd.	Suzette Nubie	1913	Single family residence **OCHS Rating: X**	

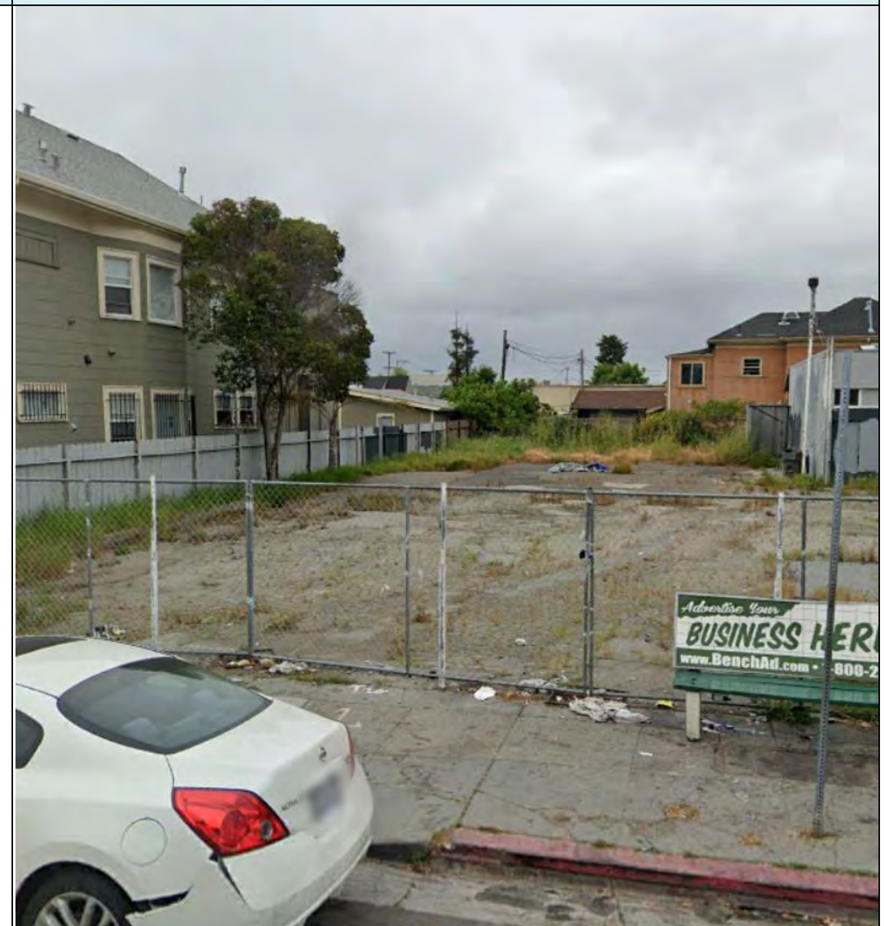
APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
9	012-0964-010	674 W MacArthur Blvd.	Li Li	1906	Single family residence **OCHS Rating: C3, PDHP**	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
10	012-0964-011	678 W MacArthur Blvd.	Ngawang Bista	1903	Four-plex **OCHS Rating: X**	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
11	012-0965-031	669 W MacArthur Blvd.	Rekha Patel	1914	Motel **OCHS Rating: X**	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
12	012-0965-032	665 W MacArthur Blvd.	Habib	1900	Triplex OCHS Rating: Dc3, PDHP	

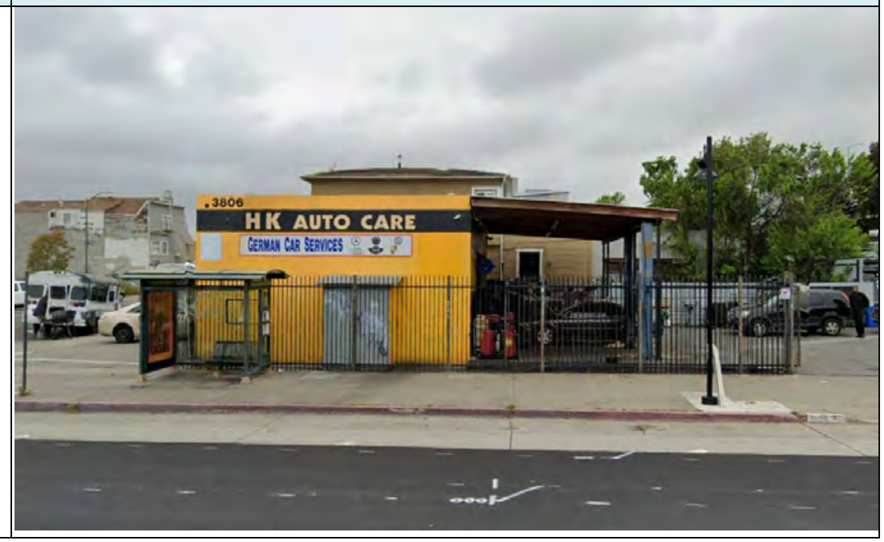
APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
13	012-0965-003	3725 Martin Luther King, Jr. Way	302EOF LLC	1906	Triplex **OCHS Rating: X**	

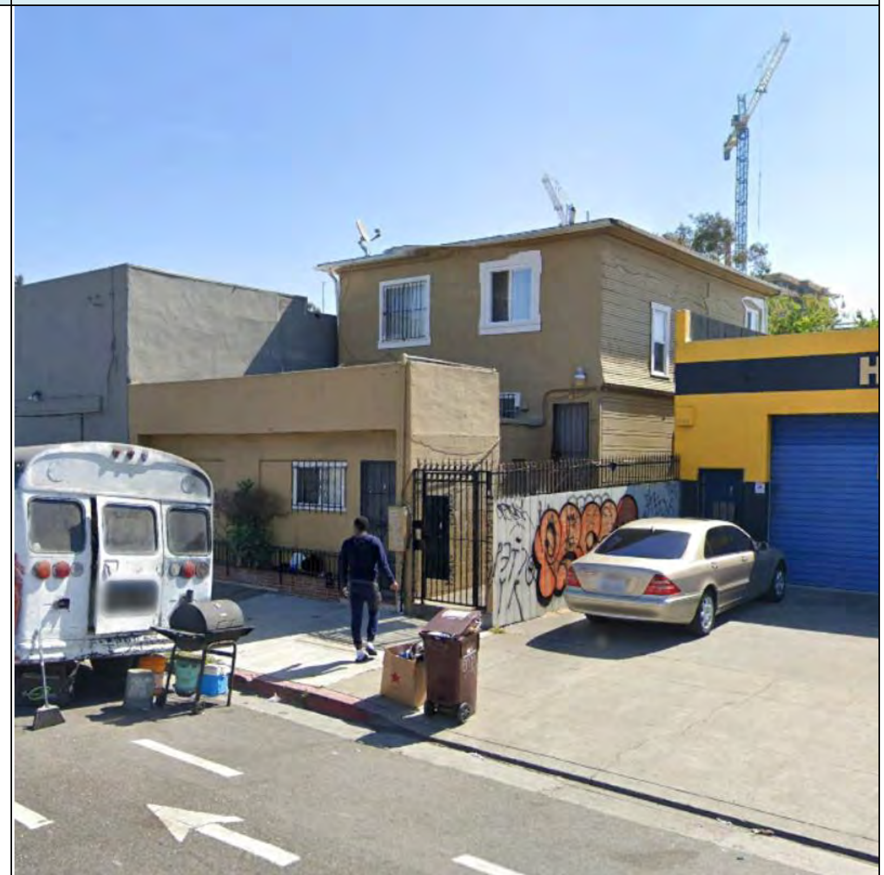
APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
14	012-0965-002	Address unassigned, Martin Luther King, Jr. Way	MacArthur PSH	n/a	Vacant apartment land **OCHS Rating: None**	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
15	012-0965-001	657 W MacArthur Blvd.	MacArthur PSH	1941	Site is a former gas station that is approved by the City of Oakland for a new, multifamily affordable housing project OCHS Rating: X	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
16	012-0966-028	3720 Martin Luther King, Jr. Way	Good Samaritan Cathedral Church God in Christ Inc.	1910	Commercial building (part of church – see below APE #17) **OCHS Rating: None (see below)**	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
17	012-0966-029-01	625 W MacArthur Blvd.	Good Samaritan Cathedral Church God in Christ Inc.	1965	Church OCHS Rating: X	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
18	012-0967-022	3806 Martin Luther King, Jr. Way	Semhar Gebremichael	1970	Commercial repair garage OCHS Rating: X	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
19	012-0967-023	3810 Martin Luther King, Jr. Way	Mohamed Mosleh	1910	Store on first floor with office OCHS Rating: X	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
20	012-0967-024-01	3820 Martin Luther King, Jr. Way	Rockridge Properties LLC	1930	One-story store **OCHS Rating: X**	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
21	012-0967-026	3834 Martin Luther King, Jr. Way	Christian Bibleway Church	1930	Commercial building OCHS Rating: X	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
22	012-0967-027	3838 Martin Luther King, Jr. Way	Lie Yang	1906	Duplex OCHS Rating: C3, PDHP	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
23	012-0967-028	3840 Martin Luther King, Jr.	Lara Evans	1906	Duplex OCHS Rating: Dc3, PDHP	

APE #	APN	Address	Owner	Year built	Comments/ OCHS Rating	Photo
24	012-0967-029	3848 Martin Luther King, Jr. Way	David Stone	1908	Four-plex OCHS Rating: Dc3, PDHP	

Oakland Cultural Heritage Survey (OCHS)/Historical and Architectural Rating System

The Rating System, adopted in the Oakland General Plan, Historic Preservation Element, is shorthand for the relative importance of properties. The system uses letters A to E to rate individual properties and numbers 1 to 3 for district status. Individual properties can have dual ("existing" and "contingency") ratings if they have been remodeled, and if they are in districts, they can be contributors, noncontributors, or potential contributors. In general, A and B ratings indicate landmark-quality buildings. The rating system is summarized below.

<u>A: Highest Importance:</u> Outstanding architectural example or extreme historical importance (about 150 properties total).

<u>B: Major Importance:</u> Especially fine architectural example, major historical importance (about 600 total).

<u>C: Secondary Importance:</u> Superior or visually important example, or very early (pre-1906). Cs "warrant limited recognition (about 10,000 total).

<u>D: Minor Importance:</u> Representative example. About 10,000 Ds are PDHPs, either because they have a higher contingency rating ("Dc") or because they are in districts ("D2+").

<u>E: Of no particular interest, * or F:</u> Less than 45 years old or modernized. Some Es, Fs, and *s are also PDHPS because they have higher contingency ratings or are in districts.

<u>Contingency Ratings (lower-case letter, as in "Dc" or "Fb")</u>: potential rating under some condition, such as "if restored" or "when older" or "with more information."

<u>District Status (numbers):</u>
"1": In an Area of Primary Importance (API) or National Register quality district.

"2": In an Area of Secondary Importance (ASI) or district of local interest.

"3": Not in a historic district.

For properties in districts, + indicates contributors, - non-contributors, * potential contributors. (3)

Historic Districts

<u>Areas of Primary Importance (APIs)</u> are historically or visually cohesive areas or property groups which usually contain a high proportion of individual properties with ratings of "C" or higher and appear eligible for the National Register of Historic Places either as a district or as a historically-related complex. At least two-thirds of the properties in an API must be "contributors" to the API, i.e. they reflect the API's principal historical or architectural themes and have not had their character changed by major alterations. Properties which do not contribute to an API because of alterations, but which could contribute if the alterations are not least partly reversed, are "potential contributors" to the API. Properties which do not reflect the API themes are "noncontributors."

Areas of Secondary Importance (ASIs) are similar to APIs, except: (1) potential contributors to the ASI are counted for purposes of the two-thirds threshold as well as contributors; and (2) ASIs do not appear eligible for the National Register.

Evaluation

There are no local landmarks or National Register properties in the Area of Potential Effects.

None of the subject properties and properties in the Area of Potential Effects are located within an Historic District.

Attachment (4)

Subject:

1a. 3801-3807 Martin Luther King, Jr. Way. The parcel contains three buildings:

A single family home constructed in the 1880s was moved west from the corner in 1907 and was converted into three apartments. The building is most closely associated with the Victorian era "Eastlake" style. The wood-framed two-story building consists of an asymmetrical plan with a projecting bay and a multi-faceted roof and does not appear to have been altered from its original form. The wood framed building consists of horizontal wood channel siding and corner trim detail. All the windows on the building are covered in plywood and may have been removed from the building; however, there is evidence of simple trim in sections that are exposed.

OCHS RATING: C3, PDHP (Secondary Importance; not in an historic district, Potential Designated Historic Property)

The corner of the parcel contains a commercial building constructed in 1907. The commercial building is constructed with elements of "storefront" commercial design. The two-story building is rectangular in form, except for a canted corner entry, upper-story bays, and a slight recessed portion along the northwest corner of the building, and does not appear to have been altered from its original form.

OCHS RATING: Dc3 (Minor Importance; Secondary Importance if restored; not in an historic district)

A 1950s shed also occupies the interior part of the property and is not rated by the City of Oakland. The shed is a wood framed building constructed in a rectangular plan and appears to have no design. The building was likely originally a shed and then later converted for use a garage.

OCHS RATING: Not rated

The three buildings were evaluated for their potential individual eligibility for listing in the NRHP under the themes of Victorian era style and storefront commercial (architecture and architect) with several periods of significance that are associated with their date of construction.

The Historic Resource Evaluation prepared for the project by Evans & De Shazo in October 2019, determined that none of the three buildings are individually eligible for listing in the National

Register of Historic Places (NRHP), and therefore none of the three buildings are considered Historic Properties under Section 106 of the NHPA.

Attachment (5)

1b. Address unassigned, Martin Luther King, Jr. Way, vacant parcel. The parcel contains no structures to evaluate for historic significance.

OCHS RATING: n/a

1c. 3823 Martin Luther King, Jr. Way, vacant parcel. The parcel contains no structures to evaluate for historic significance.

OCHS RATING: n/a

1d. 3829 Martin Luther King, Jr. Way, vacant parcel. The parcel contains no structures to evaluate for historic significance.

OCHS RATING: n/a

Surrounding Properties (APE):

2. 3837 Martin Luther King Jr. Way, ca. 1900 storefront commercial building. The ca. 1910 three-story storefront commercial building and second and third story residential units are designed with elements of storefront commercial architectural style.

   OCHS RATING: Dc3, PDHP (Minor Importance; Secondary Importance if restored; not in an historic district, Potential Designated Historic Property)

3. 3843 Martin Luther King Jr. Way, ca. 1906 multi-unit apartment building. The ca. 1906, multi-unit apartment building is constructed in the “High-Peaked” Dutch Colonial Revival architectural style; however, the building has been altered along the rear elevation over the years. The building’s rectangular mass is situated under a single gable roof with laterally projecting hipped roof dormers. The roof is clad in asphalt shingles and there is a single brick chimney along the roof ridge. The east elevation (primary façade) consists of small corner portico, at the northeast elevation, which is supported by Ionic columns.

   OCHS RATING: Dc3, PDHP (Minor Importance; Secondary Importance if restored; not in an historic district, Potential Designated Historic Property)

4. 3849 Martin Luther King Jr. Way, ca. 1969 “Drive-in Liquor Store” commercial building. The ca. 1969 building was constructed as a “Drive-in liquor store” commercial building. The building is constructed of concrete block in the rectangular plan with a flat roof. The primary façade (east elevation) consists of a centered storefront with a recessed and angled entry flanked on both sides by a metal framed storefront windows with transoms.

   OCHS RATING: X (not rated)

5. 663 Apgar Street, ca. 1900 two unit flats building and ca. 1911 accessory dwelling unit (ADU). The ca. 1900 two-unit flats building is designed with elements of the Italian Renaissance Revival architectural style. The two-story building is rectangular in plan with a symmetrical design (Figure

24). There is hipped roof clad in asphalt shingles and a centered hipped dormer. The ground floor consists of a centered, angled bay window that is flanked by two porch porticos supported with ionic, tapered and round columns.

OCHS RATING: Dc3, PDHP (Minor Importance; Secondary Importance if restored; not in an historic district, Potential Designated Historic Property)

6. 671 Apgar Street, ca. 1950 "attached" cottages and ca. 1950 three-car garage. The property at 671 Apgar Street includes three ca. 1950 "attached" cottages and a three-car garage located at the rear of the cottages. The ca. 1950 "attached" cottages are constructed in the Minimal Tradition architectural style. The "cottages" building is clad in stucco with wood scalloping in the primary gable eaves. The building is constructed in rectangular plan with a front gable-pitched roof with a lower gable that extends to include a porch roof eave along the primary façade (north elevation).

   OCHS RATING: X (not rated)

7. 668 W. MacArthur Boulevard, ca. 1908 house and ca. 1908 ADU. The ca. 1908 house is designed with elements of Italian Renaissance Revival design. The two story building is constructed in a rectangular plan with a hipped roof that is clad in asphalt shingles (Figure 26). There is a central, flat roof dormer with decorative dentil. The roof has overhanging eaves and trim work along the roof cornice.

   OCHS RATING: X (not rated)

8. 670 W. MacArthur Boulevard, ca. 1913 house. The ca. 1913 house is constructed with Italian Renaissance Revival and Craftsman elements, but has been modified. The building appears to have originally been a one story house with a basement that was raised to add a garage under the first floor.

   OCHS RATING: X (not rated)

9. 674 W. MacArthur Boulevard, ca. 1906 house. The ca. 1906 house is constructed with elements of Italian Renaissance Revival; however, the building has been significantly modified along the primary facade. The building appears to have originally been a one story house with a basement that was raised to add a garage under the first floor.

   OCHS RATING: C3, PDHP (Secondary Importance, not in a historic district)

10. 678 W. MacArthur Boulevard, ca. 1903 two-unit flats building. The ca. 1903 two-units flats building is designed in the Italian Renaissance Revival architectural style. The building consists of rectangular plan with a hipped roof and a center hipped roof dormer.

    OCHS RATING: X (not rated)

11. 669 W. MacArthur Boulevard, ca. 1914 motel. The ca. 1914 motel is designed as "attached" cottages (which consists of two forms that are evaluated as one as they are connected in design and use). The style of the ca. 1914 motel, is unclear as it has been significantly modified since it

was converted to a motel (date unknown; though likely 1990s or 2000s). As such, it is unclear what was the original style of the cottage.

OCHS RATING: X (not rated)

12. 665 W. MacArthur Boulevard, ca. 1900 two unit flats building. The ca. 1900 two unit flats building was originally designed in the Italian Renaissance Revival architectural style (Figure 31). The building is a two-story, rectangular plan with a hipped roof. It appears that the building was originally constructed as a single-family home, but was modified in ca. 1911 to created two flats.

OCHS RATING: Dc3, PDHP (Minor Importance; Secondary Importance if restored; not in an historic district, Potential Designated Historic Property)

13. 3725 Martin Luther King Jr. Way, ca. 1906 three unit apartment building and ca. 1910 garage. The ca. 1906 is a three unit apartment building is designed with elements of Italian Renaissance Revival architectural style. The two-story building is rectangular in plan with a symmetrical design.

OCHS RATING: X (not rated)

14. No physical address, no buildings present. Currently, the parcel is a vacant lot, but was previously associated with the ca. 1912 gas station (APE 15).

OCHS RATING: None

15. 657 W. MacArthur Boulevard, ca. 1912 gas station. The original design of the ca. 1912 gas station is difficult to confirm as it has been modified over the years to suit the needs of the business that occupied the building; therefore, it is categorized as Vernacular form; however, it is likely that the building had elements of a specific style that are no longer present. The site has been approved by the City of Oakland for redevelopment to multifamily affordable housing.

OCHS RATING: X (not rated)

16. 3720 Martin Luther King Jr. Way, ca. 1910 commercial building (religious building). Prior to the construction of the church (APE 17), the ca. 1910, which is now merged with the ca. 1965 church, was a separate commercial building that included two store fronts. The building appears to have been "merged" with the ca. 1965 Church when the church building was constructed. The building currently consists of a stucco exterior and has been modified significantly including removal of the original fenestrations.

OCHS RATING: None

17. 625 W. MacArthur Boulevard, ca. 1965 religious building. The ca. 1965 religious building is designed in the Mid-Century Modern architectural style. The building consists of a dominate front gable room plan with a side gable addition. The building is clad in stucco. There is a is a moderate pitch roof and a narrow vertical element clad in stucco and stone with an over-sized cross placed on top that is highly visible along W. MacArthur Boulevard. Along the north elevation there is a tall portico entry porch supported by round columns and two sets of double doors that are the main entry to the church. Above the portico are a series of narrow windows, which are also present along the rectangular addition and along the west elevation. There are letters that are

positioned along the north elevation exterior wall that state "Good Samaritan Cathedral Church of God".

OCHS RATING: X (not rated)

18. 3806 Martin Luther King Jr. Way, ca. 1970 commercial building. The ca. 1970 commercial building does not appear to have a design, but is constructed as a form. The building is rectangular in plan and consists of a flat roof. The building is concrete block construction.

OCHS RATING: X (not rated)

19. 3810 Martin Luther King Jr. Way, ca. 1910 house and ca. 1970 commercial addition. The building consists of the original ca. 1910 house (rear) and a ca. 1970 commercial addition that is attached to the primary façade (west elevation) of the house. The original two story house has been significantly modified, and it appears that the original features and fenestrations of the house have been removed and replaced with contemporary elements that include a stucco façade and vinyl sliding windows within non-original window openings.

OCHS RATING: X (not rated)

20. 3820 Martin Luther King Jr. Way, ca. 1930 commercial building. The ca. 1930 commercial building in designed with elements of storefront commercial style. The building is rectangular in plan and consists of a flat roof. The building is clad in stucco and consists of an angled side-entry door and what appears to be boarded up storefront picture windows.

OCHS RATING: X (not rated)

21. 3834 Martin Luther King Jr. Way, ca. 1930 commercial building. The ca. 1930 commercial building is constructed as a commercial building form. It is rectangular in plan and consists a flat roof. The building is clad in stucco and the primary façade has been modified. There are two recessed bays with narrow horizontal windows. The two bays flank a double-door front entry that serves at the main entrance to the building.

OCHS RATING: X (not rated)

22. 3838 Martin Luther King Jr. Way, ca. 1906 two unit flats building. The ca. 1906 two unit flat building is designed in the Italian Renaissance Revival architectural style. The two-story building is rectangular in plan with a symmetrical designed (Figure 40). There is hipped roof clad in asphalt shingles and a centered hipped dormer. The building is clad in narrow clapboard.

OCHS RATING: C3, PDHP (Secondary Importance, not in a historic district)

23. 3840 Martin Luther King Jr. Way, ca. 1906 two-unit flat building (originally a single-family house). The ca. 1906 two-unit building is constructed in the "High-Peaked" Dutch Colonial Revival architectural style. The building is designed with a rectangular mass that is situated under a single gable roof with laterally projecting shed roof dormers that extend from the roof ridge.

OCHS RATING: Dc3, PDHP (Minor Importance; Secondary Importance if restored; not in an historic district, Potential Designated Historic Property)

24. 3848 Martin Luther King Jr. Way, ca. 1908 multi-unit apartment building. The ca. 1908 multi-unit apartment building is designed in the Italian Renaissance Revival architectural style. The two-story building consists of a rectangular form and a hipped roof and angled roof corners. There is a centered hipped roof dormer and a brick chimney.

    OCHS RATING: Dc3, PDHP (Minor Importance; Secondary Importance if restored; not in an historic district, Potential Designated Historic Property)

The Indirect APE consists of 27 parcels with 30 built environment resources that were each evaluated for their potential individual eligibility for listing in the NRHP under the theme of architecture, including Victoria era design, Italian Renaissance Revival, "High Peak" Dutch Colonial Revival, Storefront Commercial, Mid-Century Modern, and Vernacular. Of the 27 build environment resources that were evaluated, only the ca. 1908 multi-unit apartment building (EDS 24) was found to be individually eligible for listing on the NRHP under Criterion C related to the theme of "Italian Renaissance Revival" architecture for the period of significance of ca. 1908. Due to this finding, the ca. 1908 multi-unit apartment building is considered a Historic Property for the purpose of Section 106 of the NHPA. EDS completed an assessment of effects in accordance with 36 CFR 800.5., and found that the proposed Project will not diminish the integrity of the ca. 1908 multi-unit apartment building or the reason for its eligibility for listing on the NRHP. Therefore, EDS recommends a finding of "no adverse effects" to built environment Historic Properties located within the Direct and Indirect APEs.

Attachment (5)

California Environmental Quality Act

The project's Planning Application was approved by the City of Oakland on September 11, 2019, which included approval for demolition of the subject property buildings. The approval made the following determination:

> *"The proposal will remove the existing Potentially Designated Historic Property (PDHP) rated C to construct a new 77- unit affordable mixed-use residential development on a 21,250 sq. ft. parcel. The scale and massing of the proposed design addresses the neighboring context. The open space area at the podium level facing onto the residential building on W. Macarthur Blvd. and the vertical offset at the podium level and upper floors serves to lighten the building mass, as well as to articulate the building elevations which will provide an eased transition to the neighboring building. As a result , the proposed replacement project is equal with respect to the quality of the existing building design and is compatible with the character of the neighborhood"*

Attachment (6)

Archaeology

The Area of Potential Effects for archaeology includes the four subject parcels to a depth required for construction of proposed new improvements.

A *Historic Property Survey (HPS)* for the proposed Longfellow Corner project was conducted by Evans & De Shazo, Inc. in September 2019. The HPS was completed by EDS Principal Archaeologist Sally Evans, M.A., RPA, and Senior Archaeologist Gilbert Browning M.A., RPA who both exceed the Secretary of Interior's qualification standards in archaeology and history. The methods used to complete the HPS included a record search at the Northwest Information Center (NWIC) of the California Historical Information System (CHRIS), a review of background information pertaining to the prehistory, history, and ethno-history of the Oakland area and the project area, and a field survey.

California Historic Resource Information System - Records Search

A record search was conducted by EDS Principal Archaeologist, Sally Evans, M.A., RPA at the NWIC on July 3, 2019 (NWIC File #19-0030). According to information on file at the NWIC, the project site has not been subject to a previous cultural resource study and there are currently no cultural resources recorded within the project site. There have been a total of five (5) cultural resource studies previously conducted within 0.25-miles of the project site.

A check of the OHP's Directory of Properties in the Historic Property Data (HPD) File for Oakland, Alameda County, California (dated 4/5/2012) was also conducted. The HPD File lists three resources in close proximity to the project site, including:

- ca. 1908 building at 627 Apgar Street that is listed with a National Register status code of 6Y, meaning it was determined ineligible for the National Register by consensus through Section 106 process – not evaluated for California Register or a local listing.
- ca. 1906 building at 680 Apgar Street that is listed with a National Register status code of 6Y, meaning it was determined ineligible for the National Register by consensus through Section 106 process – not evaluated for California Register or a local listing.
- ca. 1908 building at 709 MacArthur Boulevard that is listed with a National Register status code of 6Y, meaning it was determined ineligible for the National Register by consensus through Section 106 process – not evaluated for California Register or a local listing.

There are no resources listed in the California Inventory of Historic Resources (California Department of Parks and Recreation 1976), the Office of Historic Preservation's (OHP) Five Views: An Ethnic Sites Survey for California (1988), California Points of Historical Interest or California Historical Landmarks (OHP 2019), located in the immediate vicinity of the project site.

Attachment (7)

Field Survey

An EDS Secretary of Interior-qualified archaeologist conducted a field survey to physically inspect the project site for potentially significant cultural resources (other than built-environment resources that are addressed in the HRE). The field survey included an inspection of the project site for evidence of prehistoric archaeological sites, including artifacts, such as chipped stone (obsidian, chert and basalt) flakes and tools (e.g. projectile points, knives, scrapers), shellfish remains, ground stone, fire-affected rock, and other indicators of prehistoric archaeological resources. The project site was also inspected for evidence of historic-era resources, including archaeological resources, such as surface scatters of farming or domestic type artifacts (i.e. glass, ceramic, metal, etc.), as well as features such as alignments of stone or brick, foundation elements from previous structures, minor earthworks, and historic plantings (i.e. old fruit, nut or other types of trees, and ornamental plants).

The methods used to complete the field survey of the project site included walking a series of linear transects oriented north/south and spaced approximately one meter apart. The soil visibility within the project site was poor (approximately 10 to 20 percent visibility) due to the presence of high grasses and modern refuse that concealed much of the ground surface; however, to aid in the identification of archaeological resources the surveyor used a hand trowel to expose soil along each transect. The soil observed within the project site included light brown colored loam.

No prehistoric or historic-era artifacts, or other indications of an archaeological deposit were identified during the field survey of the project site.

Attachment (7)

Native American Contacts

AEM Consulting sent a Sacred Lands inventory request to the Native American Heritage Commission (NAHC) on July 19, 2019 to determine if there are any Sacred Lands or other Tribal resources located within or near to the project site, and to obtain a list of Native American tribes who may have additional information about Sacred Lands within or near the project site. A search of the Sacred Lands file conducted by the NAHC on July 24, 2019 was negative, meaning that it did not indicate the presence of any Native American Sacred Lands within or in the immediate vicinity of the project site.

The City of Oakland sent a letter to Federally recognized Tribe of Alameda County, California Valley Miwok on July 19, 2019 to request further information about Native American traditional cultural resources within or near the project site that could be affected by the project, and to initiate consultation, as required by the Section 106 process. No response has been received to date.

Attachment (7) (8) (9) (10)

Results

The HPS did not result in the identification of any historic properties or cultural resources having the potential to meet the criteria of a historic property under Section 106 of the NHPA. However, it was determined that the project site has a moderate to high potential to contain buried archaeological resources, and due to the potential for prehistoric and/or historic-period archaeological resources to be encountered during project-related earth-disturbing activities, a Cultural Resources Monitoring Plan (CRMP) was prepared. The CRMP includes the provision of archaeological monitoring for initial project-related earth-disturbing activities in order to identify any buried archaeological resources that may be present. Implementation of the CRMP during construction will ensure no adverse effects to buried cultural resources, if present.

Attachment (11) (12)

Conclusion

The subject property buildings do not appear eligible for listing on the National Register of Historic Places.

Buildings in the Area of Potential Effects of the undertaking will not be adversely affected by the undertaking.

Due to the moderate to high potential for accidental discovery of buried cultural resources during construction, a Cultural Resources Management Plan will be in place during ground-disturbing activities that include an archaeological monitor, to prevent any adverse effects to buried cultural resources, if present.

Recommended Determination

For purposes of Section 106 Review of this undertaking, AEM Consulting recommends that the Agency Official, City of Oakland, make a finding that there are no adverse effects to historic properties as defined for Section 106.

As the possibility still exists for accidental discovery during project activities (ground disturbance), the following Mitigation Measures will be required for project approval:

CR1. **Cultural Resources Management Plan**

The project applicant shall implement the Cultural Resource Monitoring Plan prepared for the proposed Project by Evans & De Shazo, Inc. and dated September 18, 2019 to address possible buried archeological resources including but not limited to the summarized following from the report.

a. The applicant shall retain a qualified Project Manager (PM), Principal Investigator (PI) and at least one Archaeological Monitor (AM) to be assigned to the Project with one person subsuming the responsibilities of one or more of these positions, if qualified to do so.
b. The AM will be required during earth-moving (ground disturbing) activities or work that could adversely affect cultural resources with the project site and will implement

the archeological monitoring program including actions that require full time, part time and spot check monitoring. The Archaeological monitoring shall continue until the PI determines that cultural resources are unlikely to be encountered, at which time archaeological monitoring can cease.

c. The AM and PI will prepare reports and logs per the CRMP

d. If the monitoring results in a discovery of archeological resources and/or human remains, then the AM and PI will implement the work curtail program, procedures for discovery of archeological resources and human remains, field recordation procedures and prepare a mitigation and treatment plan.

e. The applicant will assume responsibility for curation of significant and exceptional archeological resources as described in the CRMR and evaluated in the mitigation and treatment plan.

f. A final CRM report will be prepared in accordance with the Secretary of the Interior's Standards for Archaeological Documentation. The final report will be submitted to the Project developer and the NWIC.

CR2. Archaeological and Paleontological Resources - Discovery During Construction

Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or in feasible , other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented.

In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess , and how the expected data classes would address the applicable research quest ions. The ARDTP shall include the analysis and specify the curation and storage methods . Data recovery , in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible , preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense.

In the event of excavation of paleontological resources , the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.

CR3. Human Remains - Discovery During Construction

Pursuant to CEQA Guidelines section 15064 .S(e) (l), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made . In the event that the remains are Native American , the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.

Works Cited / Attached:

1. *Project Description: Longfellow Corner.* July 2019.

2. HKIT Architects. *Planning Submittal Set - 3801 MLK JR. WAY, Oakland, California.* July 16, 2019. Job No. 30366.

3. City of Oakland. Historic Preservation - Historical and Architectural Rating System. *Planning & Building.* [Online] [Cited: March 11, 2016.] http://www2.oaklandnet.com/Government/o/PBN/OurServices/Historic/DOWD009155.

4. —. *Planning and Zoning Map.* [Online] [Cited: October 10, 2019.] http://oakgis.maps.arcgis.com/apps/webappviewer/index.html?id=3676148ea4924fc7b75e7350903c7224.

5. Evans & De Shazo, Inc. *A Historic Property Evaluation for the Longfellow Corner project at 3801 Martin Luther King, Jr. Way, Oakland, California.* Sebastopol, CA : s.n., October 7, 2019.

6. Merkamp, Robert D. *Planning Application Approval - 3801-3829 Martin Luther King Jr. Way, APN: 012-0964-004 & 012-0964-005 & 012-0964-006 & 012-0964-007.* s.l. : City of Oakland, Planning and Building Department, September 11, 2019. PLN19-104.

7. Crake, Cinnamon. *Letter to Native American Heritage Commission.* s.l. : AEM Consulting, July 19, 2019.

8. Totton, Gayle. *Letter to Cinnamon Crake, AEM Consulting in re: Longfellow Corner Affordable Housing Project, City of Oakland, Oakland West USGS Quadrangle, Alameda County, California.* West Sacramento, CA : State of California, Native American Heritage Commission, July 24, 2019.

9. U.S. Department of Housing and Urban Development. Tribal Directory Assessment Information. [Online] [Cited: July 19, 2019.] https://egis.hud.gov/tdat/.

10. Marvin, Betty. *Letter to Chairperson Burley, California Valley Miwok Tribe in re: Longfellow Corner, 3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California 94606, U.S. HUD Funds - Project-Based Section 8 Vouchers.* s.l. : City of Oakland, Department of Planning and Building, July 19, 2019.

11. Evans & De Shazo, Inc. *A Historic Property Survey for the Proposed Longfellow Corner project at 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.* Sebastopol, CA : s.n., September 12, 2019.

12. —. *A Cultural Resource Monitoring Plan for the proposed Longfellow Corner project at 3801 Martin Luther King, Jr. Way, Oakland, Alameda County, California.* Sebastopol, CA : s.n., September 18, 2019.

PROJECT DESCRIPTION: LONGFELLOW CORNER

3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California 94609 (APNs 012-0964-007, -006, -005 and -004):

Resources for Community Development (RCD) proposes to acquire and develop the Longfellow Corner affordable housing project on four contiguous parcels (APNs 012-0964-007, -006, -005 and -004) with address 3801-3829 Martin Luther King, Jr. Way in Oakland, Alameda County, California 94609. The total site area is 0.49 acres. Two parcels are currently owned by RCD; two are owned by the City of Oakland. Three existing buildings at the corner of Martin Luther King, Jr. Way and MacArthur Boulevard will be demolished to construct the project. After demolition, RCD will construct a new, six-story building with 77 affordable apartments and 2,052 square feet of ground floor commercial/retail space. The unit mix will be 33 one-bedroom units, 19 two-bedroom units and 25 three-bedroom units for a total of 77 units. A total of 4,609 square feet of open space will be provided on site.

The ground floor will contain two retail spaces, parking, lobby, elevator, bicycle parking, mail boxes, trash room, management office, filing and storage room and maintenance and electrical rooms.

A total of 39 parking spaces will be provided in the ground floor parking garage and include 50 long term bicycle parking spaces with 10% or minimum four short-term bicycle parking spaces. Podium space will provide a courtyard shielded from noise that includes a BBQ, children's play area, outdoor dining and seating area.

The project is 100% affordable.

SUMMARY SCOPE OF WORK:

The scope of work includes construction of a 6 story (5 Stories Type III over 1 Story Type I) building to accommodate 77 units of Affordable Family Housing at the corner of MacArthur Boulevard and MLK Jr. Way. The building will consist of parking, office, community, laundry and other support/ amenity spaces. The project also includes outdoor gardening and communal areas, landscape, bicycle parking and other site improvements. MacArthur is a major transit corridor in Oakland and the currently underutilized site has good access to transportation and other important services.

VICINITY MAP

3801 MLK JR. WAY

OAKLAND, CA 94609

APN:
12-964-4, 12-964-5, 12-964-6, 12-964-7

PROJECT TEAM

DEVELOPER

RESOURCES FOR COMMUNITY DEVELOPMENT
2220 OXFORD STREET
BERKELEY, CA 94704
Phone: 510-841-4410
CONTACT: NICK CRANMER
ncranmer@rcdhousing.org

ARCHITECT

HKIT ARCHITECTS
538 NINTH ST SUITE 240
OAKLAND, CA 94607
Phone: 510-625-9800
CONTACT: PAUL MCELWEE
pmcelwee@hkit.com

CIVIL

BKF ENGINEERS
300 FRANK H. OGAWA PLAZA #380
OAKLAND, CA 94612
Phone: 650-482-6458

LANDSCAPE

VANDORN ABED LANDSCAPE ARCHITECTS
81 14TH STREET
SAN FRANCISCO, CA 94103
Phone: 415-864-1921
CONTACT: SHARI VANDORN
shari@valainc.com

SHEET INDEX

PROJECT INFORMATION - AFFORDABLE HOUSING

APN	12-964-4, 12-964-5, 12-964-6, 12-964-7	
ADDRESS	3801 MLK JR. WAY	(ALSO 3807, 3823, 3829, 3831 MLK WAY)
ZONE		
ZONE	CN-3	
HEIGHT LIMIT AREA	60	
GENERAL PLAN - "NEIGHBORHOOD COMMERCIAL"		
USES PERMITTED - PERMANENT HOUSING (ABOVE FLOOR 1)		
SITE AREA (SOUTH PARCEL + NORTH PARCEL)		
SQUARE FEET	21,250	S.F.
ACRES	0.49	ACRES
MIN. LOT AREA	4,000	S.F.
DENSITY		
RESIDENTIAL		
MAX ALLOWABLE DWELLING: 375 S.F. / UNIT	375	S.F. / UNIT
MAX ALLOWABLE WITH 35% DENSITY BONUS PER 17.107.040	278	S.F. / UNIT
MAX ALLOWABLE UNITS WITH 35% DENSITY BONUS	77	UNITS
PROPOSED NUMBER OF UNITS	**77**	**UNITS**
COMMERCIAL SPACE - MAXIMUM ALLOWED	5,000	S.F.
PROVIDED	1,291	S.F.
HEIGHT		
CONSTRUCTION	1 TYPE I + 5 TYPE III	
MAX. ALLOWABLE HEIGHT	60'	
MAX TOTAL STORIES ABOVE GRADE	5	STORIES
PROPOSED HEIGHT (DENSITY BONUS)	**70'**	
	6	**STORIES**
EXCEPTIONS - CORNER "TOWER", MECH EQUIPMENT	10'	
STAIR, ELEVATOR PENTHOUSES	12'	
YARDS AND COURTS		
FRONT SETBACK (FACING MLK)	0'-10'	
STREET SIDE SETBACK (MACARTHUR)	0	
INTERIOR SIDE SETBACK (FACING EAST AND NORTH)	0	
ADD'L STREET SIDE SETBACK WHEN ABUTS RESIDENTIAL	20' DEEP	1/2 OF ADJ RM FRONT SETBACK
REQ'D REAR SETBACK ADJACENT RM ZONE (NORTHWEST CORNER)	15'	
REQ'D REAR SETBACK ADJACENT RU ZONI	10'	RESIDENTIAL FACILITIES
COURTS		
MIN. DIM - L.R. WINDOWS	16'	"+4'" FOR EVERY STORY
MIN. DIM - B.R. WINDOWS	10'	
PROJECTIONS - BAYS / BALCONIES	3'	INTO FRONT OR REAR
EAVES, AWNINGS, CORNICES	4' 2'	FRONT + REAR COURT + INTERIOR SIDE
BALCONIES	5'	(6' AT REAR YARD)
MAX OVERALL BAY WIDTH	0.5	BUILDING FRONTAGE
MAX INDIVIDUAL BAY WIDTH	15'	
MAX BAY PROJECTION	3' 5'	FRONT AND SIDE STREET REAR YARD
FIRST FLOOR NON-RESIDENTIAL MINIMUM HEIGHT		
(SEP FROM GRADE TO LIVING UNIT):	12'	
GROUND FLOOR REQUIRED TRANSPARENCY	65%	

OPEN SPACE (S.F.)			
REQUIRED - 150 s.f. / unit per table 17.19.04			
REQUIRED GROUP OPEN SPACE = 150 X 77	**11,550**	**S.F.**	
MIN. DIMENSION	15'		
PROVIDED - COMMON			
MAIN COURTYARD (FLOOR 2)	4,609	S.F.	
TOTAL PROVIDED	**4,609**	**S.F.**	
PROVIDED - PRIVATE	0	S.F.	
SUBSTITUTION FOR COMMON OPEN SPACE 2:1	0		
PROVIDED - INDOOR COMMON SPACE COUNTED AS OPEN SPACE			
TOTAL OPEN SPACE PROVIDED (COMMON + 2X PRIVATE)	4,609	S.F.	
UNITS			
ONE BEDROOM	33		43%
TWO BEDROOM	19		25%
THREE BEDROOM	25		32%
TOTAL	**77**	**UNITS**	
BUILDING AREA (S.F.) - GROSS AREAS			
FLOOR 1 (INCLUDES 2,052 S.F. RETAIL)			
CONDITIONED AREA (OFFICES / LOBBY)	2,613	S.F.	
UNCONDITIONED (GARAGE/UTILITY) AREA	15,093	S.F.	
FLOOR 2	15,350	S.F.	
FLOOR 3	15,350	S.F.	
FLOOR 4	15,140	S.F.	
FLOOR 5	15,006	S.F.	
FLOOR 6	15,006	S.F.	
TOTAL GROSS AREA	**93,558**	**S.F.**	
TOTAL GROSS AREA - CONDITIONED ONLY	**78,465**	**S.F.**	
PARKING			
REQUIRED - RESIDENTIAL			
CN-3 RATIO - BASE	1		
CN-3 RATIO MODIFIED FOR AFFORDABLE: 1/2 STALL / UNIT	0.5	TRANSIT DISTRICT	
TOTAL REQUIRED	38.5	STALLS	
REQUIRED - RETAIL - LESS THAN 3,000 S.F.	ZERO	STALLS	
TOTAL REQUIRED	**39**	**STALLS**	
REQUIRED ACCESSIBLE	**2**	**STALLS**	
TOTAL PROVIDED	**39**	**STALLS**	
MIN. STALL DIMENSIONS (17.116.200)	8' X 18'		
AISLE (Sect. 17.116.210)	21'		
BICYCLES			
SHORT TERM (10% OF PARKING, MIN 4)	10% OF PARKING	(or MIN 4)	
LONG TERM (1 PER 4 UNITS) - REQ'D	50	BIKES	
LOADING			
REQUIRED FOR RESIDENTIAL USES OVER 50,000 S.F.	N/A		

VIEW FACING NORTHEAST ALONG MACARTHUR BLVD

HKIT ARCHITECTS
538 NINTH STREET SUITE 240 • OAKLAND, CA 94607
T 510 625 9800 • F 510 625 9801 • WWW.HKIT.COM

3801 MLK JR. WAY

OAKLAND, CALIFORNIA

JOB NO.	30366
DRAWN	ALR
CHECKED	PM
JOB CAPTAIN	PM
DATE	
12/19/18	PRELIMINARY PLANNING PRE-APP
07/16/19	PLANNING APPLICATION

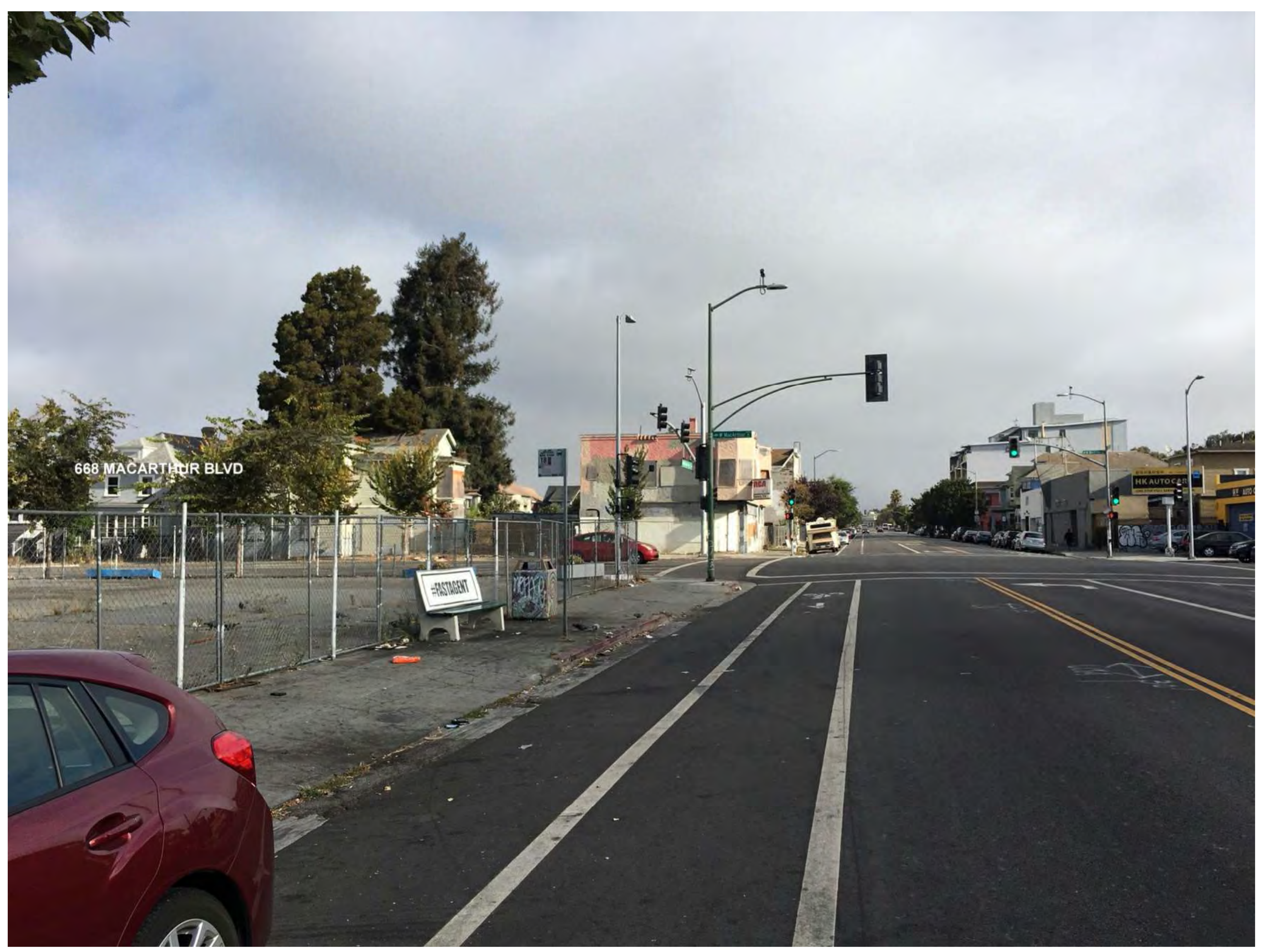
DRAWING TITLE

PROJECT INFORMATION

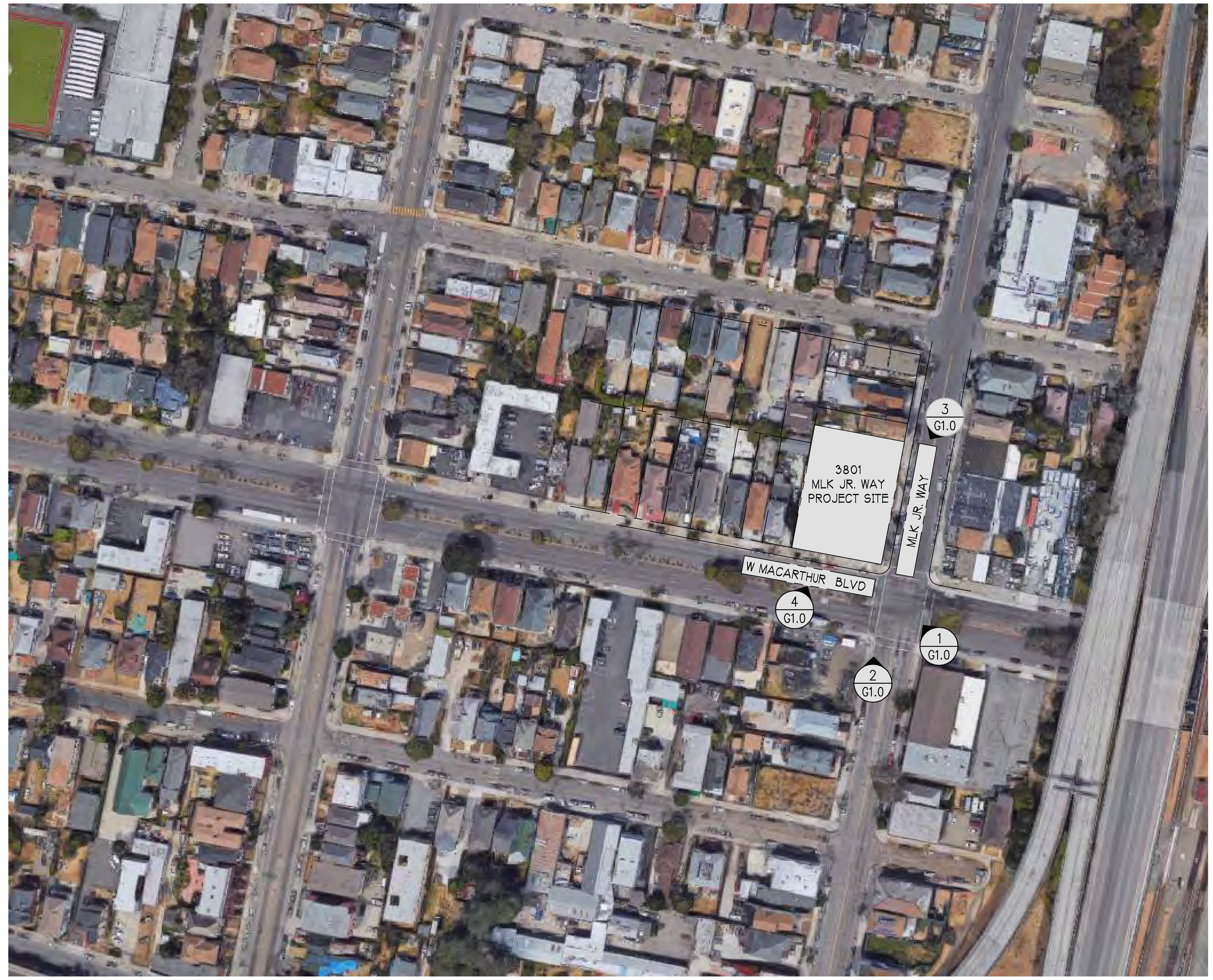
SCALE AS NOTED

G0.0

1 FACING NORTHWEST AT MACARTHUR

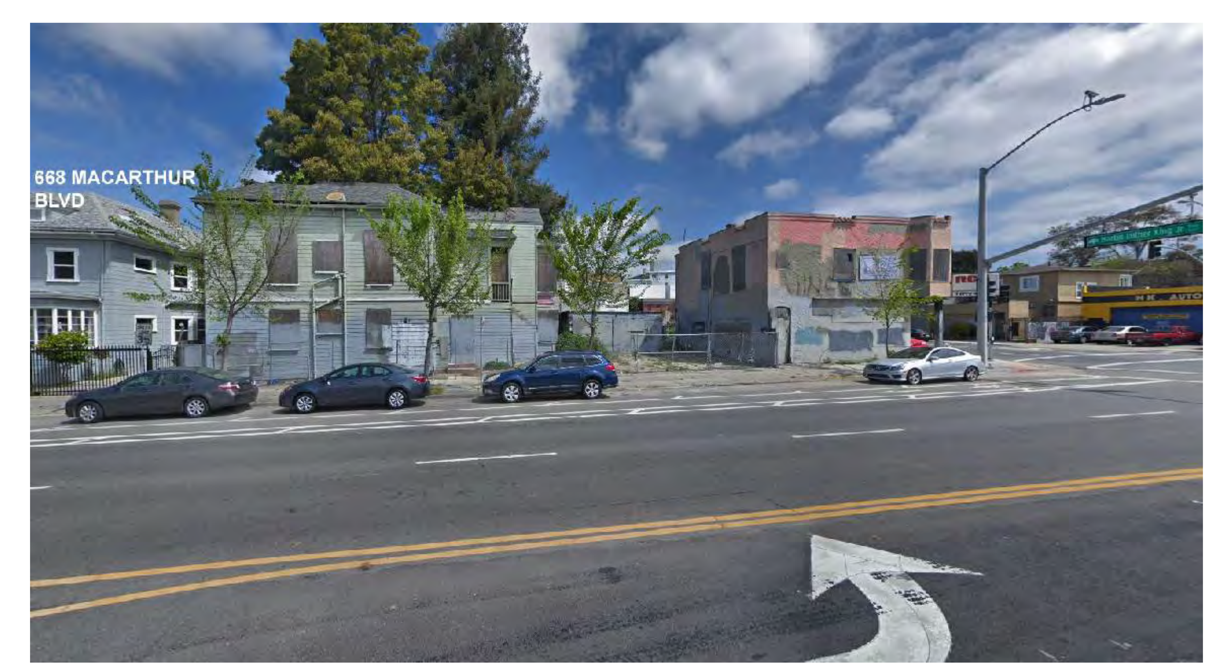


2 FACING NORTH AT MLK JR. WAY



5 AERIAL OF EXISTING CONDITIONS

3 FACING SOUTH FROM MLK JR. WAY



4 FACING NORTH FROM MACARTHUR

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3801 MLK JR. WAY

OAKLAND, CALIFORNIA

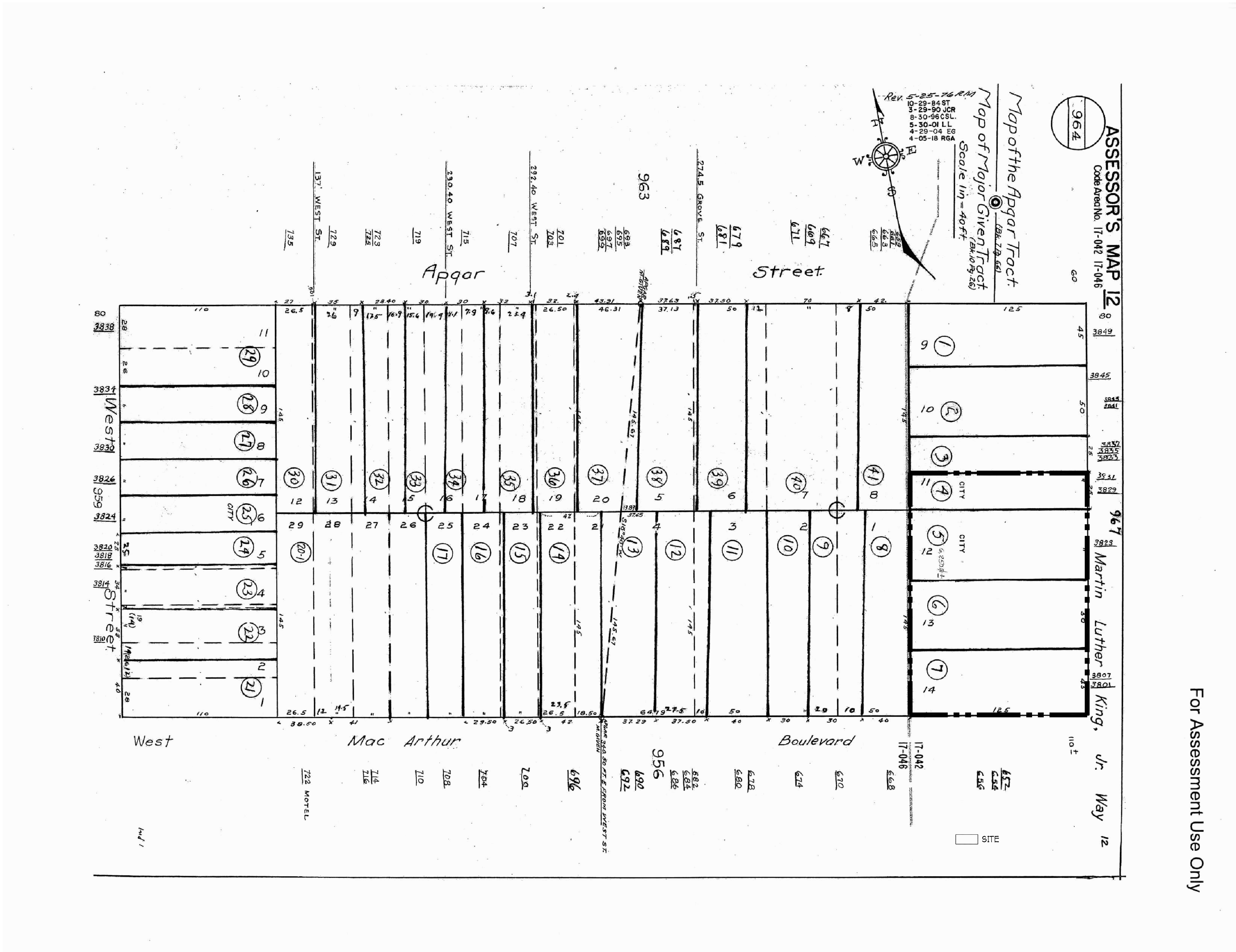
JOB NO.	30366
DRAWN	ALR
CHECKED	PM
JOB CAPTAIN	PM

DATE
12/19/18 PRELIMINARY PLANNING PRE-APP
07/16/19 PLANNING APPLICATION

DRAWING TITLE
EXISTING CONTEXT

SCALE NONE

G1.0



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3801 MLK JR. WAY

OAKLAND, CALIFORNIA

JOB NO.	30366
DRAWN	ALR
CHECKED	PM
JOB CAPTAIN	PM

DATE
12/19/18 PRELIMINARY PLANNING PRE-APP
07/16/19 PLANNING APPLICATION

DRAWING TITLE
ASSESSOR'S MAP

SCALE NONE

G2.0

LEGEND

EXISTING

- PROPERTY LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- COMMUNICATION LINE
- OVERHEAD LINE
- STORM DRAIN LINE
- ELECTRICAL LINE
- CURB AND GUTTER
- CURB LINE
- BUILDING WALL
- METAL BAR FENCE
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE
- STREET LIGHT
- TRAFFIC LIGHT POLE
- CATCH BASIN
- FIRE HYDRANT
- BOLLARD
- GAS VALVE
- UTILITY BOX
- UTILITY POLE
- SITE TREE
- CONCRETE

EXISTING GENERAL NOTES

1. BOUNDARY INFORMATION IS BASED ON RECORD INFORMATION ONLY.
2. TOPOGRAPHY SHOWN HEREON IS DERIVED FROM FIELD SURVEYS DATED JANUARY 17,2019.
3. ASSESSOR'S PARCEL NUMBERS: 12-964-4, 12-964-5, 12-964-6, & 12-964-7.
4. ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS THEREOF.
5. AREA: 21,274 SQUARE FEET, MORE OR LESS.

UTILITY NOTES

THE UTILITY LINES ON THIS SURVEY ARE DERIVED FROM RECORD DATA AND ARE APPROXIMATE. ACTUAL LOCATION AND SIZE, TOGETHER WITH THE PRESENCE OF ANY ADDITIONAL UTILITY LINES NOT SHOWN ON THIS SURVEY SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

10' 0 10' 20'

Know what's below. Call before you dig.

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BKF
100+ YEARS
ENGINEERS SURVEYORS PLANNERS
1646 N. CALIFORNIA BLVD, SUITE 400
WALNUT CREEK, CA 94596
PH: (925) 940-2200 FAX: (925) 940-2299

3801 MLK JR. WAY

OAKLAND, CALIFORNIA

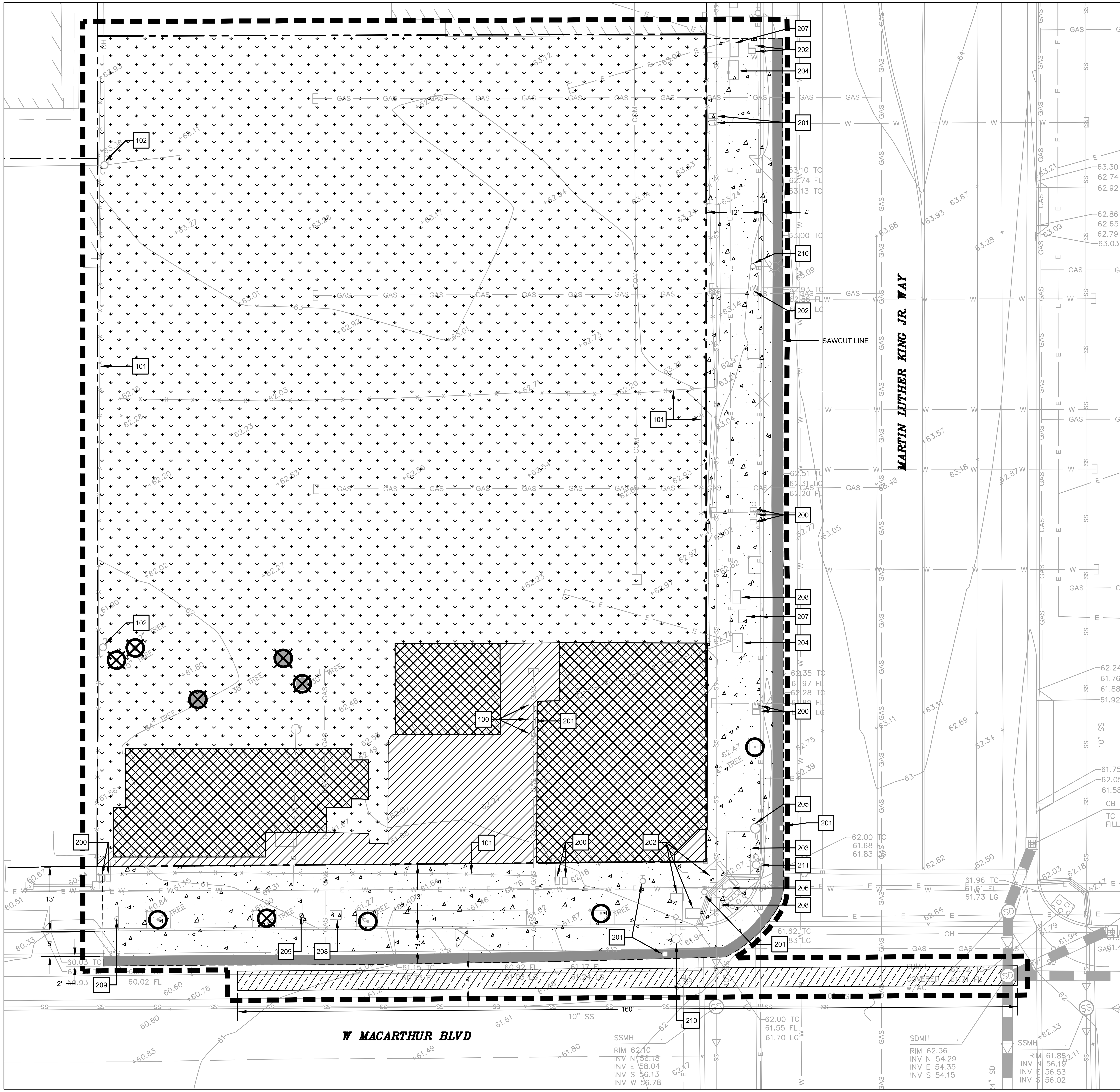
JOB NO.	20181870
DRAWN	FC
CHECKED	JF
JOB CAPTAIN	JW
DATE	JULY 16, 2019 ENTITLEMENT SUBMITTAL

DRAWING TITLE

EXISTING CONDITIONS PLAN

SCALE AS NOTED

C0.00



LEGEND

APPROXIMATE LIMITS OF DEMOLITION

SAWCUT

REMOVE CONCRETE DRIVEWAYS, SIDEWALK, CURB AND GUTTER

ON-SITE BUILDING DEMOLITION

ON-SITE CONCRETE DEMOLITION

ON-SITE CLEAR AND GRUB

ASPHALT CONCRETE REMOVAL

UTILITY TRENCH

PROTECT EXISTING TREE AND GRATE

REMOVE EXISTING TREE AND GRATE

KEYNOTES

REMOVE

100 BOLLARD

101 FENCE

102 UTILITY POLES

PROTECT

200 WATER METER

201 GAS VALVE

202 UTILITY BOX

203 ELECTRIC VAULT

204 TELEPHONE BOX

205 FIRE HYDRANT

206 STREET LIGHT BOX

207 TELEVISION BOX

208 ELECTRICITY BOX

209 SIGN POST

210 STREET LIGHT POLE

211 TRAFFIC LIGHT POLE

DEMOLITION NOTES

1. THE UTILITIES SHOWN ON THIS PLAN AREA DERIVED FROM RECORD DATA AND/OR SURFACE OBSERVATION AND ARE APPROXIMATE ONLY. ACTUAL LOCATION AND SIZE, TOGETHER WITH THE PRESENCE OF ANY ADDITIONAL UTILITY LINES NOT SHOWN ON THIS PLAN SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO CONSTRUCTION.
2. ALL EXISTING UNDERGROUND IN THE PUBLIC RIGHT OF WAY SHALL BE PROTECTED UNLESS OTHERWISE NOTED.
3. ALL EXISTING UTILITY BOXES, STRUCTURES, MANHOLES AND VALVES WITHIN THE LIMIT OF WORK SHALL BE ADJUSTED TO FINAL GRADE UNLESS OTHERWISE NOTED.
4. ALL SIDEWALK SAWCUTS, CUT AT THE NEAREST EXPANSION JOINT AS APPROVED BY THE CITY INSPECTOR AND / OR APPROVED REPRESENTATIVE.
5. CONTRACTOR IS RESPONSIBLE TO LEGALLY DISPOSE OF ALL REMOVED MATERIAL.

GRAPHIC SCALE

10' 0 10' 20'

Know what's below. Call before you dig.

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1646 N. CALIFORNIA BLVD, SUITE 400
WALNUT CREEK, CA 94596
PH: (925) 940-2200 FAX: (925) 940-2299

3801 MLK JR. WAY

OAKLAND, CALIFORNIA

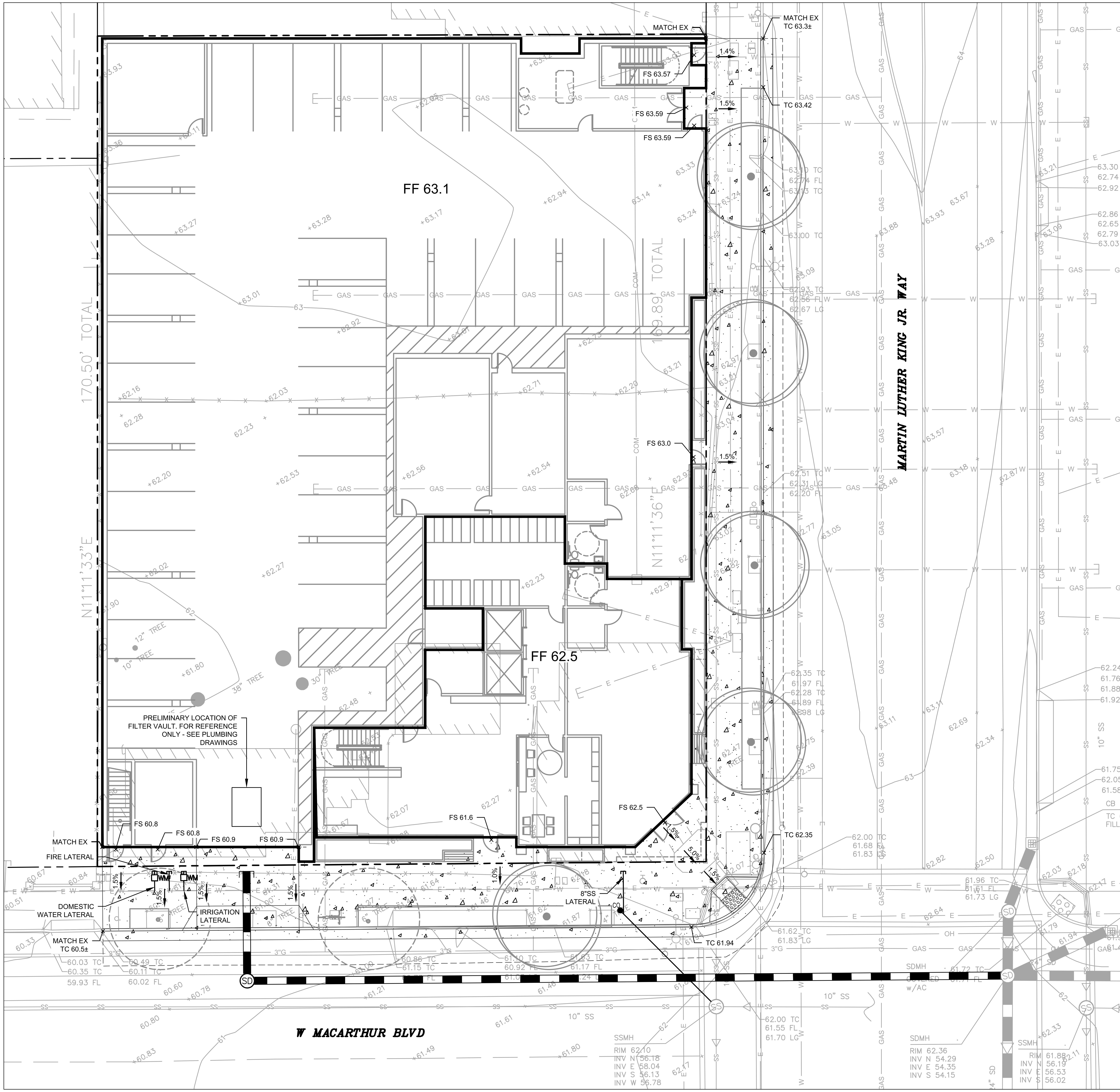
JOB NO.	20181870
DRAWN	FC
CHECKED	JF
JOB CAPTAIN	JW
DATE	JULY 16, 2019 ENTITLEMENT SUBMITTAL

DRAWING TITLE

DEMOLITION PLAN

SCALE AS NOTED

C1.00



LEGEND

EXISTING

- PROPERTY LINE
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- COMMUNICATION LINE
- OVERHEAD LINE
- STORM DRAIN LINE
- ELECTRICAL LINE
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE
- STREET LIGHT
- TRAFFIC LIGHT
- CATCH BASIN
- FIRE HYDRANT
- BOLLARD
- GAS VALVE
- UTILITY BOX
- UTILITY POLE

PROPOSED

- STORM DRAIN LINE
- SANITARY SEWER LINE
- SANITARY SEWER CLEANOUT
- STORM DRAIN MANHOLE
- CONCRETE SIDEWALK

GRADING GENERAL NOTES

1. GRADING OPERATIONS WILL OCCUR OVER EXISTING UTILITIES. CONTRACTOR SHALL EXERCISE THE NECESSARY CARE TO ENSURE EXISTING UTILITIES ARE NOT DAMAGED OR EXPERIENCE ANY INTERRUPTION IN SERVICE. ANY UTILITIES DAMAGED DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED TO ORIGINAL CONDITION AT THE EXPENSE OF THE CONTRACTOR.
2. ORDER OF WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL BE PHASED SUCH THAT CLOSURE OF PUBLIC FACILITIES ARE MINIMIZED.
3. FINAL PAVING LIMITS ARE TO THE CENTERLINE OF MARTIN LUTHER KING JR. WAY AND TO THE CENTER MEDIAN ALONG WEST MACARTHUR BOULEVARD.

UTILITY GENERAL NOTES

1. ALL EXISTING UTILITIES HAVE BEEN PLOTTED FROM RECORD INFORMATION AND FIELD TOPOGRAPHIC SURVEY. THE TYPES, LOCATIONS, SIZES AND DEPTHS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS MAY VARY AND ADDITIONAL FACILITIES MAY EXIST. THE CONTRACTOR IS CAUTIONED THAT ONLY EXCAVATION WILL REVEAL THE TYPES, EXTEND, SIZES, LOCATIONS, AND DEPTH OF EXISTING UNDERGROUND UTILITIES.
2. UNLESS OTHERWISE NOTED ALL UTILITY LINES AND STRUCTURES SHALL REMAIN AND BE PROTECTED IN PLACE.
3. CONTRACTOR SHALL VERIFY EXACT LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF WORK.
4. CONTRACTOR TO POTHOLE AND FIELD VERIFY ALL UTILITY CROSSINGS.
5. CONTRACTOR TO CONTACT USA AT (800)247-2600 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION. UTILITY REMOVAL OR EXCAVATION.
6. LENGTHS OF STORM DRAIN PIPES ARE HORIZONTAL DISTANCES FROM CENTER TO CENTER OF STRUCTURES, ROUNDED TO THE NEAREST FOOT AND ARE SHOWN FOR ENGINEERING CALCULATIONS ONLY. CONTRACTOR SHALL ESTIMATE HIS/HER OWN PIPE LENGTHS PRIOR TO BIDDING.
7. ALL UTILITY LINES (DOMESTIC WATER, IRRIGATION, FIRE WATER, STORM DRAIN AND SANITARY SEWER) SHALL BE STUBBED 5 FT FROM BUILDING. SEE PLUMBING PLAN FOR CONTINUATION INTO BUILDINGS.
8. CONTRACTOR TO INSTALL NPDES MEDALLION AT ALL STORM DRAIN CATCH BASINS PER CITY OF OAKLAND STANDARD DETAIL XX, SHEET XX.
8. OWNER TO RESEARCH AND REVIEW PREVIOUS STREET VACANCY RECORD MAPS. PRIOR TO CONSTRUCTION, OWNER MAY POTENTIALLY HAVE TO NEGOTIATE AGREEMENT WITH ADJACENT PROPERTY OWNER FOR PUBLIC UTILITY EASEMENTS TO ACCOMMODATE PROPOSED STORM DRAIN AND SANITARY SEWER LINES OR PROJECT MAY NEED TO MODIFY PROPOSED UTILITIES TO UTILIZE EXISTING EASEMENTS.
9. CONTECH MEDIA FILTER (LOCATED IN XX) SHALL HAVE BACKUP GENERATOR IN THE EVENT OF A POWER LOSS.
10. ALL UTILITY POINTS OF CONNECTIONS (P.O.C.) WILL BE ACCOMMODATED WITHIN THE BUILDING STRUCTURE AND SHALL BE SUBJECT TO ALL BUILDING PERMIT REQUIREMENTS
11. UTILITY TRENCH REPAIR SHALL BE PER UTILITY AGENCY STANDARD OR CITY STANDARD.

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WALNUT CREEK, CA 94596
PH: (925) 940-2200 FAX: (925) 940-2299

3801 MLK JR. WAY

OAKLAND, CALIFORNIA

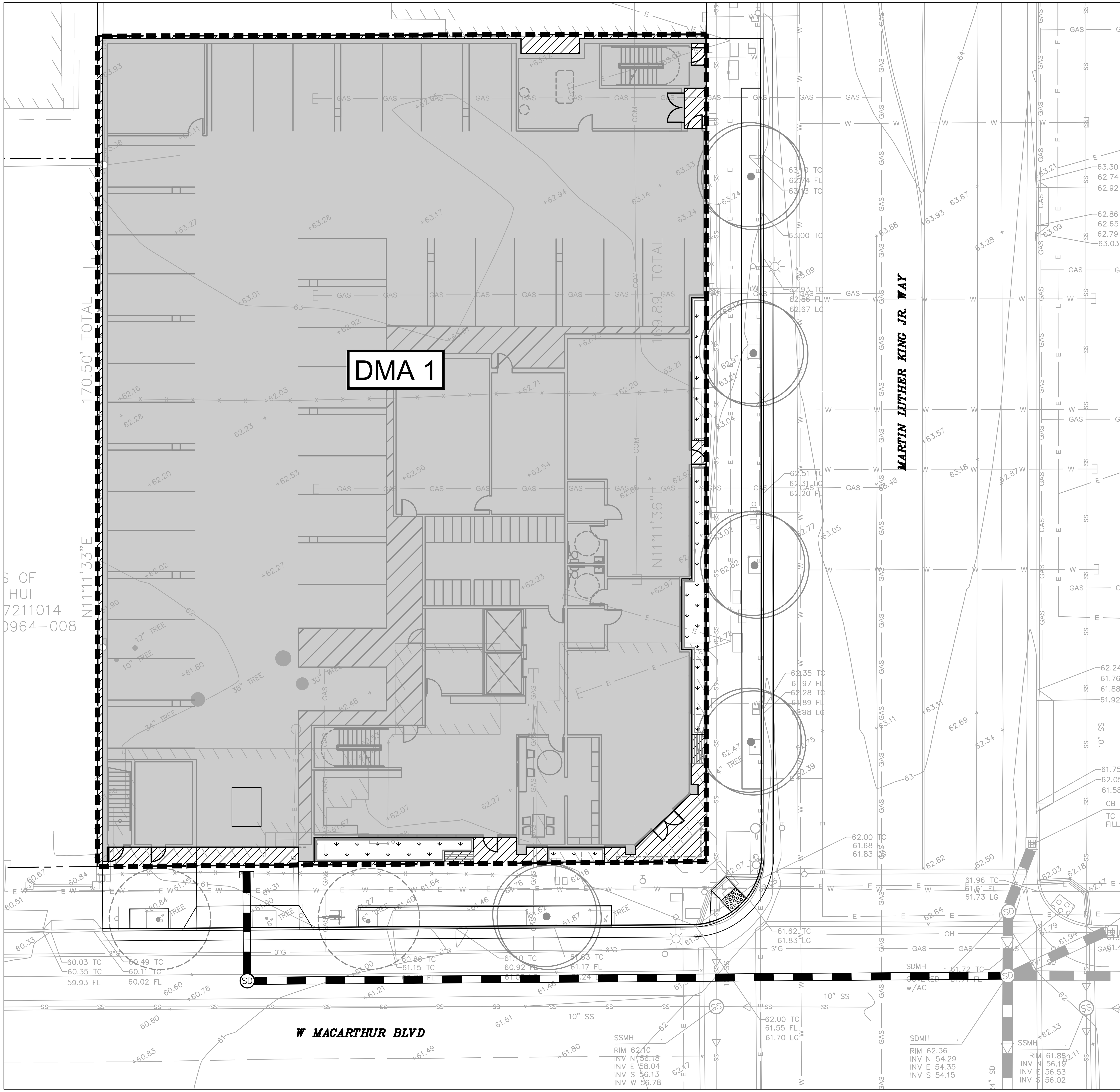
JOB NO.	20181870
DRAWN	FC
CHECKED	JF
JOB CAPTAIN	JW
DATE	
JULY 16, 2019 ENTITLEMENT SUBMITTAL	

DRAWING TITLE

GRADING AND UTILITY PLAN

SCALE AS NOTED

C2.00



LEGEND

- BUILDING AREA (20,003 SF)
- NOT TREATED AREA (834 SF)
- STREET LEVEL PLANTERS SELF TREATING (438 SF)
- PROJECT BOUNDARY

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JOB CAPTAIN	JW
DATE	JULY 16, 2019 ENTITLEMENT SUBMITTAL

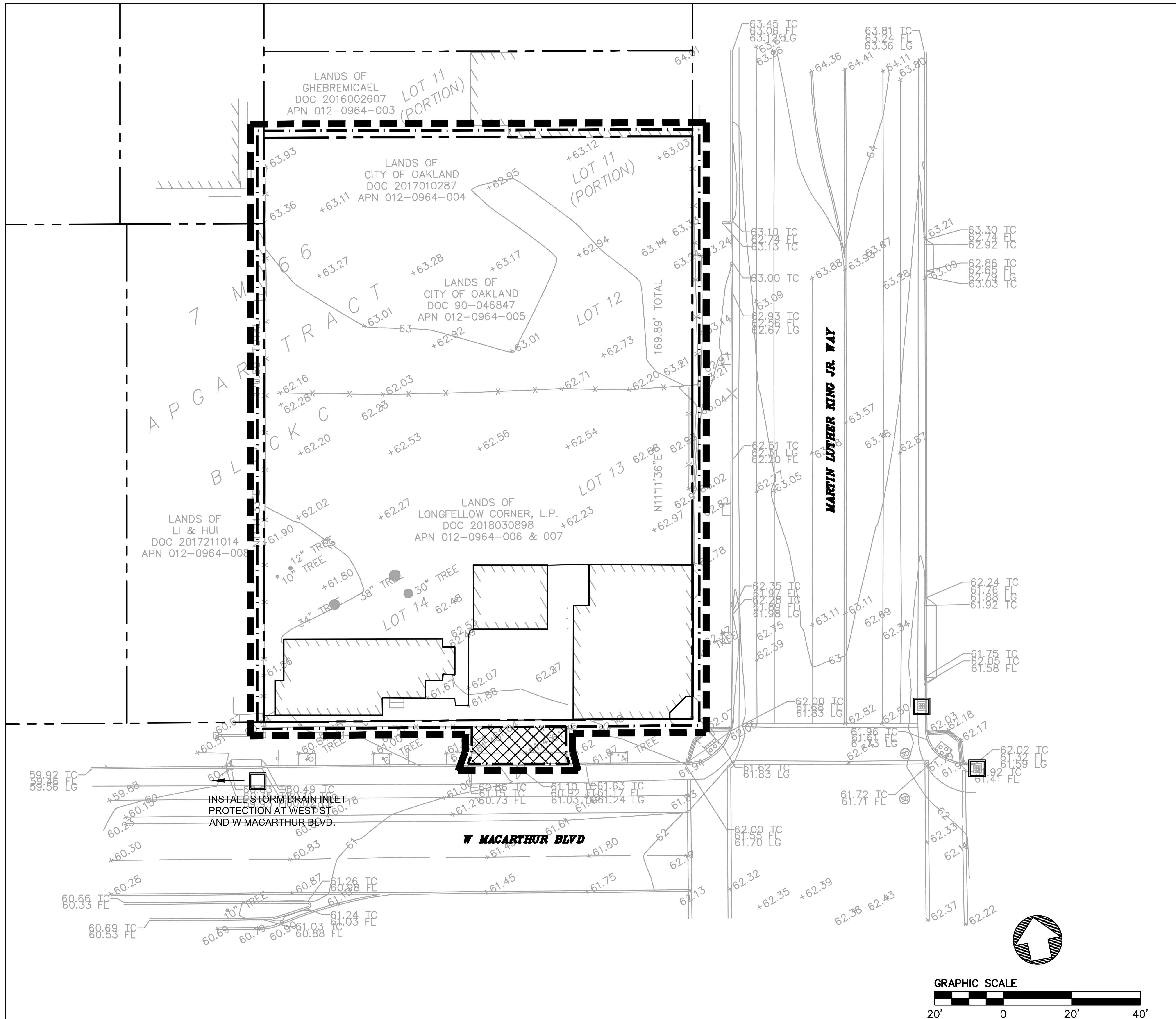
DRAWING TITLE

STORMWATER CONTROL PLAN

Know what's below. Call before you dig.

SCALE AS NOTED

C3.00



TEMPORARY MEASURES EFFECTIVE DURING RAINY SEASON (OCTOBER 1 TO APRIL 15)

1. TEMPORARY EROSION CONTROL DEVICES SHOWN ON GRADING PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.

2. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL DEVICES SHOWN ON THE EROSION CONTROL PLAN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON AND MAINTAINED DURING THE RAINY SEASON (OCTOBER 1 TO APRIL 15).

3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF THE ASSOCIATION OF BAY AREA GOVERNMENTS (ABAG) "MANUAL OF STANDARDS FOR EROSION AND SEDIMENT CONTROL MEASURES" UNLESS OTHERWISE STATED WITHIN THESE GENERAL NOTES. CONTROL MEASURES ARE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DIVISION OF THE PUBLIC SERVICES DEPARTMENT. SCHEDULE AN ENGINEERING INSPECTION BY CALLING 925-943-5839 AT LEAST 48 HOURS PRIOR TO THE START OF ANY WORK.

4. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.

5. THE CONTRACTOR SHALL PLACE 3"-4" FRACTURED STONE AGGREGATE AS A GRAVEL ROADWAY (6" MINIMUM THICKNESS FOR THE FULL WIDTH AND 50 FEET LONG) AT EACH ROAD ENTRANCE TO THE SITE. ANY MUD THAT IS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED THE SAME DAY AS REQUIRED BY THE CITY ENGINEER. MINIMUM WIDTH OF GRAVEL ROADWAY IS 10 FEET.

6. A CONCRETE WASHOUT IS REQUIRED FOR ALL CONCRETE WORK. THE WASHOUT SHALL CONSIST OF A CONTAINMENT AREA ENCLOSED BY AN EARTHEN DIKE. PLASTIC TARP, COVERING THE CONTAINMENT AREA AND EARTHEN DIKE, SHALL BE STAKED IN AT OUTSIDE EDGE OF EARTHEN DIKE.

7. ADDITIONAL CONTAINMENT METHODS MUST BE PROVIDED FOR ANY WASTE STORAGE AREA, STOCKPILE/MATERIAL STORAGE AREA AND/OR CONSTRUCTION TOILET AREA.

8. IF THE PROJECT REQUIRES A STORMWATER POLLUTION PREVENTION PLAN (SWPPP), PROVIDE THE FOLLOWING:

   WASTE DISCHARGE IDENTIFICATION NUMBER (WDIN) ______________________

   CONTACT PERSON'S NAME: ______________________

   ADDRESS: ______________________

   TELEPHONE NUMBER: ______________________

9. STAND-BY CREWS SHALL BE ALERTED BY THE PERMITTEE OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS.

10. AFTER OCTOBER 1, ALL EROSION CONTROL MEASURES WILL BE INSPECTED DAILY AND AFTER EACH STORM. AFTER OCTOBER 1, BREACHES IN DIKES AND SWALES WILL BE REPAIRED AT THE CLOSE OF EACH DAY AND WHENEVER RAIN IS FORECAST.

11. AS A PART OF THE EROSION CONTROL MEASURES, UNDERGROUND STORM DRAIN FACILITIES AND CONCRETE SHALL BE INSTALLED COMPLETE AS SHOWN ON THE IMPROVEMENT PLANS.

12. ALL STORM DRAIN INLET STRUCTURES GREATER THAN FOUR FEET IN DEPTH SHALL HAVE STEPS INSTALLED PER THE LATEST ACCEPTED SAFETY STANDARDS. A 6" CONCRETE COVER SLAB SHALL BE INSTALLED OVER PIPE WITH LESS THAN 2.5 FEET OF COVER TO SUBGRADE. ALL PIPE TO BE CLASS III UNLESS OTHERWISE NOTED.

13. ALL GRADED AREAS, INCLUDING, BUT NOT LIMITED TO, CUT AND FILL SLOPES, STREETS, PARKING AREAS,
    AND BUILDING PADS SHALL BE HYDROSEEDED PER ABAG. IN ADDITION TO HYDROSEEDING, APPLICATION OF STRAW WITH A TACKIFIER OR MULCH MAY BE REQUIRED BY THE CITY ENGINEER.

14. IF ANY GRADING OPERATIONS, OTHER THAN LOT FINISH GRADING, ARE TO BE PERFORMED DURING THE RAINY SEASON, OCTOBER 1 THROUGH APRIL 15, AN EROSION CONTROL PLAN MUST BE SUBMITTED BY SEPTEMBER 1 AND THE PLAN MUST BE APPROVED BY THE CITY OF WALNUT CREEK PRIOR TO THE COMMENCEMENT OF ANY SUCH GRADING OPERATIONS.

15. TO MINIMIZE EROSION OF GRADED BANKS, ALL GRADED BANKS STEEPER THAN 2% AND HIGHER THAN 3 FEET, SHALL BE HYDROSEEDED, LANDSCAPED, OR SEALED. IN ADDITION TO HYDROSEEDING, APPLICATION OF STRAW WITH A TACKIFIER OR MULCH MAY BE REQUIRED BY THE CITY ENGINEER. IF THE PERMANENT STORM DRAIN SYSTEM IS NOT INSTALLED BY OCTOBER 1, TEMPORARY DITCHES SHALL BE CONSTRUCTED TO CONTAIN THE STORM WATER AND DIRECT IT, IN A MANNER THAT AVOIDS EROSION OF THE BANKS, TO THE EROSION AND SEDIMENT CONTROL FACILITIES.

16. ALL CUT AND FILL SLOPES ARE TO BE PROTECTED TO PREVENT OVERBANK FLOW USING 4" EARTH BERMS OR SILT FENCES.

17. ALL GRADED AREAS, INCLUDING, BUT NOT LIMITED TO, CUT AND FILL SLOPES, STREETS, PARKING AREAS, AND BUILDING PADS SHALL BE HYDROSEEDED PER CITY'S REQUIREMENT. SUGGESTED MIX DESIGN FOLLOWS:

'BLANDO' BROME	40 LBS/ACRE
ZORRO FESCUE	10 LBS/ACRE
HYKON ROSE CLOVER	9 LBS/ACRE
SUB CLOVER	5 LBS/ACRE
CALIFORNIA NATIVE WILDFLOWER	8 LBS/ACRE
FERTILIZER	300 LBS/ACRE
ORGANIC BINDER	100 LBS/ACRE
STRAW MULCH	4000 LBS/ACRE

18. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE CITY ENGINEER.

19. SANDBAGS, STRAW WATTLES AND/OR STRAW BALES SHALL BE STOCKPILED ON SITE AND PLACED AT INTERVALS SHOWN ON EROSION CONTROL PLANS, WHEN THE RAIN FORECAST IS 40% OR GREATER, OR WHEN DIRECTED BY THE INSPECTOR.

20. SANDBAGS REFERRED TO IN THE PRECEDING ITEMS MUST BE FULL. APPROVED SANDBAG FILL MATERIALS ARE DECOMPOSED GRANITE AND/OR GRAVEL, OR OTHER MATERIALS APPROVED BY THE INSPECTOR.

21. WHEN DIRECTED BY THE INSPECTOR, A 12-INCH BERM SHALL BE MAINTAINED ALONG THE TOP OF THE SLOPE OF THOSE FILLS ON WHICH GRADING IS NOT IN PROGRESS.

22. WHEN PAD ELEVATIONS OF ADJACENT LOTS OR ELEVATIONS BETWEEN THE STREET AND THE LOT ARE SEPARATED BY MORE THAN 6 FEET, A MINIMUM 12" BERM SHALL BE MAINTAINED ALONG THE PROPERTY LINE SEPARATING THE LOTS, AND THE BERM SHALL DIRECT THE WATER TO THE OUTLET. VELOCITY CHECK DAMS SHALL BE INSTALLED BETWEEN THE OUTLET ON THE LOT AND THE STREET.

23. PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED STREETS AT THE INTERVALS INDICATED BELOW IN NOTE #21. VELOCITY CHECK DAMS MAY BE CONSTRUCTED OF STRAW BALES, SANDBAGS OR OTHER EROSION RESISTANT MATERIALS APPROVED BY THE INSPECTOR, AND SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. EARTH DIKES MAY NOT BE USED AS VELOCITY CHECK DAMS.

24. PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED GRADED CHANNELS AT THE INTERVALS INDICATED BELOW:

GRADE OF CHANNEL	INTERVAL
LESS THAN 3%	100 FEET
3% TO 6%	50 FEET
OVER 6%	25 FEET

25. SEWER OR STORM DRAIN TRENCHES THAT ARE OUT THROUGH BASIN DIKES OR BASIN INLET DIKES, SHALL BE PLUGGED WITH SANDBAGS FROM TOP OF PIPE TO TOP OF DIKE. SEWER LINES SHALL FIRST BE ENCASED IN CONCRETE BEFORE SANDBAGS ARE PLACED.

26. ALL OPEN UTILITY TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS FROM THE BOTTOM TO TOP WITH A DOUBLE ROW OF SANDBAGS PRIOR TO BACKFILL. SEWER TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS WITH A DOUBLE ROW OF SANDBAGS EXTENDING DOWNWARD, TWO SANDBAGS FROM THE GRADED SURFACE OF THE STREET. SANDBAGS ARE TO BE PLACED WITH ALTERNATE HEADER AND STRETCHER COURSES. THE INTERVALS PRESCRIBED BETWEEN SANDBAG LOCKING SHALL DEPEND ON THE SLOPE OF THE GROUND SURFACE, BUT NOT EXCEED THE FOLLOWING:

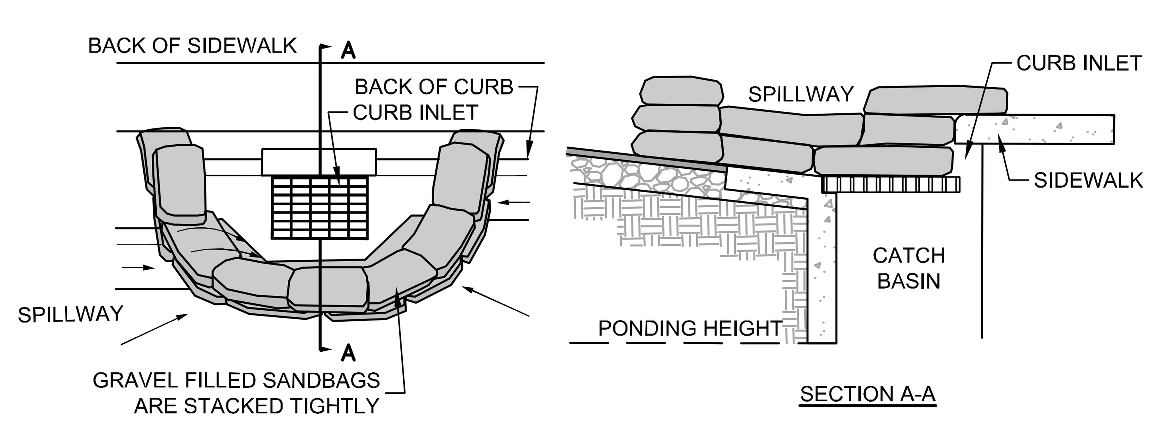
GRADE OF THE STREET	INTERVAL
LESS THAN 2%	AS REQUIRED
2% TO 4%	100 FEET
4% TO 10%	50 FEET
OVER 10%	25 FEET

27. AFTER STORM DRAIN, SANITARY SEWER AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTER LINE OF A CROWNED STREET.

28. SEDIMENT TRAPS SHALL BE CLEANED OUT WHENEVER SEDIMENT REACHES THE SEDIMENT CLEANOUT LEVEL INDICATED ON THE DETAIL ON THIS SHEET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN THE DESILTING BASINS AND THE SEDIMENT TRAPS.

29. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THESE PLANS IN THE FIELD, SUBJECT TO APPROVAL OF THE CITY ENGINEER.

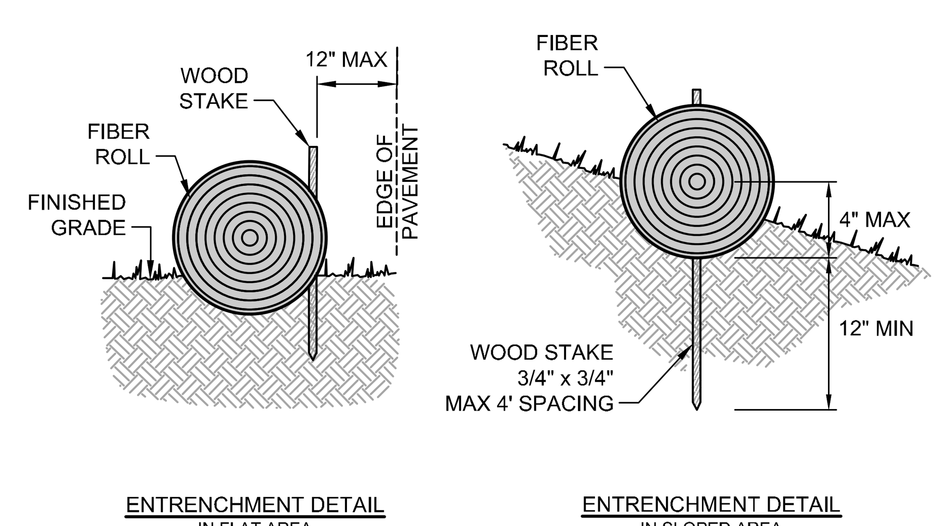
30. EROSION CONTROL STRUCTURES SHALL BE ADJUSTED BY THE CONTRACTOR TO REFLECT ALL CHANGES IN DRAINAGE AS STREETS AND BUILDING PADS ARE BEING INSTALLED.



NOTES:

1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS OF EITHER BURLAP OR WOVEN 'GEOTEXTILE' FABRIC, ARE FILLED WITH GRAVEL LAYERED AND PACKED TIGHTLY.
3. LEAVE A ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

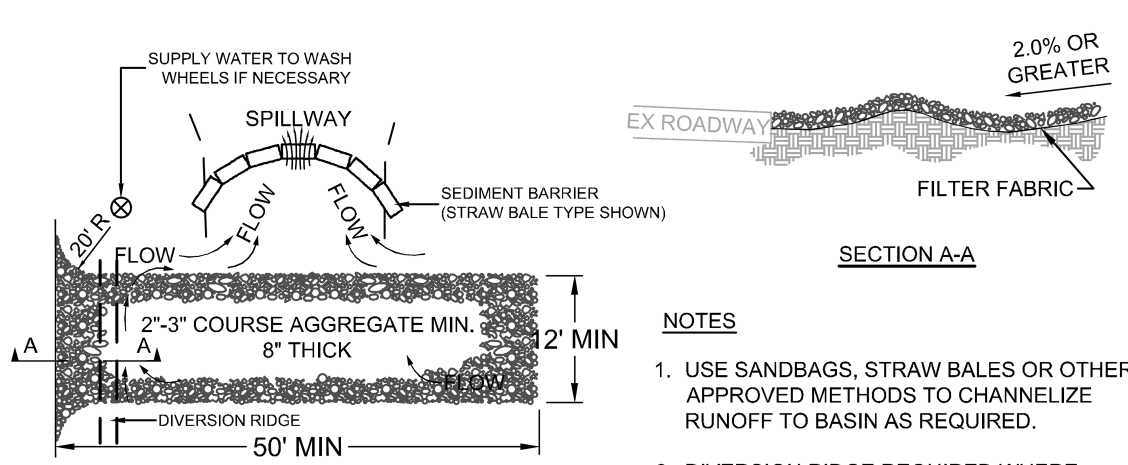
1 CURB INLET SEDIMENT BARRIER
NOT TO SCALE



NOTES

1. FIBER ROLLS ARE TUBES MADE FROM POROUS BIODEGRADABLE FIBER STUFFED IN A PHOTO-DEGRADABLE OPEN WEAVE NETTING. THEY ARE APPROXIMATELY 8" DIAMETER.
2. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 2"-4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL. ROLLS SHOULD BE ABUTTED SECURELY TO PROVIDE A TIGHT JOINT, NOT OVERLAPPED.

2 FIBER ROLL
NOT TO SCALE



NOTES

1. USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.
2. DIVERSION RIDGE REQUIRED WHERE GRADE EXCEEDS 2.0%.

3 CONSTRUCTION ENTRANCE
NOT TO SCALE

LEGEND

APPROXIMATE LIMITS OF WORK	
FIBER ROLLS	2
STORM DRAIN INLET PROTECTION	1
CONSTRUCTION ENTRANCE	3

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OAKLAND, CALIFORNIA

JOB NO.	20181870
DRAWN	FC
CHECKED	JF
JOB CAPTAIN	JW
DATE	JULY 16, 2019 ENTITLEMENT SUBMITTAL

DRAWING TITLE
EROSION CONTROL PLAN

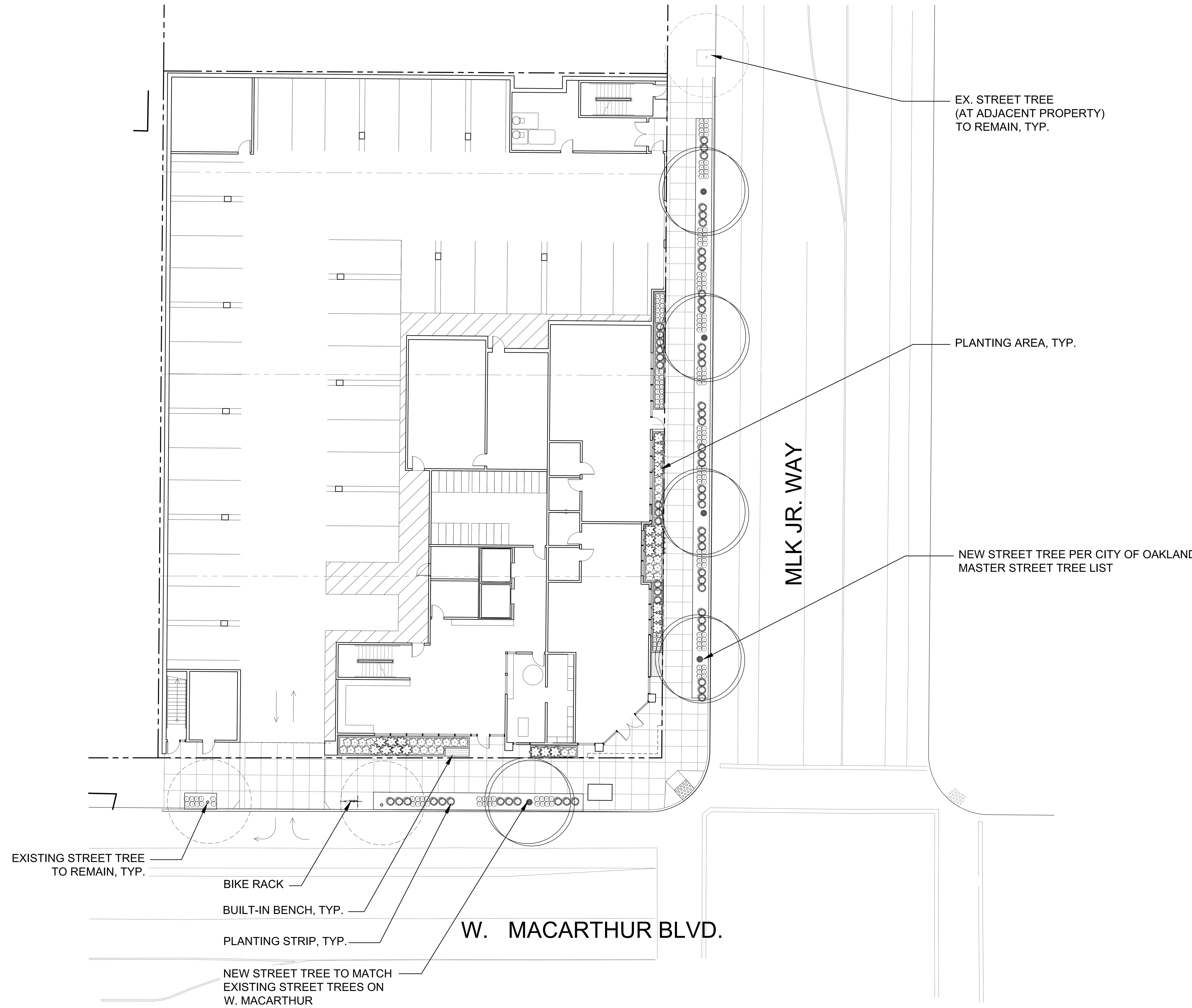
SCALE AS NOTED

C4.00

NOTES

SEE L2.0 FOR SITE AMENITIES

SEE SHEET L3.1 FOR PLANTING LIST, IMAGERY AND PLANTING DESIGN INTENT STATEMENT.



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OAKLAND, CALIFORNIA

CONCEPTUAL LANDSCAPE PLAN - STREET LEVEL

SCALE: 1/16" = 1'-0"

DATE: 07.16.2019

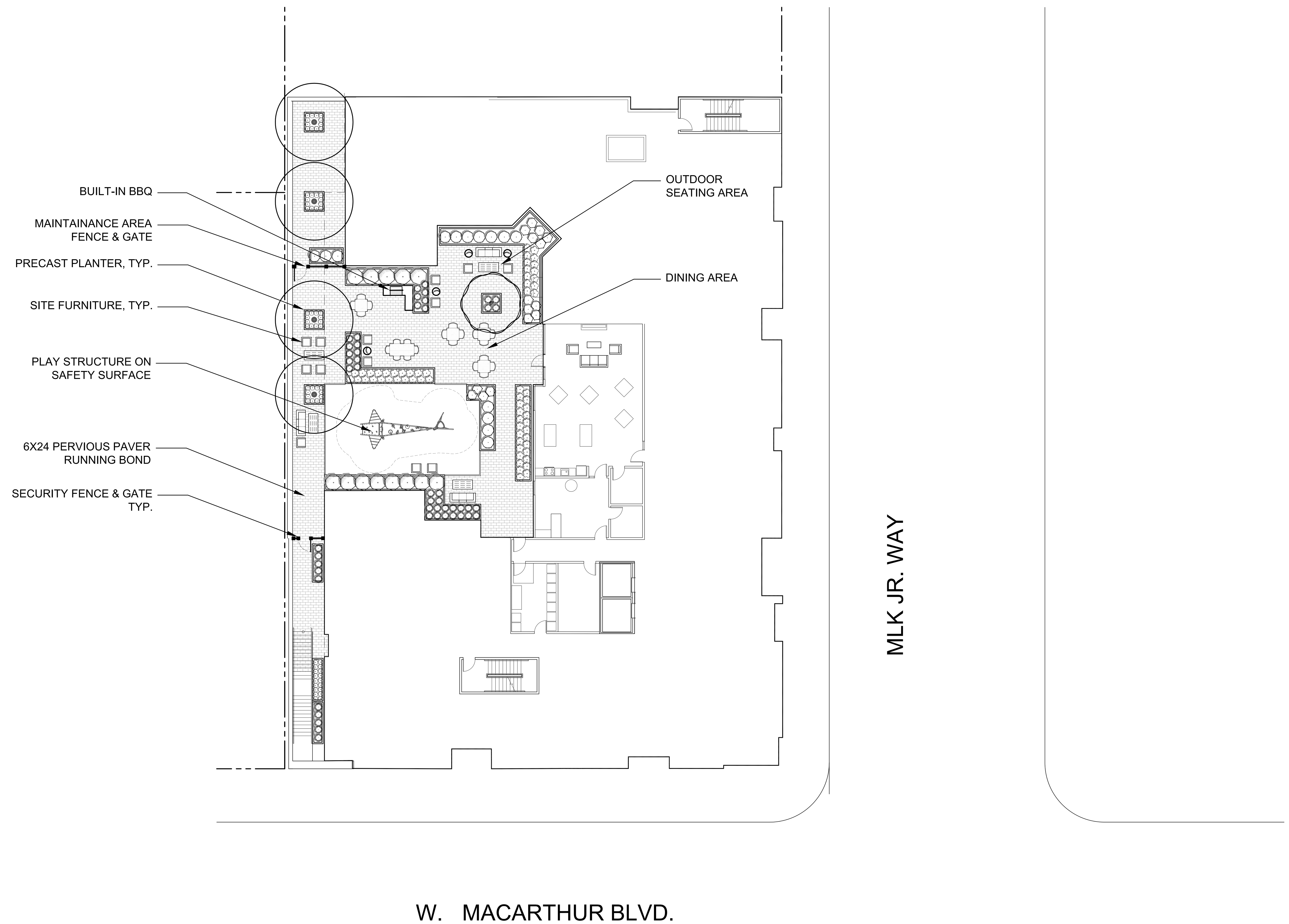
0 8 16 32 48

L1.0

NOTES

SEE L2.0 FOR SITE AMENITIES

SEE SHEET L3.1 FOR PLANTING LIST, IMAGERY AND PLANTING DESIGN INTENT STATEMENT.



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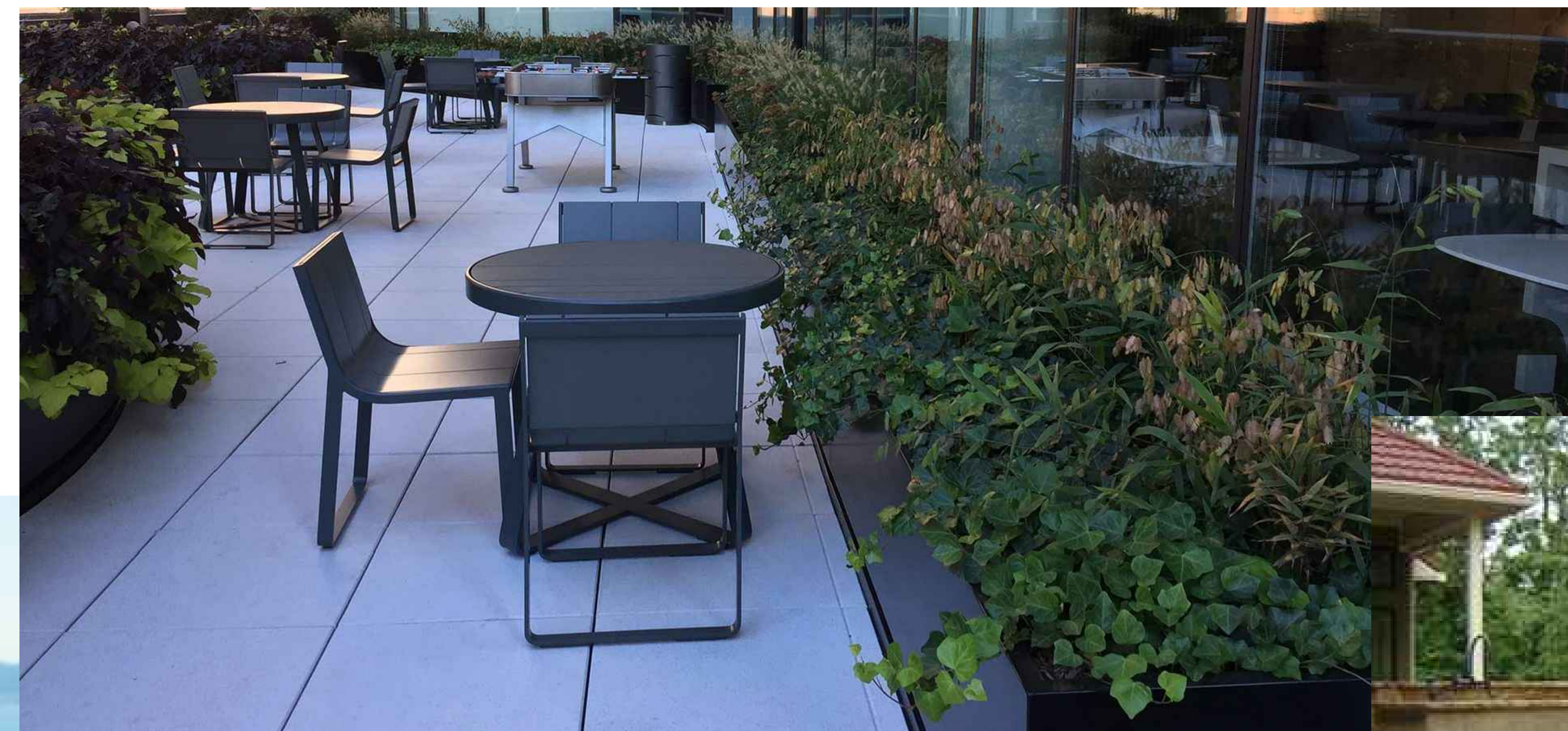
CONCEPTUAL LANDSCAPE PLAN - PODIUM LEVEL

SCALE: 1/16" = 1'-0"

DATE: 07.16.2019

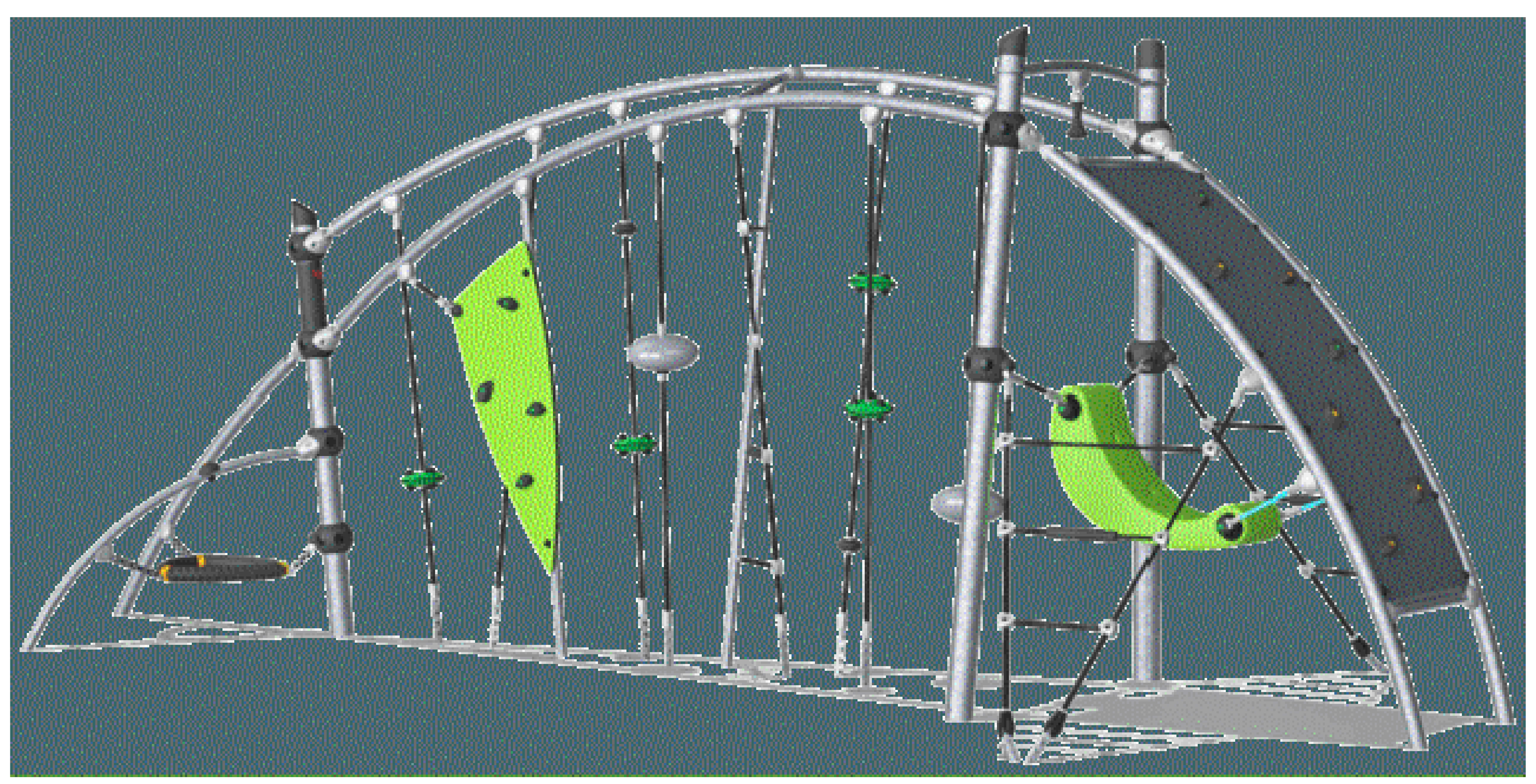
0 8 16 32 48

L1.1



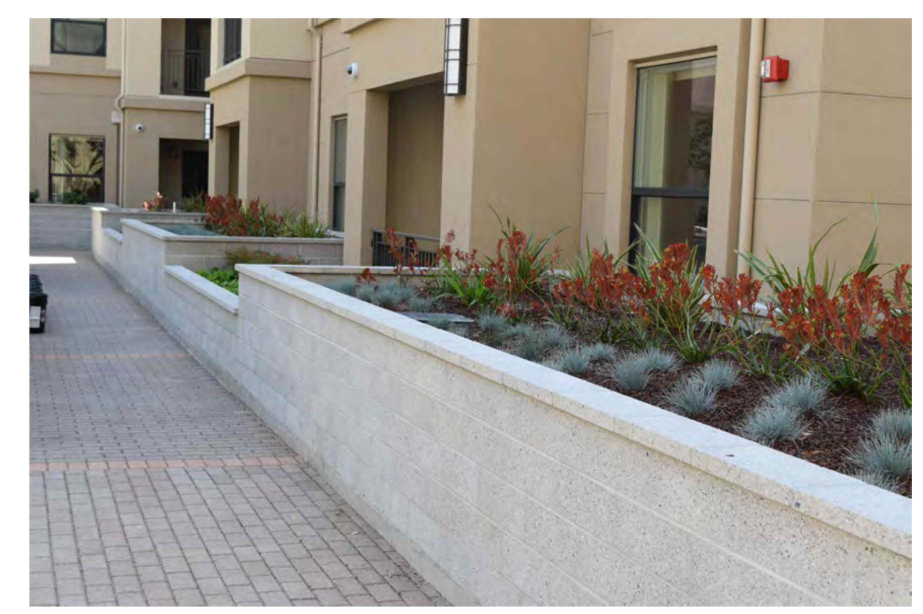
SITE FURNITURE

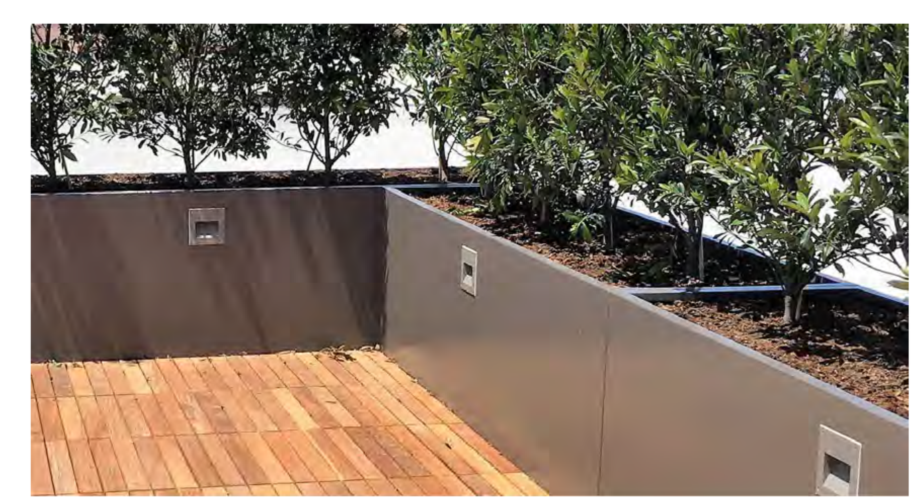
BUILT-IN BBQ w/ COUNTER



PLAY STRUCTURE

6x24 PERVIOUS PLANK PAVERS RUNNING BOND





PRECAST PLANTERS

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OAKLAND, CALIFORNIA

CONCEPTUAL LANDSCAPE IMAGERY

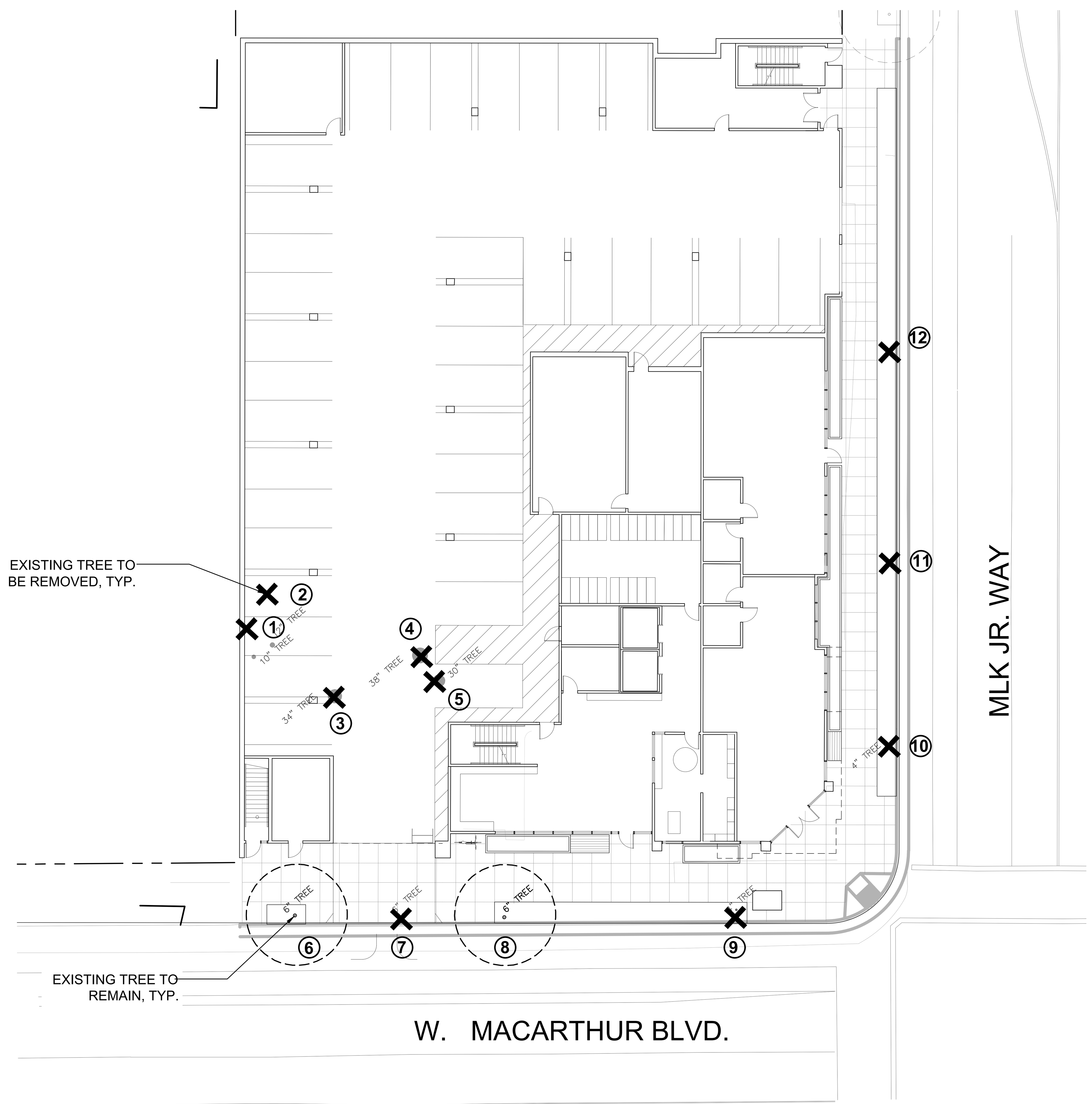
SCALE: NTS

DATE: 07.16.2019

L2.0

TREE INVENTORY TABLE

NUMBER	BOTANICAL NAME	DBH	PROTECTED TREE	REMOVE
1	WALNUT	10"	YES	YES
2	WALNUT	12"	YES	YES
3	BLACK ACACIA	34"	YES	YES
4	SEQUOIA	38"	YES	YES
5	SEQUOIA	30"	YES	YES
6	ELM	7"	STREET TREE	NO
7	ELM	6"	STREET TREE	YES
8	ELM	6"	STREET TREE	NO
9	ELM	4"	STREET TREE	YES
10	CHINESE TALLOW	4"	STREET TREE	YES
11	PRUNUS	4"	STREET TREE	YES
12	CHINESE TALLOW	4"	STREET TREE	YES



NOTES

1. TOTAL PROTECTED TREES TO BE REMOVED: 5
2. STREET TREES TO BE REMOVED: 5
3. TOTAL TREES TO REMAIN: 2
4. TREE INVENTORY PROVIDED BY VAN DORN ABED LANDSCAPE ARCHITECTS. EDIT: INVENTORY REVISED BY CITY OF OAKLAND ARBORICULTURAL INSPECTOR ON 6/12/2019
5. PROTECTED TREE AS DEFINED BY CITY OF OAKLAND TREE PRESERVATION ORDINANCE.
6. STREET TREES TO BE REMOVED ARE TO BE REPLACED PER "CITY OF OAKLAND MASTER STREET TREE LIST"

LEGEND

EXISTING TREE TO REMAIN

EXISTING TREE TO BE REMOVED

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81 14TH STREET, SAN FRANCISCO, CA
ZIP 94103 PH (415) 864-1921 FAX (415) 864-4796

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OAKLAND, CALIFORNIA

TREE DISPOSTION PLAN

SCALE: 1/16" = 1'-0"

DATE: 07.16.2019

0 8 16 32 48

L3.0

TREE IMAGERY

PISTACIA CHINENSIS

GINKGO BILOBA

LAGERSTROEMIA MUSKOGEE

RHUS LANCEA

TRISTANIA LAURINA

PLANTING AND WATER USE DESIGN INTENT STATEMENT

THE PLANTING DESIGN INCORPORATES PRINCIPLES INCLUDED IN THE "BAY FRIENDLY LANDSCAPE GUIDELINES".

PLANTS ARE GROUPED BY HYDROZONE, EXPOSURE & LOCAL CLIMATIC CONDITIONS. THE PLANTING DESIGN ALLOWS FOR THE PLANTS TO REACH THEIR NATURAL, FULL-GROWN SIZE AND ELIMINATES THE NEED FOR EXCESSIVE PRUNING OR HEDGING.

THE PLANTS HAVE BEEN SELECTED UTILIZING THE STATE OF CALIFORNIA'S MODEL WATER EFFICIENT LANDSCAPE ORDINANCE PLANT LIST.

NO PLANTS ARE USED THAT ARE CONSIDERED INVASIVE IN THE THE REGION AS LISTED BY THE CAL-IPC.

THE IRRIGATION SYSTEMS WILL UTILIZE A COMBINATION OF PRESSURE COMPENSATING LOW VOLUME DRIP EMITTERS & TREE BUBBLERS.

PLANT WILL BE IRRIGATED BY HYDROZONE ON SEPARATE HYDROZONE VALVE CIRCUITS. ALL NEW TREES WILL BE IRRIGATED WITH BUBBLERS ON A SEPARATE DEDICATED CIRCUIT.

SMART E.T. WEATHER-BASED IRRIGATION CONTROLLERS SHALL BE UTILIZED TO OPTIMIZE EFFICIENT WATER APPLICATION. SMART CONTROLLERS AUTOMATICALLY ADJUST THEIR DAILY WATER SCHEDULE PROGRAMMING BASED UPON THE LOCAL CLIMATE AT THE PROJECT SITE. SMART CONTROLLERS RECEIVE WIRELESS DATA DAILY FROM THE IRRIGATION MANUFACTURERS WEATHER DATA SERVICE. A RAIN SWITCH WILL BE INSTALLED TO PREVENT IRRIGATION DURING RAINY PERIODS.

THE REMOTE CONTROL VALVES WILL HAVE INTEGRAL PRESSURE REGULATORS TO PREVENT FLUCTUATIONS AND ENSURE CONSTANT APPLICATION RATES TO MINIMIZE OVER OR UNDER WATERING.

A FLOW SENSOR AND MASTER VALVE WILL BE CONNECTED TO THE SMART CONTROLLER TO ALLOW AUTOMATIC SHUT OFF OF ANY VALVE CIRCUIT OR MAIN LINE IN THE EVENT OF A PIPE BRAKE TO PREVENT WATER WASTE.

PLANT LIST

TREES	CODE	BOTANICAL NAME	COMMON NAME	CONT	REMARKS
	ULM FRO	ULMUS x 'FRONTIER'	FRONTIER ELM	24" BOX	L
	LAG MUS	LAGERSTROMIA MUSKOGEE	CRAPE MYRTLE	24" BOX	L
	GIN BIL	GINKGO BILOBA	GINKGO	24" BOX	M
	PIS CHI	PISTACIA CHINENSIS	CHINESE PISTACHE	24"BOX	L
	RHU LAN	RHUS LANCEA	AFRICAN SUMAC	24" BOX	L
	TRI LAU	TRISTANIA LAURINA	WATER GUM	24" BOX	L

SHRUBS	CODE	BOTANICAL NAME	COMMON NAME	CONT.	REMARKS
	ABE KAL	ABELIA KALEIDOSCOPE	ABELIA	5 GAL	M
	ANI SPE	ANIGOZANTHOS SPECIES	KANGAROO PAW	5 GAL	L
	ARC MAN	ARCTOSTAPHYLOS X `EMERALD CARPET`	EMERALD CARPET MANZANITA	5 GAL	M
	ASP DEN	ASPARAGUS DENSIFLORUS `MYERS`	MYERS ASPARAGUS	5 GAL	M
	CAL LIT	CALLISTEMON LITTLE JOHN	DWARF BOTTLE BRUSH	5 GAL	L
	CAR TES	CAREX TESTACEA	CAREX	1 GAL	M
	CHO TEC	CHONDROPETALUM TECTORUM	CAPE RUSH	5 GAL	L
	COL SUN	COLEONEMA SUNSET SPREADER	BREATH OF HEAVEN	5 GAL	L
	COR DU2	CORREA X `DUSKY BELLS`	AUSTALIAN FUCHSIA	5 GAL	L
	ERI KAR	ERIGERON KARVINSKIANUS	FLEABANE	1 GAL	L
	ERY WEN	ERYSIMUM LINIFOLIUM `WENLOCK BEAUTY`	WALLFLOWER	5 GAL	L
	FES MAI	FESTUCA MAIREI	ATLAS FESCUE	5 GAL	L
	GRE NOE	GREVILLEA X `NOELLII`	GREVILLEA	5 GAL	L
	JUN PAT	JUNCUS PATENS	CALIFORNIA GRAY RUSH	5 GAL	L
	LAN LEM	LANTANA LEMON SWIRL	LANTANA	1 GAL	L
	PEN SPP	PENNISETUM BUNNY EARS	FOUNTAIN GRASS	5 GAL	L
	PHO SPE	PHORMIUM SPECIES	NEW ZEALAND FLAX	5 GAL	L
	PHO DUE	PHORMIUM X `DUET`	NEW ZEALAND FLAX	5 GAL	L
	SAL LEU	SALVIA LEUCANTHA 'SANTA BARBARA'	SANTA BARBARA SAGE	5 GAL	L
	SAN VIR	SANTOLINA VIRENS	LAVENDER COTTON	5 GAL	L

SHURBS, GRASSES, GROUNDCOVERS

ANIGOZANTHOS 'BIG RED'

ARCTOSTAPHYLOS 'EMERALD CARPET'

ABELIA KALEIDOSCOPE

ASPARAGUS DENS. 'MEYERS'

CAREX TESTACEA

CHONDROPETALUM TECTORUM

CORREA 'DUSTY BELLS'

CALLISTEMON LITTLE JOHN

COLEONEMA

ERIGERON KARVINSKIANUS

ERYSIMUM 'WENLOCK BEAUTY'

FESTUCA MAIREI

GREVILLEA 'NOELLII'

JUNCUS PATENS

LANTANA

PENNISETUM BUNNY EARS

PHORMIUM 'DUET'

SANTOLINA

SALVIA LEUCANTHA

VAN DORN ABED
LANDSCAPE ARCHITECTS, INC.
81 14TH STREET, SAN FRANCISCO, CA
ZIP 94103 PH (415) 864-1921 FAX (415) 864-4796

HKIT ARCHITECTS
MLK JR. WAY HOUSING
OAKLAND, CALIFORNIA

CONCEPTUAL PLANT LIST, IMAGERY & DESIGN INTENT STATEMENT

SCALE: NTS

DATE: 07.16.2019

L3.1

HKIT ARCHITECTS

538 NINTH STREET SUITE 240 • OAKLAND, CA 94607
T 510 625 9800 • F 510 625 9801 • WWW.HKIT.COM

3801 MLK JR. WAY

OAKLAND, CALIFORNIA

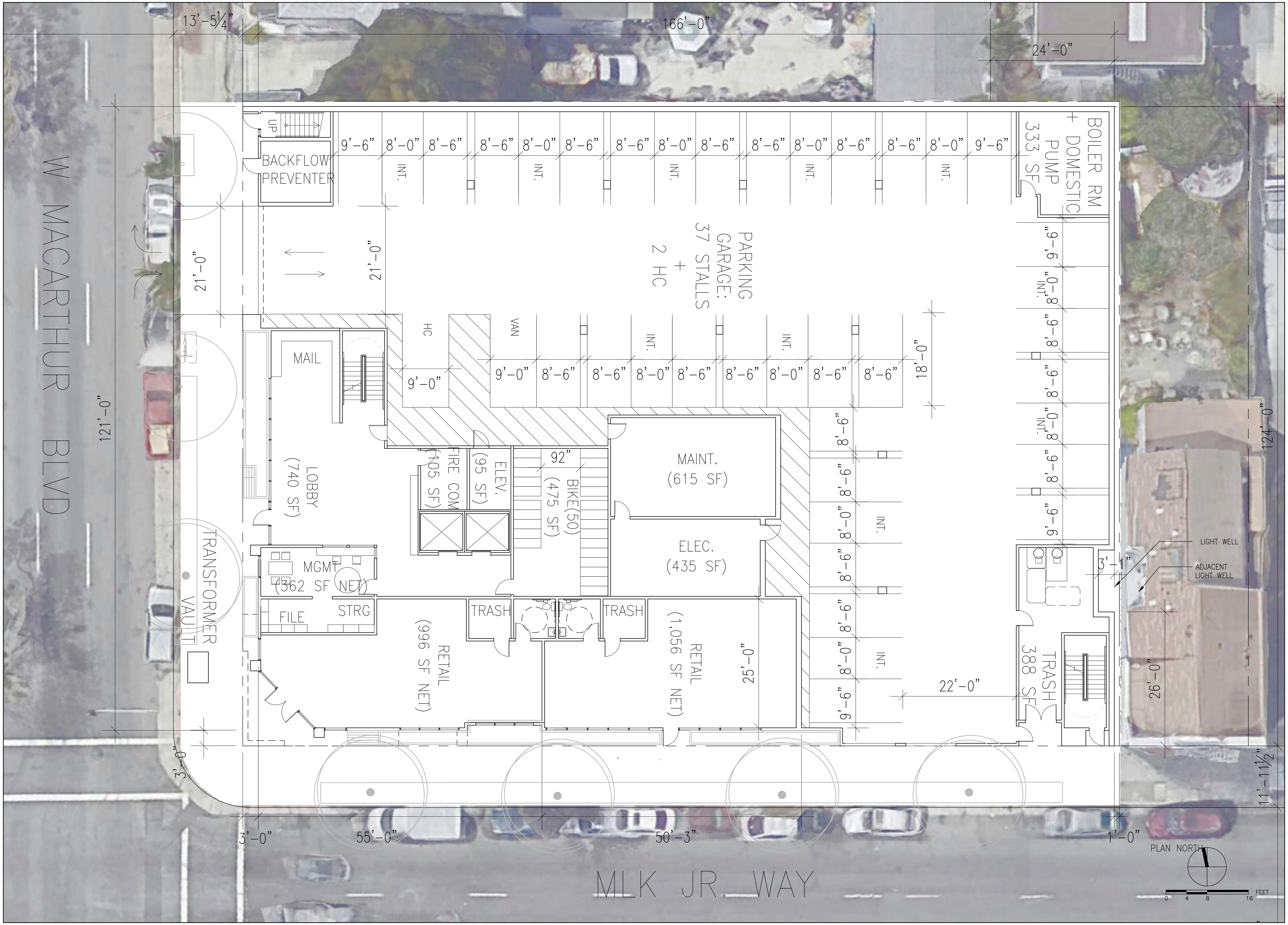
JOB NO.	30366
DRAWN	ALR
CHECKED	PM
JOB CAPTAIN	PM
DATE	
12/19/18	PRELIMINARY PLANNING PRE-APP
07/16/19	PLANNING APPLICATION

DRAWING TITLE

SITE PLAN

SCALE 1/16" = 1' - 0"

A1.0



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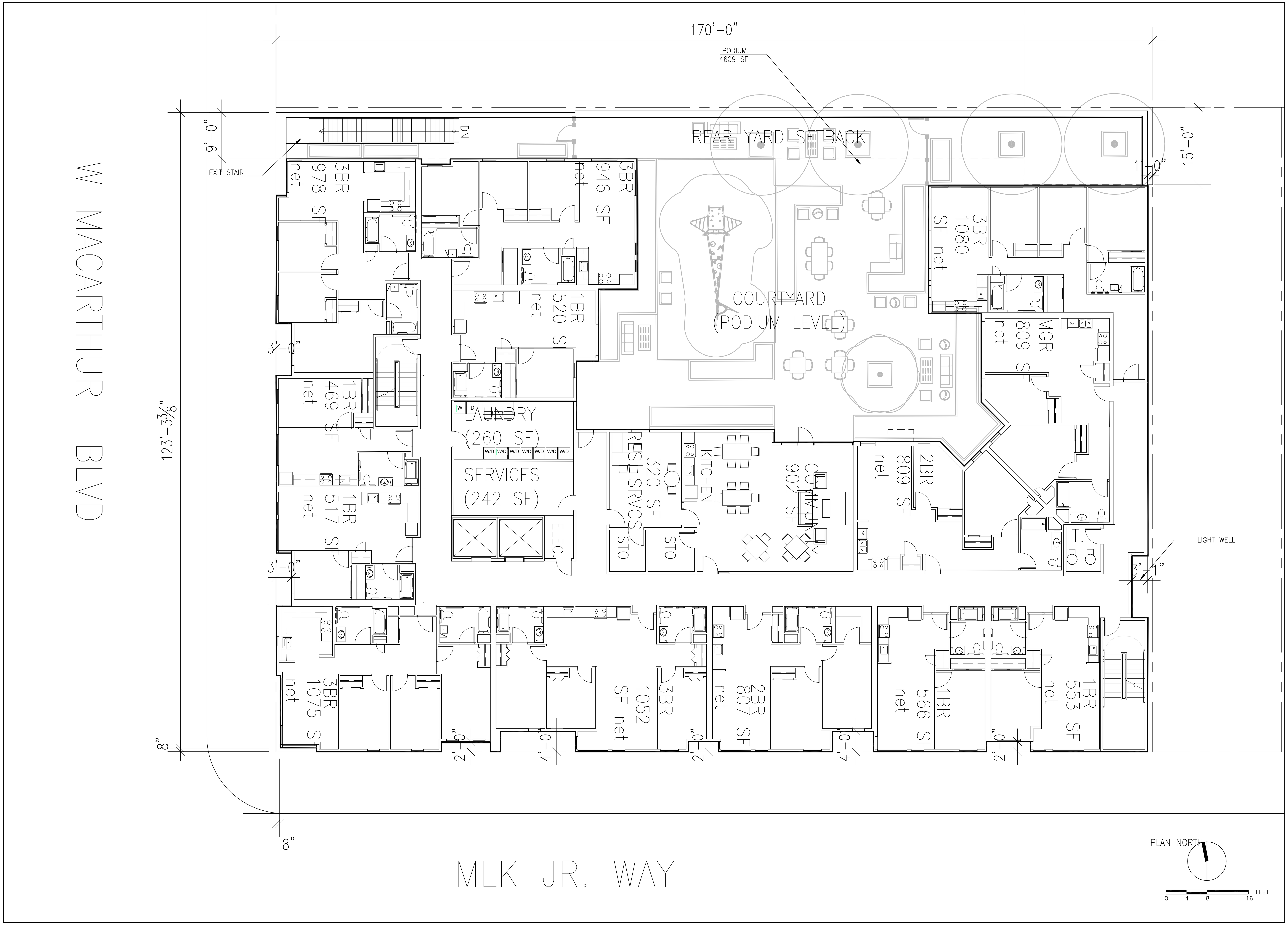
1ST FLOOR PLAN

SCALE 1/8" = 1' – 0"

A2.1



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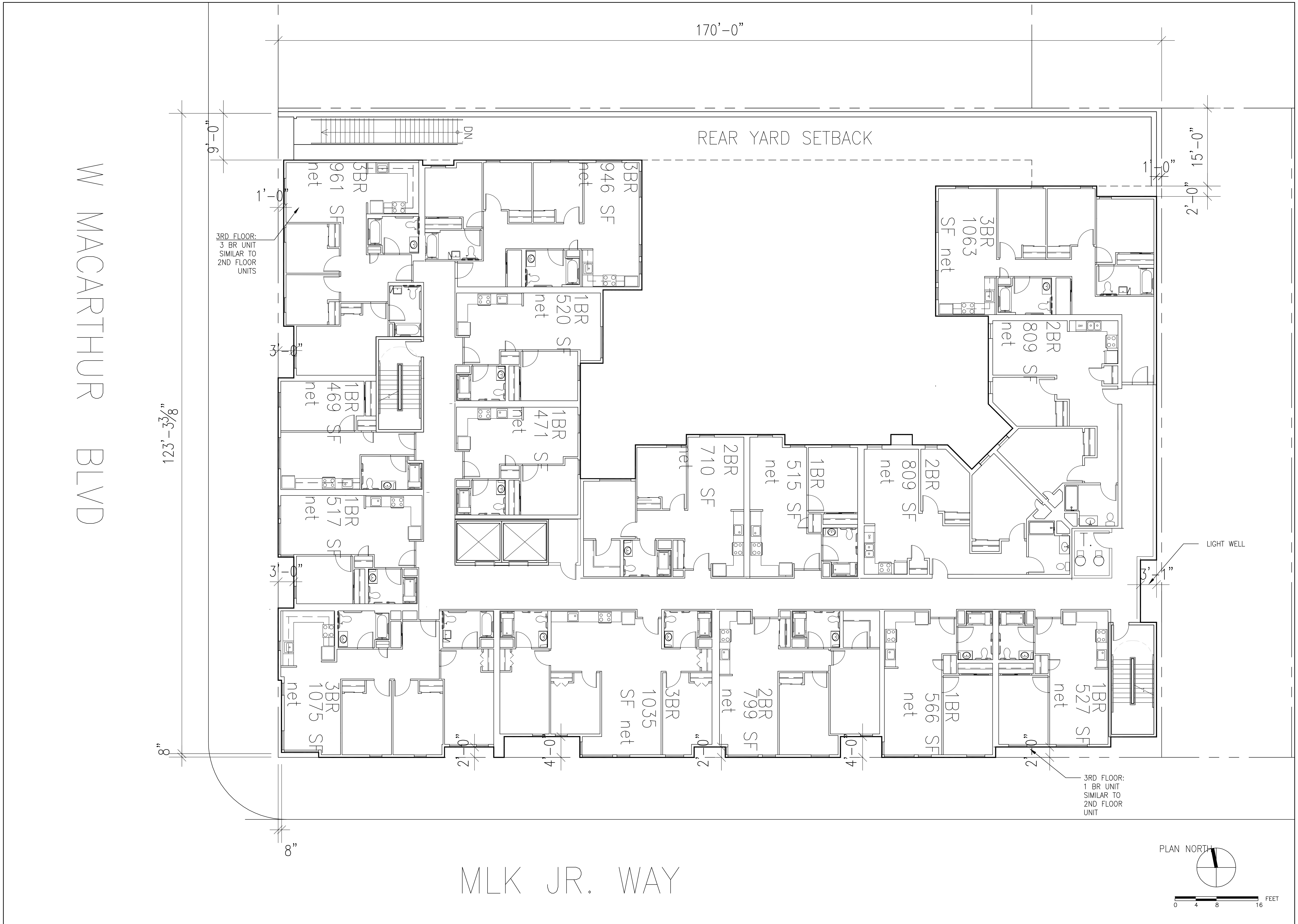
PODIUM LEVEL FLOOR PLAN

SCALE 1/8" = 1' - 0"

A2.2



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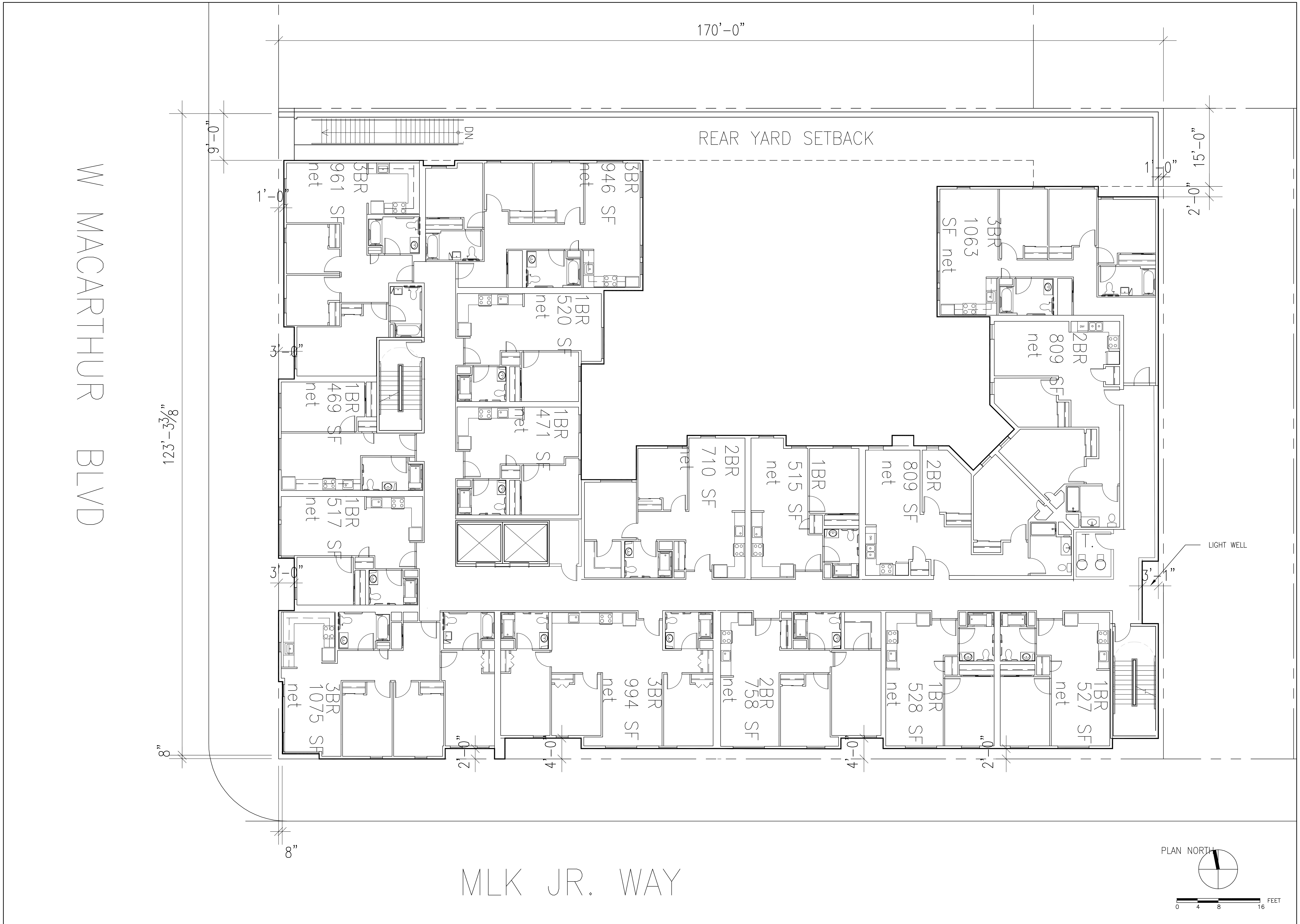
3RD & 4TH FLOOR PLAN

SCALE 1/8" = 1' - 0"

A2.3



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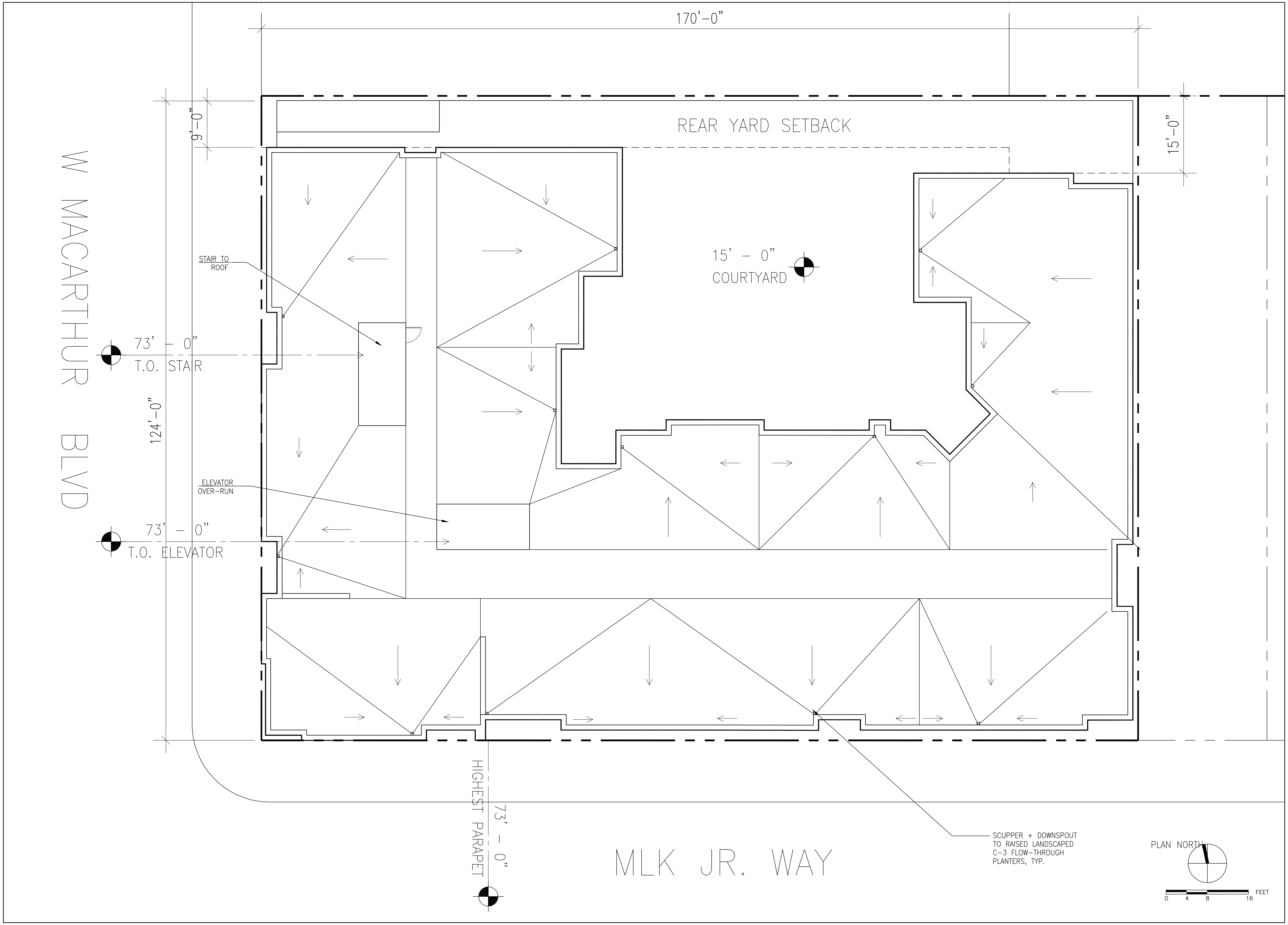
DRAWING TITLE

5TH & 6TH FLOOR PLAN

SCALE 1/8" = 1' - 0"

A2.4



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DRAWING TITLE

ROOF PLAN

SCALE 1/8" = 1' - 0"

A2.5

1 MLK JR. WAY ELEVATION
SCALE : 1/8" = 1'–0"

GENERAL KEYNOTES:

1. COLORED VINYL WINDOW.
2. PERFORATED ALUMINUM SHADE.
3. HORIZONTAL PLANK FIBER CEMENT SIDING.
4. CEMENT PLASTER.
5. SCUPPER AND DOWNSPOUT.
6. 30" TALL CONCRETE FLOW THROUGH LANDSCAPED PLANTER.
7. ALUMINUM STOREFRONT.
8. SIGNAGE.
9. COR-TEN VERTICAL STANDING SEAM METAL SIDING.
10. GARAGE ENTRANCE - ROLL UP PANEL DOOR - PERFORATED STEEL.
11. GATE TO PODIUM STAIR.
12. STAIR TO ROOF.
13. 42" FENCE ALONG EDGE OF PODIUM.

2 MACARTHUR BLVD ELEVATION
SCALE : 1/8" = 1'–0"

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DRAWING TITLE

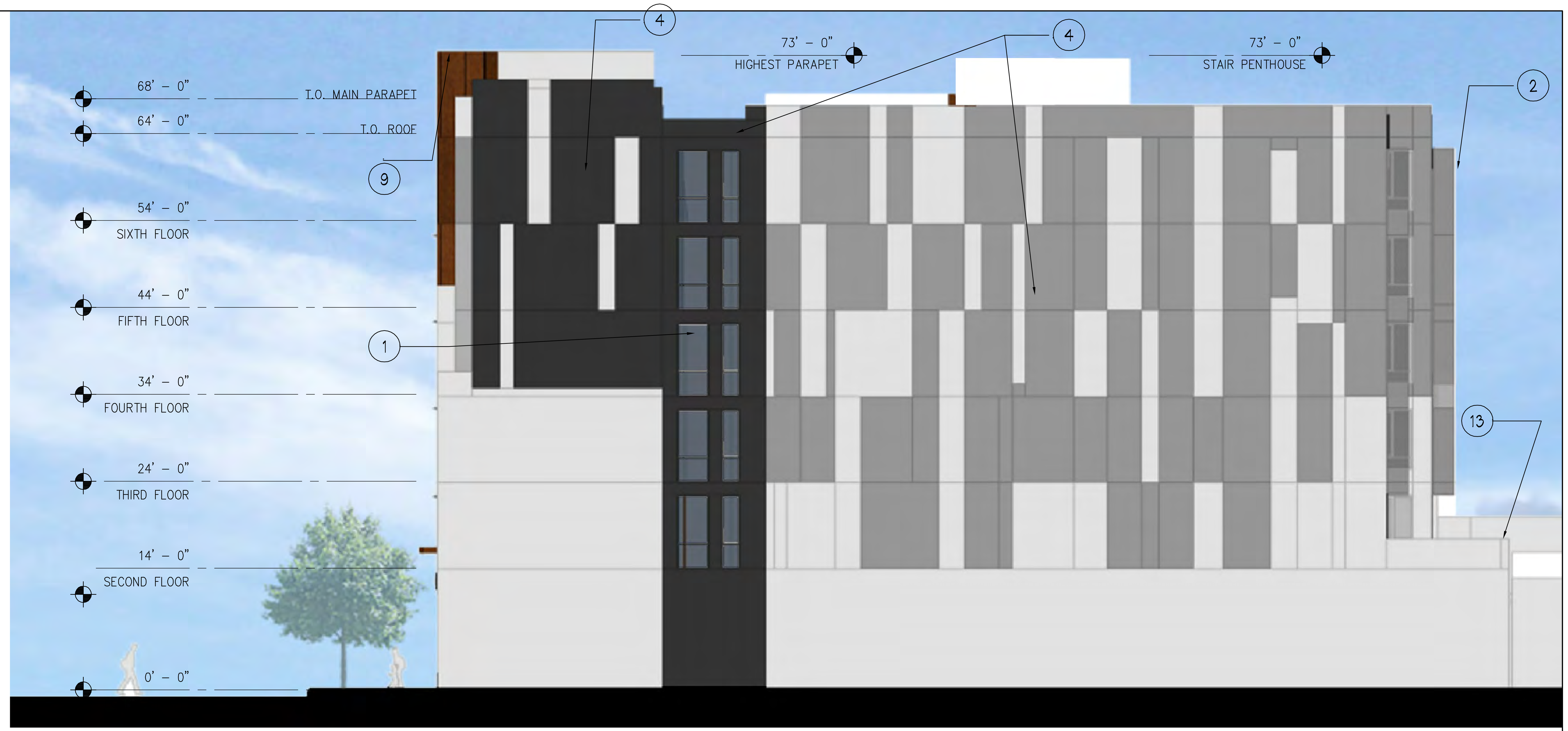
EXTERIOR ELEVATIONS

SCALE 1/8" = 1' – 0"

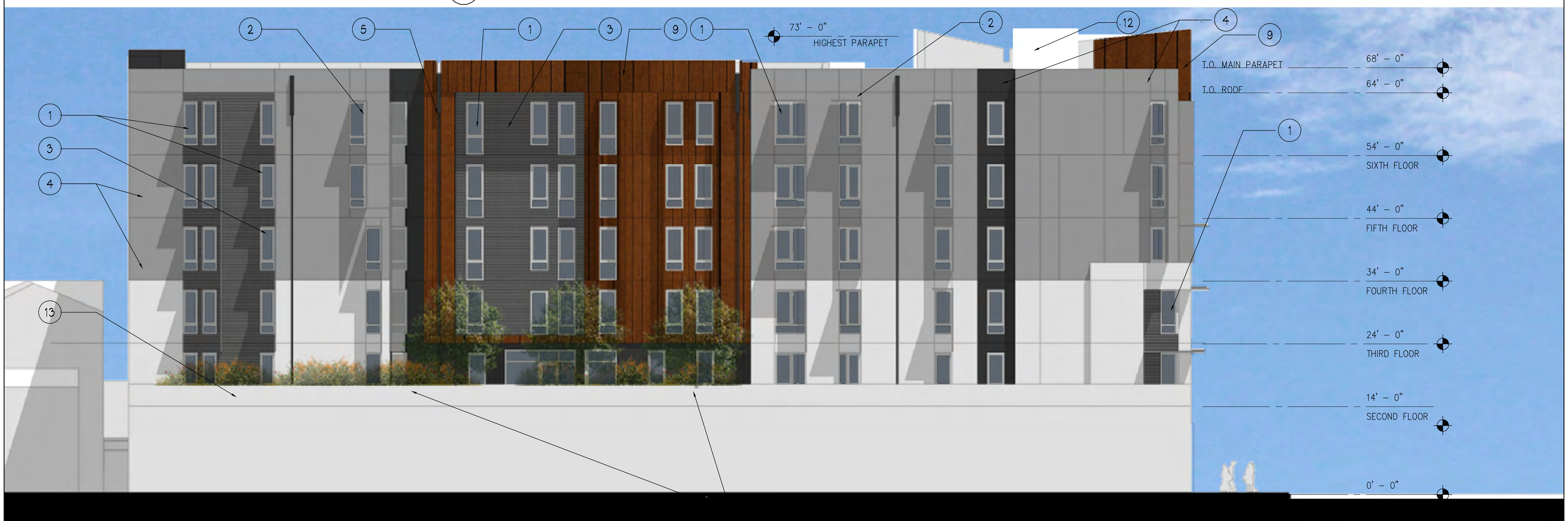
A3.1

GENERAL KEYNOTES:

1. COLORED VINYL WINDOW.
2. PERFORATED ALUMINUM SHADE.
3. HORIZONTAL PLANK FIBER CEMENT SIDING.
4. CEMENT PLASTER.
5. SCUPPER AND DOWNSPOUT.
6. 30" TALL CONCRETE FLOW THROUGH LANDSCAPED PLANTER.
7. ALUMINUM STOREFRONT.
8. SIGNAGE.
9. COR-TEN VERTICAL STANDING SEAM METAL SIDING.
10. GARAGE ENTRANCE - ROLL UP PANEL DOOR - PERFORATED STEEL.
11. GATE TO PODIUM STAIR.
12. STAIR TO ROOF.
13. 42" FENCE ALONG EDGE OF PODIUM.



4 NORTH ELEVATION
SCALE : 1/8" = 1'-0"



3 EAST ELEVATION
SCALE : 1/8" = 1'-0"

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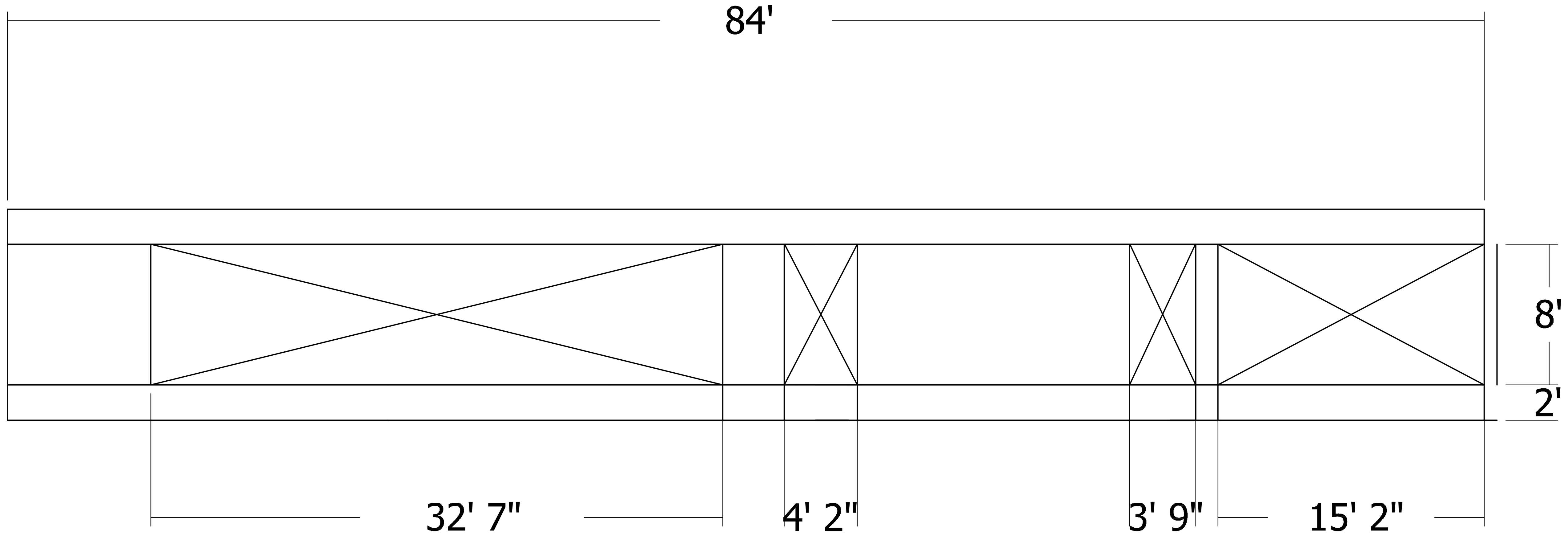
DRAWING TITLE

EXTERIOR ELEVATIONS

SCALE 1/8" = 1' - 0"

A3.2

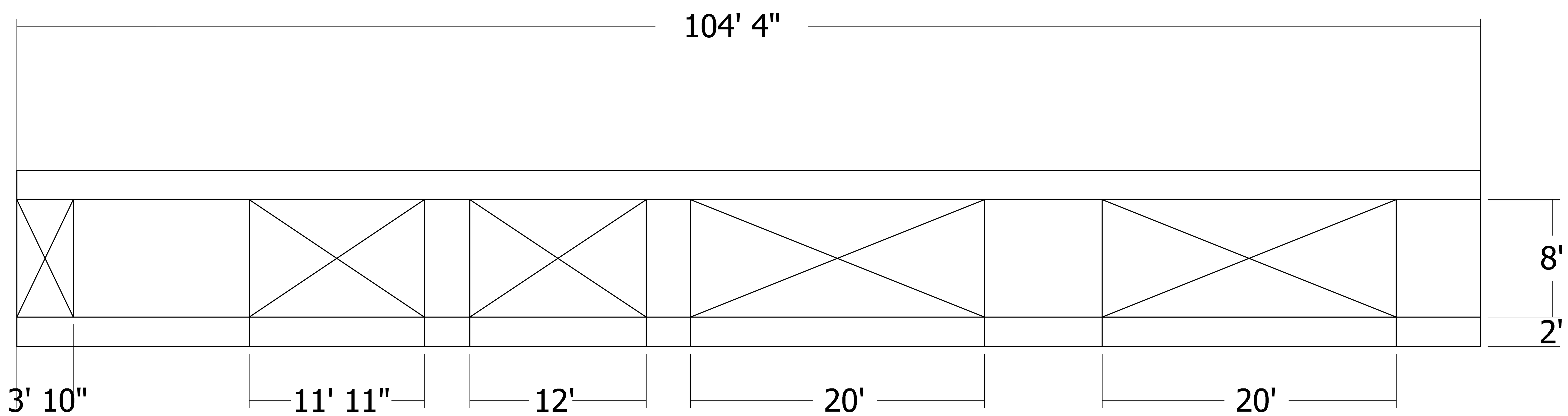


AREA OF REQ'D TRANSPARENCY = TOTAL AREA OF GLAZING / AREA OF NON-RESIDENTI FACADE (BETWEEN 2' -8

AREA OF REQ'D TRANSPARENCY = 445 SF / 672 SF

66% TRANSPARENCY

1 MACARTHUR BLVD TRANSPARENCY DIAGRAM
SCALE : 3/16" = 1'-0"



AREA OF REQ'D TRANSPARENCY = 542 SF / 834 SF

65% TRANSPARENCY

2 MLK JR. WAY TRANSPARENCY DIAGRAM
SCALE : 3/16" = 1'-0"

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3801 MLK JR. WAY

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DRAWING TITLE
TRANSPARENCY DIAGRAMS

SCALE AS NOTED

A3.3

VIEW FACING NORTHWEST ALONG MACARTHUR BLVD

VIEW FACING COURTYARD

VIEW FACING NORTHEAST ALONG MACARTHUR BLVD

VIEW FACING SOUTHWEST ALONG MLK JR. WAY

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DRAWING TITLE

PERSPECTIVES

SCALE AS NOTED

A3.4

EVANS & DE SHAZO
ARCHAEOLOGY HISTORIC PRESERVATION

A HISTORIC RESOURCES EVALUATION FOR THE LONGFELLOW CORNER PROJECT AT 3801 LONGFELLOW CORNER, OAKLAND, ALAMEDA COUNTY, CALIFORNIA

SUBMITTED TO:

Cinnamon Crake, Associate

AEM Consulting

SUBMITTED BY:

Stacey De Shazo, M.A.
Principal Architectural Historian
stacey@evans-deshazo.com

October 7, 2019

Evans & De Shazo, Inc
1141 Gravenstein Highway South
Sebastopol, CA 95472
707-812-7400

www.evans-deshazo.com

ABSTRACT

Evans & De Shazo, Inc. (EDS) completed a Historic Resource Evaluation (HRE) for the proposed Longfellow Corner project (Project) at located within four adjacent parcels that total 0.49 acres, including a 0.13 acre parcel at 3807 Martin Luther King Jr. Way, a 0.15 acre parcel with no physical address, a 0.14 acre parcel at 3823 Martin Luther King Jr. Way, and a 0.07 acre parcel at 3829 Martin Luther King Jr. Way, in Oakland, Alameda County, California. The proposed project entails the demolition of three buildings and the construction of a six-story, 77-unit apartment complex and associated infrastructure (Project). The HRE was completed in compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA) regulations and guidelines due to funds that may be provided by the United States (U.S.) Department of Housing and Urban Development (HUD) for the Project. Two Areas of Potential Effect (APEs) were established for the Project, including a Direct APE that includes the 0.49-acre Project Area that includes four (4) adjacent parcels, and an Indirect APE that includes twenty-three (23) parcels adjacent and surrounding the Project Area with built environment resources at least 50 years of age.

The HRE was completed by EDS Principal Architectural Historian, Stacey De Shazo, M.A., who exceeds the Secretary of Interior's professional qualification standards in Architectural History and History. The methods used to complete the HRE included a record search and review of documentation available at local repositories, as well as various online sources to provide an understanding of the built environment resources within the Direct and Indirect APE, and the surrounding area to assist in the development of the historic context, and a field survey of the Direct APE, which contains three built environment resources, and the Indirect APE, which contains 27 built environment resource, to document the total 30 built environment resources to determine the age, materials, use, style, and assess the potential eligibility for listing on the NRHP.

The HRE determined that the none of the three (3) buildings located within the Direct APE are eligible for listing in the NRHP under any criteria; therefore, they are not considered Historic Properties under Section 106 of the NHPA. Within the Indirect APE, it was it was determined that the ca. 1908 multi-unit apartment building at 3848 Martin Luther King Jr. Way (EDS 24) is likely eligible for listing on the NRHP under Criterion C due to its Italian Renaissance Revival architecture. None of the remaining 26 buildings within the Indirect APE appear eligible for listing in the NRHP under any criteria. Therefore, potential indirect affects to the ca. 1908 multi-unit apartment building as a result of the proposed Project were assessed, and it was determined that the Project will have no adverse effect on the ca. 1908 building. As such, a finding of no adverse effects to built environment resources is recommended pursuant to 36 CFR § 800.5 and 36 CFR § 800.11.

All built environment resources at least 50 years in age located within the Direct and Indirect APEs were documented on Department of Parks and Recreation (DPR) 523 forms (Appendix A).

Table of Contents

INTRODUCTION

Evans & De Shazo, Inc. (EDS) was contracted by AEM Consulting to provide an HRE and an Historic Property Survey (HPS) for the proposed Longfellow Corner project at 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California that entails the demolition of a ca. 1910 commercial building, a ca. 1890 three-unit flat,[1] and a ca. 1950 shed currently located within the property at 3807 Martin Luther King Jr. Way, and the construction of a six-story, 77-unit apartment complex and associated infrastructure. The HRE and HPS were completed to ensure compliance with NEPA and Section 106 of the NHPA by determining if there are any Historic Properties within the Project APEs that could be adversely affected by the proposed Project.

The HRE was completed by EDS Principal Architectural Historian, Stacey De Shazo, M.A., who exceeds the Secretary of Interior's Professional Qualification Standards in Architectural History and History. The purpose of the HRE was to evaluate the built environment resources that are at least 50 years in age located within the Direct and Indirect APEs to determine if any of them meet the definition of a Historic Property under Section 106 of the NRHP guidelines in order to assess potential adverse effects to built environment historic properties.

The HPS was completed by EDS Principal Archaeologist, Sally Evans, M.A., RPA, and Senior Archaeologist Gilbert Browning M.A., RPA who both exceed the Secretary of Interior's professional qualification standards in archaeology and history. The methods and results of the HPS are presented in a separate report.[2]

The methods and results of the HRE are described herein.

PROJECT DESCRIPTION

The Project includes the demolition of the existing ca. 1910 commercial building, a ca. 1890 three-unit flat, and a ca. 1950 shed currently located within the parcel at 3807 Martin Luther King Jr. Way, and the construction of a six-story 77-unit apartment complex and associated infrastructure. The new apartment building will include parking, office, community, laundry and additional support/amenity spaces, including an outdoor gardening area, landscaping, and bicycle parking.

PROJECT LOCATION

The Project Area is located at 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California (Figure 1), and includes four adjacent parcels totaling 0.49 acres, including the 0.13 acre parcel at 3807 Martin Luther King Jr. Way (Assessor Parcel Number (APN) 012-964-7), the 0.15 acre parcel with no physical address (APN 012-964-6), the 0.14 acre parcel at 3823 Martin Luther King Jr. Way (APN 012-964-5), and the 0.07 acre parcel at 3829 Martin Luther King Jr. Way (APN 012-964-4). The Project Area is bounded by single-family houses on the north and west, Martin Luther King Jr. Way on the east and W. MacArthur Boulevard on the south.

[1] A flat is usually a single family home where each level has been converted to a separate dwelling
[2] Sally Evans, *Historic Property Survey for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California,* Evans & De Shazo, 2019.

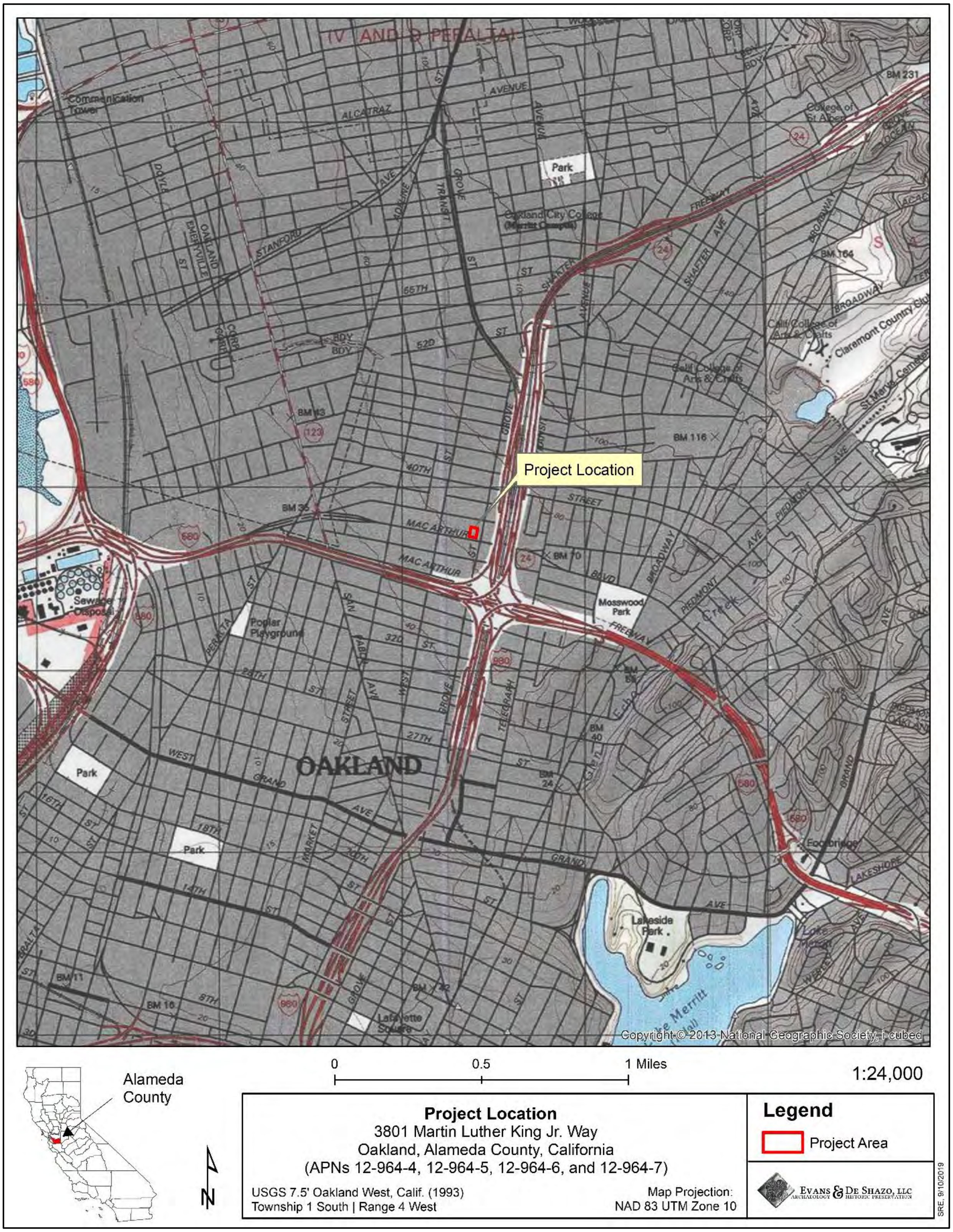

Figure 1. Project Area location map.

AREA OF POTENTIAL EFFECT

The regulations implementing the Section 106 review process requires that an APE be defined for the Project (36 CFR 800.16(d)). The Section 106 regulations define the APE as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking". Two APEs were established for the proposed Project, including a Direct APE and an Indirect APE (Figure 2).

Each of the parcels was assigned an EDS number 1a, 1b, 1c and 1c, 2 – 24,[3] which include 27 parcels containing a total of 30 buildings that are at least 50 years of age that were evaluated to determine significance under Section 106 of the NHPA, as amended.

Direct APE

The Direct APE is defined as the area that will be directly impacted by the proposed Project and includes the following four adjacent properties:

- 1a: 3801 - 3807 Martin Luther King Jr. Way, APN 012-964-7 (ca. 1910 commercial building, a ca. 1890 three-unit flat, and a ca. 1950 shed)
- 1b: No physical address, APN 012-964-6 (vacant)
- 1c: 3823 Martin Luther King Jr. Way, APN 012-964-5 (vacant)
- 1d: 3829 Martin Luther King Jr. Way, APN 012-964-4 (vacant)

Indirect APE

The Indirect APE includes twenty three (23) adjacent and nearby parcels, twenty-two (22) of which contain built environment resources at least 50 years of age. The Indirect APE includes the following parcels:

- EDS 2: 3837 Martin Luther King Jr. Way (APN 012-964-3)
- EDS 3: 3843 Martin Luther King Jr. Way (APN 012-964-2)
- EDS 4: 3849 Martin Luther King Jr. Way (APN 012-964-1)
- EDS 5: 663 Apgar Street (APN 012-694-41)
- EDS 6: 671 Apgar Street (APN 012-964-4)
- EDS 7: 668 W. MacArthur Boulevard (APN 012-964-8)
- EDS 8: 670 W. MacArthur Boulevard (APN 012-964-9)
- EDS 9: 674 W. MacArthur Boulevard (APN 012-964-1)
- EDS 10: 678 W. MacArthur Boulevard (APN 012-964-11)

[3] To provide a simple reference to a project number the parcels were assigned EDS 1 (Direct APE) and 2 – 22 (Indirect APE) that makes it easy to reference the parcel on the map and within the details throughout this document.

- EDS 11: 669 W. MacArthur Boulevard (APN 012-965-31)
- EDS 12: 665 W. MacArthur Boulevard (APN 012-965-32)
- EDS 13: 3725 Martin Luther King Jr. Way (APN 012-965-3)
- EDS 14: No physical address (APN 012-965-2)
- EDS 15: 657 W. MacArthur Boulevard (APN 012-965-1)
- EDS 16: 3720 Martin Luther King Jr. Way (APN 012-966-28)
- EDS 17: 625 W. MacArthur Boulevard (APN 012-966-29-1)
- EDS 18: 3806 Martin Luther King Jr. Way (APN 012-967-22)
- EDS 19: 3810 Martin Luther King Jr. Way (APN 012-967-23)
- EDS 20: 3820 Martin Luther King Jr. Way (APN 012-967-24-1)
- EDS 21: 3834 Martin Luther King Jr. Way (APN 012-967-26)
- EDS 22: 3838 Martin Luther King Jr. Way (APN 012-967-27)
- EDS 23: 3840 Martin Luther King Jr Way (APN 012-967-28)
- EDS 24: 3848 Martin Luther King Jr. Way (APN 012-967-29)

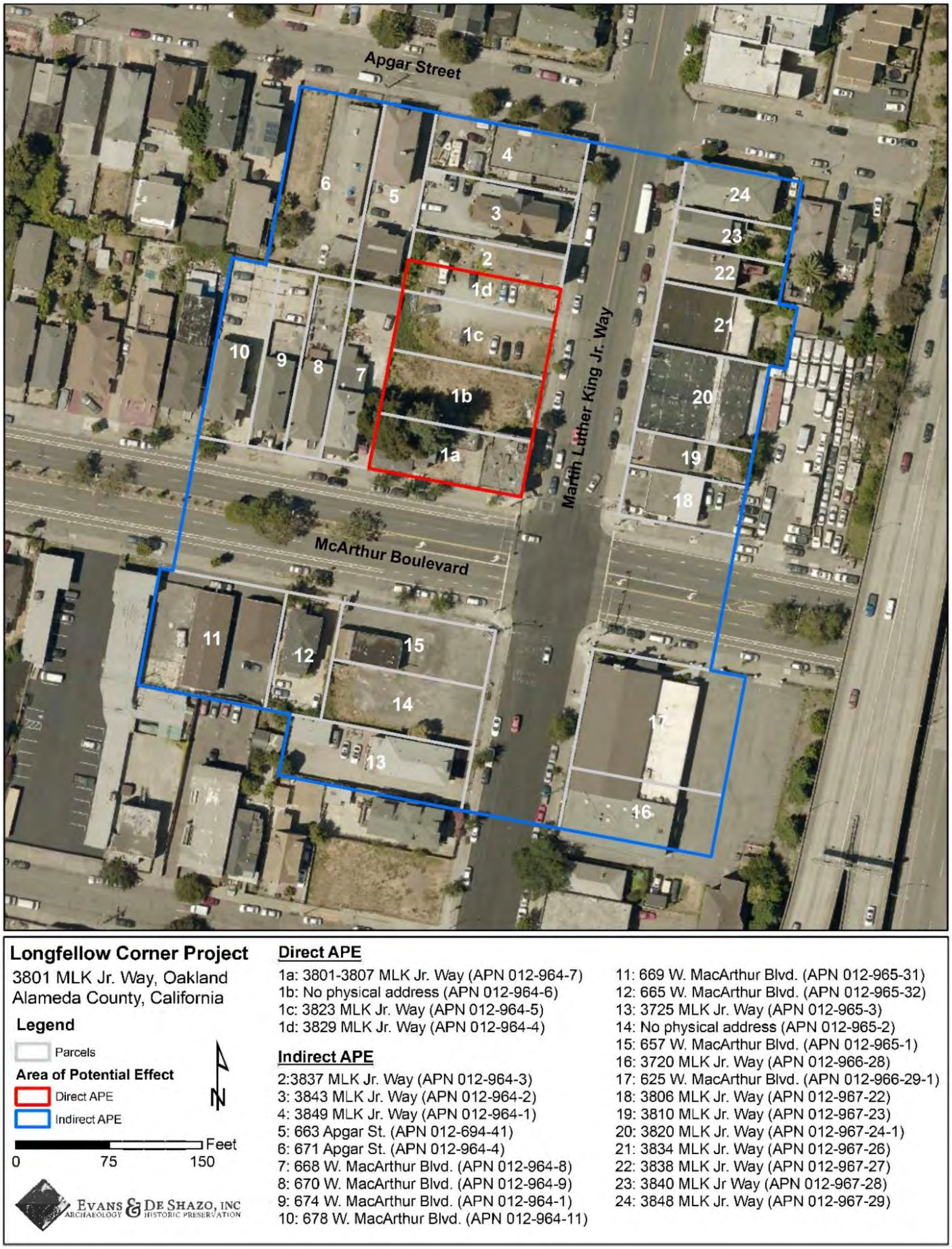

Figure 2. Area of Potential Effect map.

REGULATORY SETTING

The proposed Project is considered an undertaking subject to NEPA and Section 106 of the NHPA review due to financial assistance being provided by HUD for the Project. These regulations, as they pertain to cultural resources, are outlined below.

THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

NEPA [42 U.S.C. 4321 et seq.] establishes national environmental policies and goals for the protection, maintenance, and enhancement of the environment and provides a process for implementing these goals within the Federal agencies. The term "cultural resources" is not defined in NEPA. NEPA address the "human" — social and cultural — aspects of the environment. Culturally valued aspects of the environment generally include historic properties (as defined by the NHPA), sacred sites, archaeological sites not eligible for the NRHP and archaeological collections. The cultural use of natural resources and such "intangible" socio-cultural attributes as social cohesion, social institutions, life ways, religious practices, and other cultural institutions are typically evaluated under the "social impact" category.

NATIONAL HISTORIC PRESERVATION ACT (NHPA) - SECTION 106

Section 106 of the NHPA pertains to Federal "undertakings". A Federal undertaking is defined as a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency, those carried out with Federal financial assistance, and those requiring a Federal permit, license or approval. The NHPA directs federal agencies to take into account (through identification, recordation and mitigation) the effects of proposed activities on historic properties and give the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. Historic properties are properties that are included in the NRHP or that meet the criteria for the National Register.

NATIONAL REGISTER OF HISTORIC PLACES (NRHP)

Historic properties are districts, sites, buildings, structures, and objects listed or found eligible for listing in the NRHP. Unlisted properties are evaluated against the National Register criteria to determine eligibility for listing, in consultation with the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) and any Native American Tribe that may attach religious or cultural importance to them.

The five property types are:

- **Building**: A structure created principally to shelter or assist in carrying out any form of human activity. A "building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.
- **Structure**: A construction made for a functional purpose rather than creating human shelter. Examples include mines, bridges, and tunnels.
- **Object**: Construction primarily artistic in nature or relatively small in scale and simply constructed. It may be movable by nature or design or made for a specific setting or environment. Objects should be

in a setting appropriate to their significant historic use or character. Examples include fountains, monuments, maritime resources, sculptures and boundary markers.

- **Site**: The location of a significant event. A prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by physical remains if it is the location of a prehistoric or historic event and if no buildings, structures, or objects marked it at that time. Examples include trails, designed landscapes, battlefields, habitation sites, Native American ceremonial areas, petroglyphs, and pictographs.
- **District**: Unified geographic entities which contain a concentration of historic buildings, structures, or sites united historically, culturally, or architecturally.

In order to be included or qualify for the National Register, a building, structure, object, site or district must possess significance in American history, architecture, archaeology, engineering or culture, and must be associated with an important historic context and retain historic integrity of those features necessary to convey its significance. The resource should possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet any of the following criteria:

A. Is associated with events that have made a significant contribution to the broad patterns of our history; or

B. Is associated with the lives of persons important in our past; or

C. Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possesses high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or,

D. Has yielded, or may be likely to yield, information important in prehistory or history.

METHODS

The methods used to complete the HRE included a record search and review of documentation available at the Northwest Information Center (NWIC) of the California Historical Information Systems (CHRIS) including the cultural resource inventories listed in the section below. In addition, research was conducted at the Oakland Public Library, as well as various online sources including Ancestry.com, Newspapers.com, California State Library, Calisphere.com, and California Digital Newspaper Collection to review primary source documents such as photographs, historic maps, and Sanborn Fire Insurance maps. The purpose of the research was to provide an understanding of the development of the Project Area, the adjacent parcels, and the surrounding area. EDS Principal Architectural Historian Stacey De Shazo, M.A., also conducted an architectural survey of the built environment resources within the Direct APE and the Indirect APE to identify the style, character-defining features, materials, and alterations of the buildings and associated landscape. The indirect APE was assessed from the street view only.

CULTURAL RESOURCE INVENTORIES

As part of the record search, the following inventories were reviewed:

- National Register of Historic Places (NRHP)
- California Register of Historical Resources (CRHR)
- California Historical Landmarks (CHL)
- California Points of Historical Interest (CPHI)
- Directory of Properties in the Historic Property Data (HPD) File for the City of Oakland, Alameda County (OHP 2012).

ONLINE RESEARCH

Online research was also conducted that utilized the following sources:

- www.newspapers.com
- www.ancestry.com
- www.calisphere.com (University of California)
- http://www.library.ca.gov/ (California State Library)
- https://cdnc.ucr.edu/ (California Digital Newspaper Collection)
- Alameda County Assessor's Office:
- (http://gis.acgov.org/Html5Viewer/index.html?viewer=parcel_viewer

The results of the local and online research are within the Historic Setting section of this report.

RESULTS OF THE NWIC RECORD SEARCH

A record search was conducted by EDS Principal Archaeologist Sally Evans, M.A. RPA at the NWIC on July 3, 2019 (NWIC File #19-0030) in order to obtain and review documentation pertaining to previous cultural resource studies and previously documented cultural resources within 0.25-miles of the Project Area. According to information on file at the NWIC, the Project Area has not been previously surveyed for cultural resources; however, there have been five (5) previous cultural resource studies conducted within 0.25 miles of the Project Area that pertains to land located outside of the Direct and Indirect APEs and is further detailed in the EDS Archaeological Site Sensitivity Study report.[4]

According to the OHP's HPD there are no cultural resources listed within or near the Project Area that are listed or determined eligible for the NRHP or CRHR. Furthermore, there are no California State Historical Landmarks, or California State Points of Historical Interest located in the immediate vicinity of the Project Area, nor are there any properties listed on the California Inventory of Historic Resources (California

[4] Sally Evans, *Historic Property Survey for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California,* Evans & De Shazo, 2019.

Department of Parks and Recreation 1976) located near the Project Area. Furthermore, the Project Area, nor the Indirect APE are located within any locally listed or eligible historic district.

CITY OF OAKLAND HISTORICAL AND ARCHITECTURAL HERITAGE SURVEY

In addition to the information provided by the NWIC record search, a review was conducted of the Oakland (Citywide) Historical and Architectural Heritage Survey and the City's Planning and Zoning map that provides information about historical resources in the City (http://oakgis.maps.arcgis.com/apps/webappviewer). The Historical and Architectural Heritage survey was completed in 1986 and again in in 1997 and consisted of the identification of all buildings located within the City constructed prior to 1946. The report provides a preliminary rating (based on architectural, aesthetic, historical and other cultural value) for individual properties listed, and identifies areas of "Primary" and "Secondary" importance, based on the number of contributing properties within a given area. The document also provides a preliminary individual property rating based on its architectural, historical and cultural value. The current rating system, adopted in the Historic Preservation Element of the City of Oakland General Plan, uses letters A to E to rate individual properties and numbers 1 to 3 for district status. In general, A and B ratings indicate landmark-quality buildings.

A review of the City's Planning and Zoning map[5] revealed that the Project Area formerly contained one Potential Designated Historic Property (PDHP) within APN 012-964-4; however, this building is no longer present. However, additional documentation provided by the City of Oakland Historic Preservation Planner Betty Marvin (October 4, 2019) revealed that the ca. 1890 three-unit flat and ca. 1910 commercial building, within the Project Area, had been previously identified in 1993 during a "Preliminary Survey" completed by the City of Oakland and documented on "Identification Sheets". Although not showing in the online PDHP, the documents revealed that ca. 1890 three-unit flat has a rating of C3, which means it is a building of "secondary importance" and "may warrant some sort of preservation effort by the City".[6] The documents also revealed that the ca. 1910 commercial building within the Project Area was identified during the "Preliminary Survey" but the building was not given a rating by the City of Oakland, and only noted as "X" by the surveyor. Neither of the two buildings were documented on Historic Resources Inventory (HRI) or DPR forms.

Additional local and online research is detailed with the historic setting and property history of this report.

HISTORICAL SETTING

The following historical setting is intended to provide an overview of broader historic themes, as well as specific historic themes associated with the Project Area, as well as the surrounding area.

MEXICAN PERIOD (1822 – 1846)

In 1821, Mexico won its independence from Spain with the signing of the Treaty of Córdoba and took possession of California, marking the end of the Spanish period and the beginning of the Mexican period in

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[5] http://oakgis.maps.arcgis.com/apps/webappviewer

[6] http://www2.oaklandnet.com/government/o/PBN/OurServices/Historic/DOWD009155

Alta California. Many changes occurred throughout Alta California under Mexican rule due to the lack of strong oversight and military rule imposed by the Spanish. Under Mexican rule, missions were secularized, which resulted in Mission land and property being dissolved, and new opportunities arose for trade because foreign ships that had previously been held off by Spanish guarded military ports could dock and provide a variety of provisions to local settlers throughout California. Thus, tea, coffee, sugars, spices, spirits of all kinds, as well as a variety of manufactured goods made their way into the region; and the taxes on these imported goods became the main source of revenue for the Mexican government in California. Likewise, products produced in Alta California were exported, which bolstered the hide and tallow trade that became the primary business activity in California during this time. The Mexican colonial authorities also permitted and encouraged foreigners to relocate and settle in Alta California and as a result the population of Euro-Americans increased.

As the population grew, and the hide and tallow trade became a main source of revenue, several additional ranchos were established that included large tracts of land given to politically prominent Mexican citizens and military leaders. As a result, the 20 or so ranchos that had existed during the Spanish period, including *Rancho San Antonio,* increased to roughly 800 that varied between 10,000 and 20,000 acres in size. The income of the rancho was dependent on the amount of hide and tallow produced; therefore, a family's wealth was often determined by the size of their rancho, number of cattle they owned, and the availability of a labor force, which consisted mostly of Indians and poor Mexicans who depended on the rancho owners for their basic needs during this time.[7]

The new Mexican government in Alta California confirmed Don Luis Maria Peralta's claim to the *Rancho San Antonio* following Mexican Independence in 1822 (Figure 3). Don Luis never lived on the Rancho, and when he died in 1842 at the age of 83, he bequeathed it to his four sons, Ignacio, Domingo, Antonio and Vincente. Upon his death his estate was valued at $1,383,500.00 ($30 million today's value).

According to the Hacienda Peralta Historical Park,[8]

> *"Sometime around 1828, Antonio brought his first wife, Maria Dolores Galindo to live on the rancho and the other three sons of Luís María Peralta soon followed. Eventually, Vicente, Domingo and Ignacio Peralta all built their own homes in various parts of the rancho in order to better manage the large grant. José Domingo Peralta (1795-1865), who had his own rancho in present-day Santa Clara-San Mateo counties, was convinced to move to Rancho San Antonio in the 1830s and eventually built an adobe in 1841 in the northernmost part of the rancho in what is now the city of Berkeley. The oldest son, Hermenegildo Ignacio (1791-1874), after retiring as alcalde in San José, came to the rancho in 1835 and established a residence in the southernmost area in present-day northern San Leandro. The youngest son, José Vicente (1812-1871), lived with his brother Antonio until he married and built his own adobe in 1836 in what is now the northern Temescal district of Oakland.*

[7] Stephen W. Silliman, *Lost Laborers in Colonial California, Native Americans and the Archaeology of Rancho Petaluma*. University of Arizona Press, 2004.
[8] Hacienda Peralta Historical Park, "Hacienda Peralta Historical Park", http://www.peraltahacienda.org. Accessed June 17, 2017.

In 1842, apparently believing it was time to settle his estate, eighty-three-year-old Luís María Peralta journeyed to the rancho in order to divide the rancho land among his four sons. Luís had already given cattle to his three married daughters and planned to leave his San José adobe and land to his two unmarried daughters, who lived with him. Antonio received 16,067 acres of land from 68th Avenue to present-day Lake Merritt and up the eastern side of Lake Merritt to Indian Gulch, now known as Trestle Glen. Antonio's portion also included the peninsula of Alameda. Ignacio received approximately 9,416 acres from southeastern San Leandro Creek to approximately 68th Avenue in Oakland. Vicente received the acreage that included the entire original town of Oakland, from Lake Merritt to the present Temescal district. Domingo received all of what is present-day Albany and Berkeley and a small portion of northern Oakland. The acreage of each portion is only known because of the patents later received by the brothers from the US government. Both Ignacio and Antonio received separate patents for their portions, but Vicente and Domingo applied for a joint patent that totaled 19,143 acres."[9]

[9] Hacienda Peralta Historical Park, "Hacienda Peralta Historical Park", http://www.peraltahacienda.org. Accessed June 17, 2017.

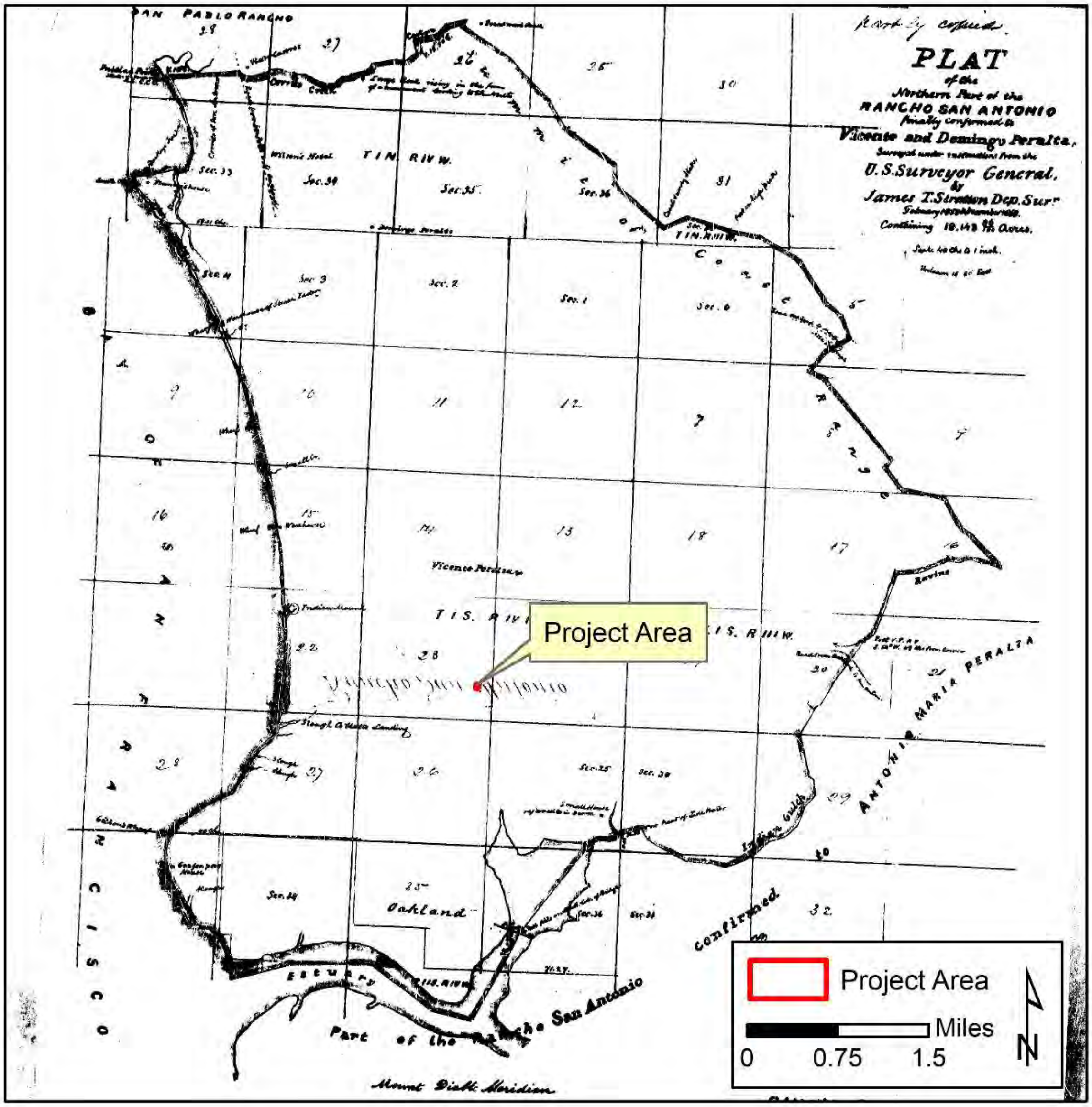

Figure 3: Plat Map of the Northern Part of the Rancho San Antonio confirmed to Vincente and Domingo Peralta (1859).

AMERICAN PERIOD (1848 – 1880)

The beginning of the American Period in California is marked by the end of the Mexican-American War in 1848 when the U.S. signed the Treaty of Guadalupe Hidalgo and took possession of the territories that included present-day California, Arizona, Colorado, Nevada, Utah, Wyoming, and New Mexico. The Treaty of Guadalupe Hidalgo provided the resident Californios[10] their American citizenship and guaranteed title to land granted during the Mexican period. However, within weeks of the treaty signing, gold was discovered by

[10] Spanish-speaking residents of Alta California during the Spanish and Mexican era (1769-1848).

James Marshall along the American River in California, and as a result a rush of people from all over the U.S., as well as Scotland, Ireland, England, Germany, and France European and American came to California in search of gold and wealth.

For the first few years of the California Gold Rush (1848-1850), *Rancho San Antonio* remained prosperous, as the Peralta's made a significant amount of money supplying beef and flour to the miners. However, the Gold Rush also brought an influx of new settlers that were drawn to the fertile and undeveloped lands of the ranchos, and this gave rise to land disputes as settlers (aka "squatters") began to move onto vacant rancho land that they perceived to be available for settlement.

When the U.S. took possession of California and other Mexican lands in 1848, it was bound by the Treaty of Guadalupe Hidalgo to honor the legitimate land claims of Mexican citizens residing in the captured territories. In order to investigate and confirm titles in California, officials acquired the provincial records of the Spanish and Mexican governments in Monterey, and they were transferred to the U. S. Surveyor General's Office in San Francisco, including land deeds, sketch maps (*disenos*), and various other documents. In 1851, the U.S. passed the California Land Act that established a three-member Public Land Commission to review these records and determine the validity of the land grants, and charged the Surveyor General with surveying confirmed land grants. Of the 813 grants ultimately claimed, the land commission approved only 553; however, some of the confirmed grants were reduced in original size and the cost of litigation forced many of the Californios to sell their land and cattle.[11] [12]

As required by the California Land Act of 1851, the Peralta brothers filed a claim for *Rancho San Antonio* with the Public Lands Commission in 1852. However, over the next few decades, they began selling large portions of the rancho land. Antonio remained in possession of the largest tract of land within the Rancho, and in 1870, he built an Italianate house adjacent to his adobe house (still extant), which is now a part of the Peralta Hacienda Historical Park in the Fruitvale District of East Oakland. However, it was not until June 17, 1874 that the U.S. issued a patent to Antonio for his 16,067-acre portion of the original *Rancho San Antonio* that his father Luís had deeded him in 1842. By 1879, when Antonio Peralta (Don Luis' youngest son) died, only 23-acres of the original 44,800-acres remained.[13]

Early Development of Oakland

Early development of the City of Oakland was largely shaped by its topography and accessibility. The original town site was located near Lake Merritt, which allowed for several access options that included a tidal slough, the San Antonio Estuary, and its marshy shores, the Bay west of Pine and Cedar Streets, and a wedge shaped northern marsh that extended from about 16th Street north to 28th Street and beyond, and at its widest came inland as far as Adeline Street.[14] In 1850, within the town of Oakland, a group of squatters hired a surveyor and laid out the town plat near Lake Merritt and present-day Broadway Street (ESA 2007). The original street

[11] California Secretary of State. *Spanish and Mexican Land Grants, 1855-1875*. Accessed September 4, 2019. https://www.sos.ca.gov/ archives/collections/ussg/. 2019.
[12] Nancy, Olmsted. *Vanished Waters: A History of San Francisco's Mission Bay*. Mission Creek Conservancy, San Francisco. 1986.
[13] Friends of Peralta Hacienda Historical Park. *Peralta Family History*, Accessed August 16, 2019, www.peraltahacienda.com. 2019.
[14] Environmental Science Associates (ESA). *Draft EIR, 2935 Telegraph Avenue*, Oakland. March 2007.

grid ran west as far as Market Street and north to 14th Street. In 1852, the town was incorporated, and was extended west from Lake Merritt to the San Francisco Bay and north to approximately 22nd Street.

In 1861, the Transcontinental Railway opened its western terminus in Oakland, on Third Street near Broadway. The Oakland "local" line was operated by the San Francisco and Oakland Railroad Company, which also operated the rail-ferry to the Oakland wharf. “To meet competition of a rival ferry line on the Oakland Estuary "creek route," the railroad built a bridge (later filled in) across San Antonio Creek and extended its service to the town of San Antonio (now East Oakland) on September 28,1864”.[15] This event marked the beginning of the move of the City’s central district away from the waterfront, and northward along Broadway. The prosperity brought by the railway began a cycle of growth in Oakland that resulted in the commercial hub of the City being firmly established at Ninth Street and Broadway by 1877.

Longfellow Neighborhood

The Longfellow neighborhood is located in north Oakland and encompasses the area north of Highway 580, east of Adeline Street, south of 51st Street, and west of State Route (SR) 24. Originally considered to be part of the Temescal neighborhood, which is north of Longfellow, the Longfellow neighborhood developed slowly during the late 1800s, and by 1870s the neighborhood consisted of Victorian era style houses; however, there were also still areas within Longfellow that were either undeveloped or utilized as farmland. According to a notation on an 1877 Map of Oakland and Alameda, the land adjacent and east of the Project Area was occupied by “Chinese Vegetable and Berrie Garden, 1880s”. By the 1890s, the land within the Longfellow neighborhood had been sold to investors who subdivided the land into smaller parcels for housing Tract developments including the Alden Tract, the Evoy Tract, the Sheridan Tract, the Major Given Tract, and the Apgar Tract, where the Project Area is located (Figure 4). The Apgar Tract was owned by Richard M. (aka R.M.) Apgar, who was a longtime resident of Oakland and started a real estate investment firm in 1884. In the early 1900s, the area began to develop and was known as “Little Italy”, which also included the Temescal neighborhood north of Longfellow (often referred to collectively as North Oakland).

During the early 1900s, the Longfellow neighborhood was composed of mostly Italian immigrant communities. The Sacred Heart Parish church (founded in 1876) on the corner of Martin Luther King Jr. Way (formerly Grove Street) and 40th Street was the heart of the larger Italian neighborhoods of Longfellow and Temescal.

In the early 1900s, Grove Street was home to the Grove Street #5, a streetcar connecting the North Oakland community to the greater Key System (Key Route) in Oakland (Figure 5). The Key System’s F line connected Berkeley to the Bay Bridge and ran down Linden Street in the Longfellow neighborhood. The Key System was a privately owned transit company that serviced Oakland from 1903 to the early 1960s. The Key System’s F line connected Berkeley to the Bay Bridge and ran down Linden Street in the Longfellow neighborhood.

By the late 1930s, the Grove Shafter Freeway (now known as SR 24) was constructed and destroyed a large portion of the Longfellow and Temescal neighborhoods, and also divided neighborhoods from the commercial district along Grove Street. As a result, the Sacred Heart Parish suffered as the area fell into

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[15] Joseph E. Baker. Past and Present of Alameda County. Chicago: S.J. Clarke Publishing Co. 1914

decline. In the 1940s and 1950s, the Longfellow neighborhood transitioned from an Italian immigrant community to an African American community.[16] This was in large part due to redlining practices by the City of Oakland. As Oakland's African-American population grew during World War II, discriminatory practices like redlining made it near-impossible for people of color to buy homes east of Telegraph Avenue. Redlining was used throughout the U.S. during this time, and excluded African-Americans, as well as Chinese, from securing mortgages for homes in "higher-grade" areas. In 1937, in a document filed by the City of Oakland's building inspector, the Longfellow neighborhood was listed as a "Grade D" or red, which was the least desirable; and as such, mortgages were hard to obtain in these areas (Figure 6). This inequality, combined with years of social injustices, gave rise to several African American organizations within Oakland's Longfellow community during the 1960s, including the African American Museum and Library (AAMLO)[17] and the Black Panther Party, which began in part in the Longfellow neighborhood (Norman 2006; Seale 1978). During this time, the Black Panther Party Office #2 was located at 4419 Martin Luther King Jr. Way, within the Longfellow neighborhood. Also, in the 1960s, Highway 580 was constructed and divided the Longfellow neighborhood up even further (Figure 7), and this resulted in a decline of the once vibrant commercial district that had developed along Grove Street, then in 1984 Grove Street was remade by the City of Oakland to Martin Luther King Jr. Boulevard.

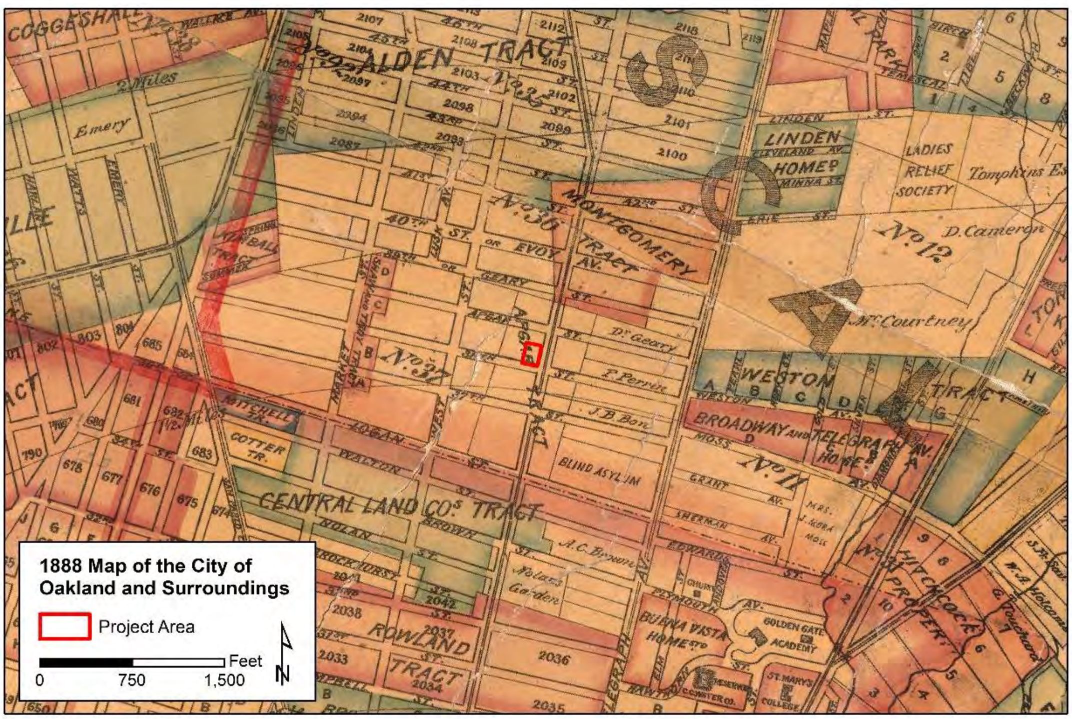

Figure 4. 1888 Map of the City of Oakland by J.C. Henkenius showing Project Area within Apgar Tract.

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16 Megan Molteni. "I'll see you down at the club", Oakland North, online news service produced by the UC Berkeley Graduate School of Journalism. Accessed September 9, 2019, https://oaklandnorth.net/2012/02/20/ill-see-you-down-at-the-club/. 9

17 AAMLO's predecessor was the East Bay Negro Historical Society.

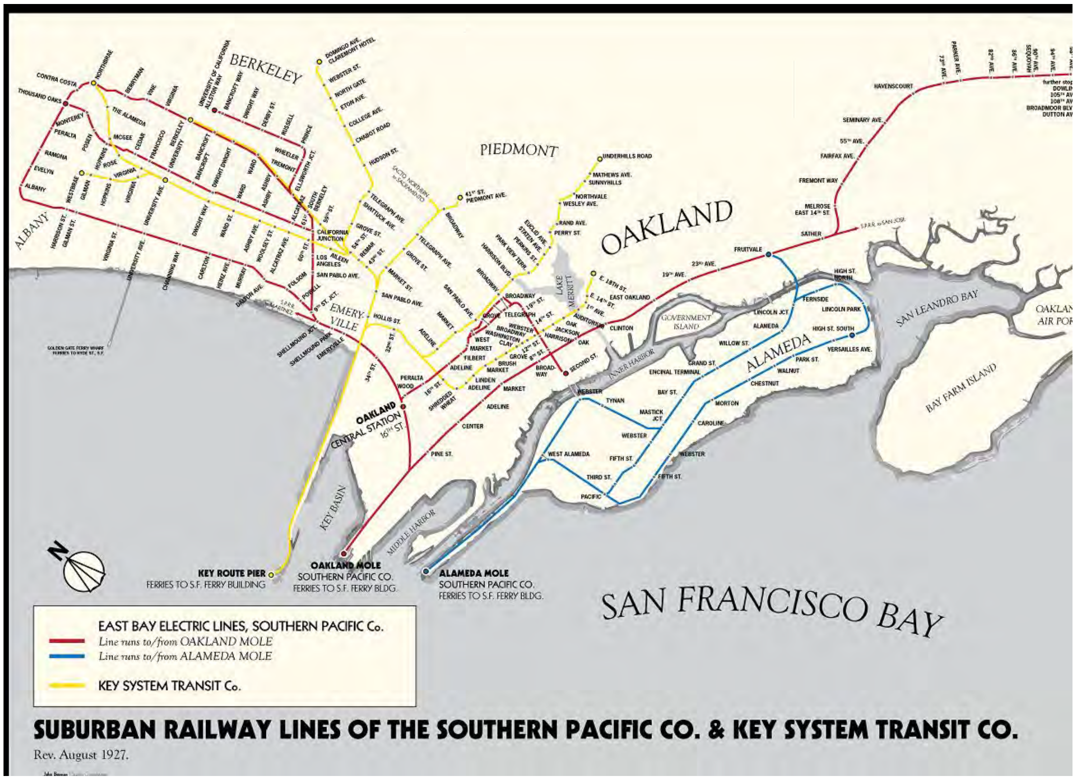


Figure 5. 1926 map of the Suburban Railway lines.

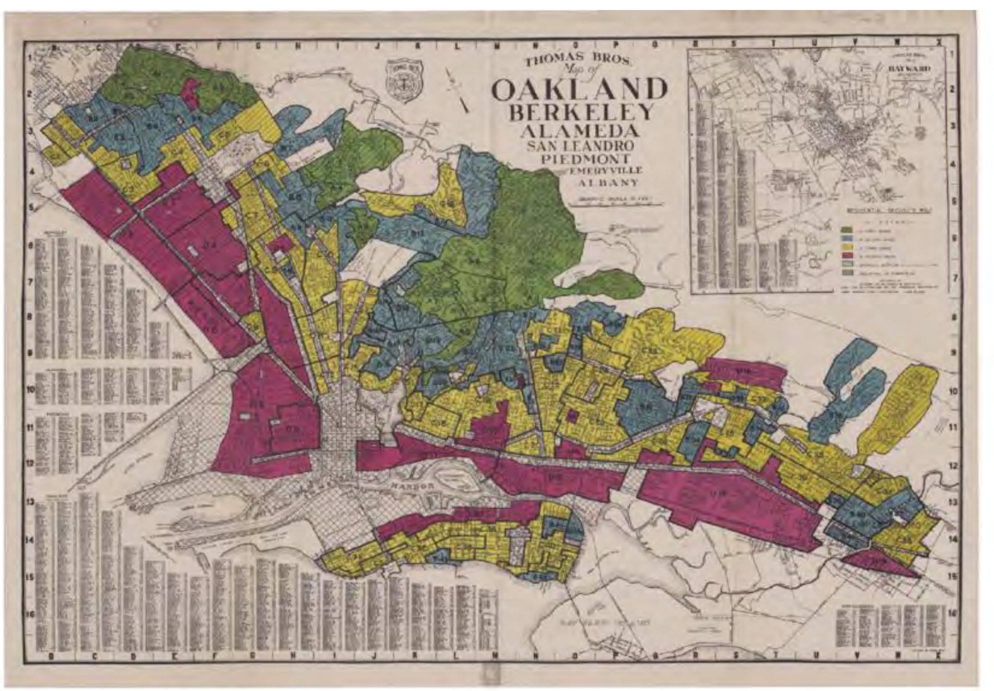


Figure 6. A 1937 map from the Home Owner's Loan Corporation showing the divide in North Oakland between "Fourth Grade" land to the west and higher-grade land to the east.

Figure 7. 1960s aerial photo of the "Grove Shaffer Freeway" interchange within the Longfellow neighborhood (www.calisphere.org).

PROPERTY HISTORIES

The following section describes the property-specific history related to the owner, businesses, and occupancy history of the built environment resources, at least 50 years in age, including the three (3) buildings within the Direct APE and the 27 buildings within the Indirect APE. For the purpose of the evaluation, EDS assigned identification numbers for each resource that includes EDS 1a, 1b, 1c, and 1d (Direct APE) of which only 1a contains the three historic built environment resources, and EDS 2 – 24 (Indirect APE) contains 27 built environment resource, of which are shown in Figure 8. The history of the Project Area prior to the construction of the current three built environment resources is presented in detail within the HPS Report.[18]

[18] Sally Evans, *Historic Property Survey for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California,* Evans & De Shazo, 2019

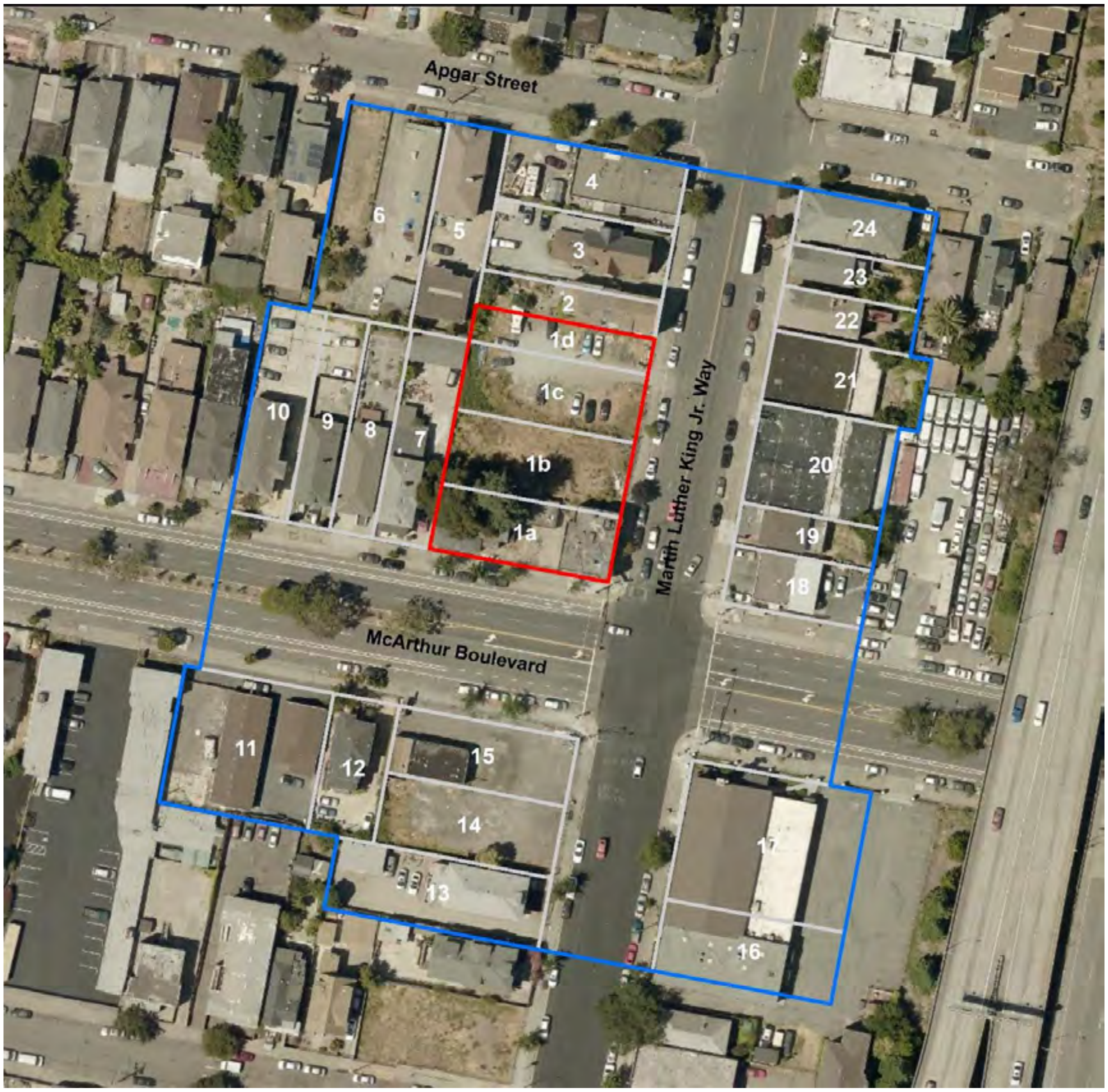


Figure 8. Project APE map, with the Direct APE parcels in red and the Indirect APE parcels in blue.

DIRECT APE PROPERTY HISTORY

EDS 1a: 3801-3807 Martin Luther King Jr. Way, ca. 1910 commercial building, a ca. 1890 three-unit flat, and a ca. 1950 shed

There are three buildings within the Direct APE (EDS 1a) that include a ca. 1910 commercial building, a ca. 1890 three-unit flat, and a ca. 1950 shed (see Figure 8). The construction dates for the three buildings range from ca. 1890 to ca. 1950 and include both residential and commercial uses. The ca. 1910 commercial building is previously associated with address 3801 Grove Street from ca. 1910 to 1984 (as well as 3807 Grove Street from ca. 1951 to 1984) when Grove Street was changed to Martin Luther King Jr. Way. The ca. 1890 three-unit flat originally consisted of three residential units with three separate addresses, including 654, 656, and 658 38th Street (present day W MacArthur Boulevard), which was the address associated within the property until 38th Street was changed to MacArthur Boulevard in the early 1970s. The following table below provides some details regarding ownership and occupancy history of the ca. 1910 commercial building and the ca. 1890 three-unit flat. There are no built environment resources within EDS 1b, 1c, or 1d.

ca. 1910 commercial building		
Year	**Owner**	**Storefront History/Occupants**[19]
ca. 1910	Jacques Kremer	• The ca. 1910 commercial building is previously associated with address: 3801 Grove Street from ca. 1910 to 1984; as well as storefront address 3807 Grove Street by ca. 1951.
1910 – ca. 1915	Mary M. Posey	• N/A
1918	Unknown	• A.J. Zanone is listed as being associated with the building, but his association with the building is unclear at this time.
1919 - 1923	A. Nelson and G. Bauer	• N/A
1924- 1930	1924: Unknown 1925 – ca. 1926: Oscar R. Olson	• "Confectionary and Ice Cream retail store"[20] • By 1924 the storefront is an established Confectionary and Ice Cream retail store (Figure 10). • 1925 – 1926: Oscar R. Olson purchased the building and business and, according to the 1925 U.S. Cities Directory for the City of Oakland, he was a "confectioner" and manager of the retail store. He was married to Evelyn and they appear to have lived on the second story of the building. • 1927 – 1930: the confectionary and ice cream retail store was operated by Walter M. Rose. Walter was married to Eda Rose. It is unclear if they lived on the second floor of the building or if Oscar remained the owner.
ca. 1935 - ca.1965	ca. 1935 – Rose-Waterman Drug Co. ca. 1953 – ca. 1965 – Michael A. Burnett	• Storefront at 3801 Grove was a "Drugstore" from ca. 1935 to 1965. • 1935 – Rose-Waterman Drug Co. (Figure 11) • 1953 – 1965 the storefront was owned and operated by Michael A. Burnett.
1970s	Unknown	• The building, in part, was occupied by the "Earthquake Safety Election Committee", which likely occupied the second floor or the storefront along the northeast corner of the building. [21]
ca. 1976 - 1979		• The building housed "Terry's T.V." from ca. 1976 to 1979.

[19] www.ancestry.com
[20] Ibid.
[21] www.newspapers.com

ca. 1890 three-unit apartment building, *previously associated with address: 654, 656, and 658 38th Street.*		
Year	Owner	Occupants/Additional Details[22]
ca. 1890 – ca. 1910	F. Schorct (1892 – 1902) Della Hildebrand (1902 – uknown)	• The ca. 1890 three unit flat building appears to have been previously located on the corner of what is now Martin Luther King Jr. Way and W. McArthur Boulevard and was previously a single family home.
ca. 1910	Unknown	• By ca. 1910 the former single family house had been moved and was located at the rear of the lot, and the ca. 1910 commercial building had been constructed. • Jacob Lesser, and his wife Bertha, son Alvin, and brother-in-law Isaac Jaffer. Jacob's occupation is listed as the "proprietor" of the Washington Market – located at 1219 Washington Street, Oakland. • George and Mary Groves. George Groves occupation is a dry goods salesman • John Wortman, occupation: "sexton" at a church. • George and Amelia Morton. George's occupation is a fire insurance underwriter.
ca. 1912		• Preston Brock
1922	Unknown	• Harry Skopp, occupation: peddler
1923	Unknown	• Roy J. Auldin, occupation: furniture packer
1924	Unknown	• F.A. and Ella Hicks
1926	Unknown	• Jason Burke, occupation: book-keeper • Mrs. K Lorimer, occupation: stenographer
1928	Unknown	• Z.E. Oscar, occupation: salesman • Alice and Glen Waters • Mary and Ivan Donley
1930	Unknown	• Mary and Ivan Donley

[22] www.ancestry.com

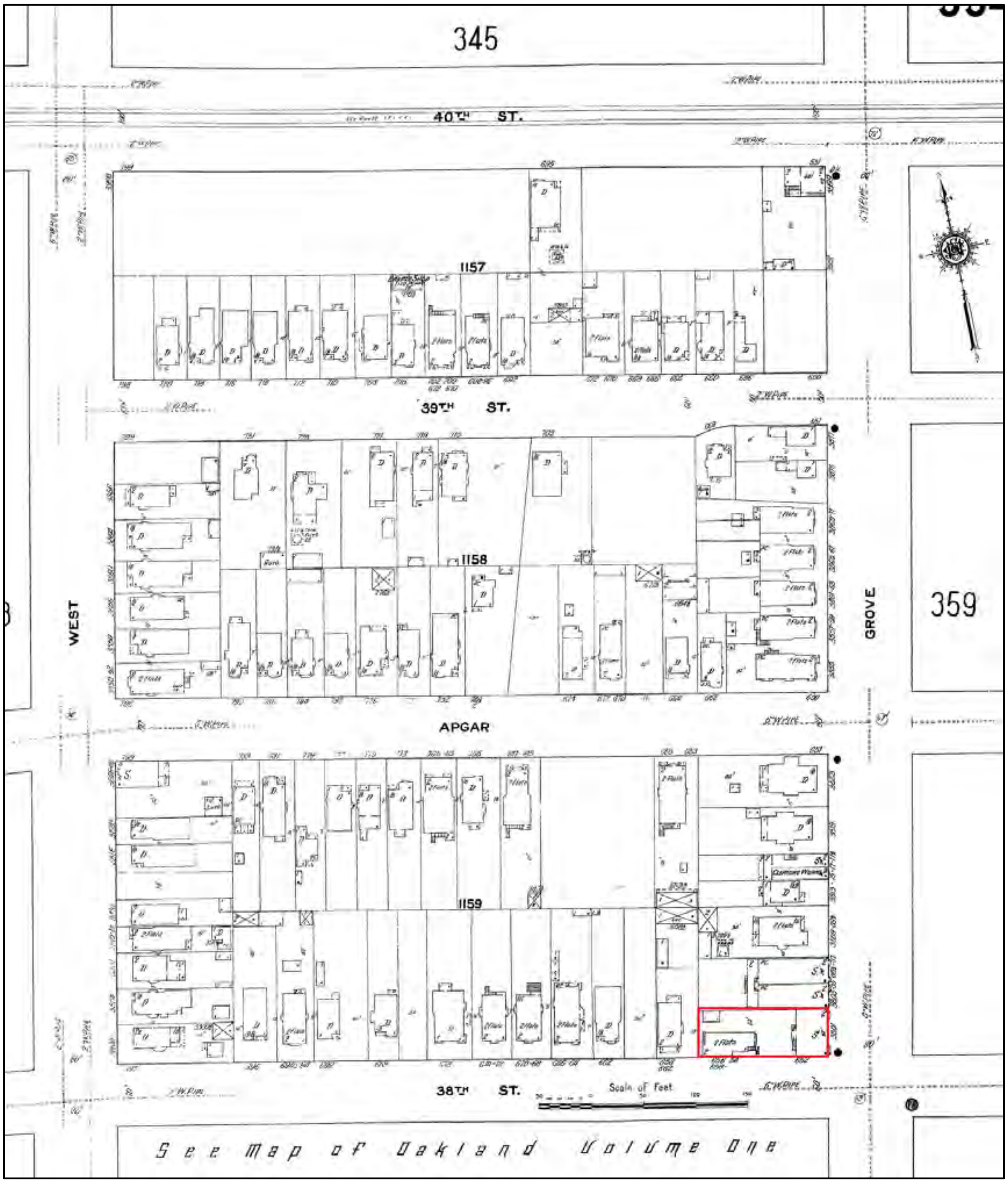
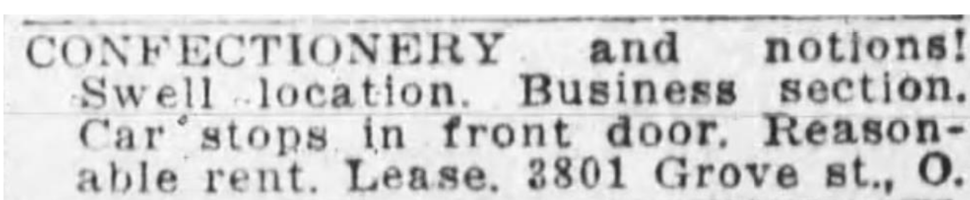


Figure 9. 1911 – 1912 Sanborn Fire Insurance map.



CONFECTIONERY and notions! Swell location. Business section. Car stops in front door. Reasonable rent. Lease. 3801 Grove st., O.

Figure 10. Advertisement in the Oakland Tribune, dated Wednesday, June 4, 1924 (www.newspapers.com).

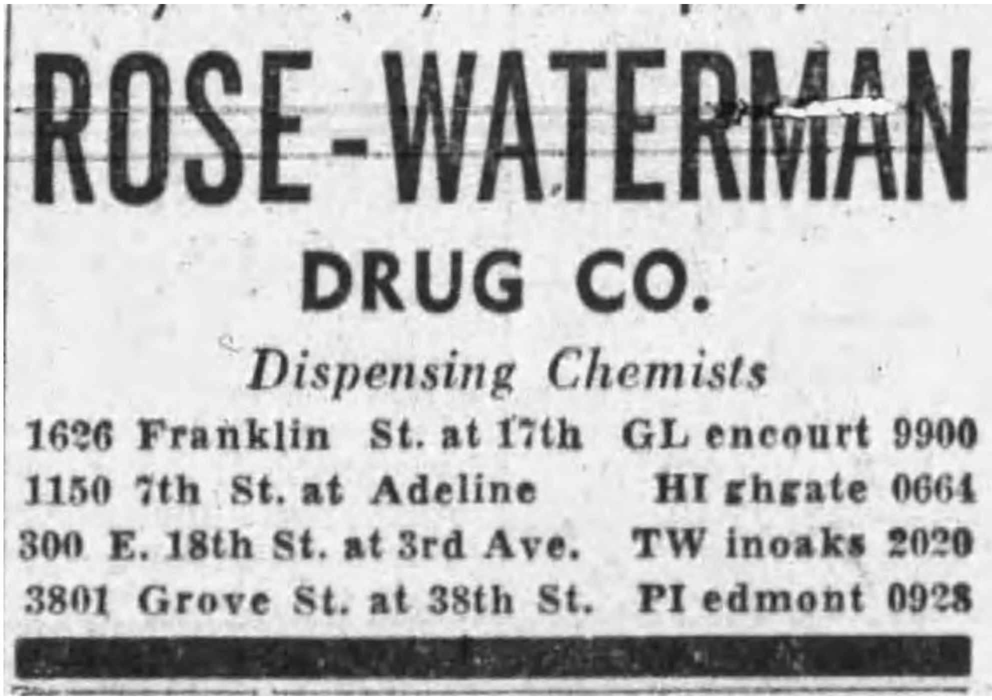


Figure 11. Advertisement in the Oakland Tribune, dated Wednesday, December 15, 1943.

INDIRECT APE PROPERTY HISTORIES: 30 BUILDINGS (EDS 2 – EDS 24)

The following section provides brief details about the known ownership and occupancy history of 23 parcels within the Indirect APE that consist of 27 built environment resources. The amount of details varies based on available documentation. The history of the properties, which are labeled as EDS 2 - 24 (see Figure 8), are detailed within the following sections and tables.

EDS 2: 3837 Martin Luther King Jr. Way, ca. 1900 storefront commercial building

Year	Owner	History/Occupants
1924	Whayne & Co.	• Storefront in 1924 was a dry cleaner business. Addresses associated with this building include: • 3815- 3817 in 1911-1912 • 3829 -3831 in 1951 • 3833 currently on the front door of the storefront.
1913 - 145	Unknown	Apartment Unit Occupants • Frank Anito Pertosa • Carrie Mattiessen • Thomas and Cora Pattison • Edward and Myrtle Medeiros • Carl and Vera Jackson • Elsie Gorrlnger • May and Ous Kronvold • “Annette and H Chas” • Hattie and Charles Harris

Year	Owner	History/Occupants
		• C Martine • George Bamhill • Pearl Martin • Standley and Betty Comerford • L.F. Adams • Cora McMullan • Rita Harris • Minta Larsen • Darrell Thompson • Gladys Mourlam • Flora Floras • Lilian Bender • May Lemon • Sarah Nutt • William Thelma • Hans Andrew Jensen • Wilbert A Reid • Ralph Decasare and his wife Lena, and daughter Helen

EDS 3: 3843 Martin Luther King Jr. Way, ca. 1906 multi-unit apartment building (former single-family house)

Year	Owner	History/Occupants
ca. 1906	Unknown	• The ca. 1900 house was a single family home when it was constructed, but by ca. 1910 had been converted into three separate rental units.
1910	Unknown	• Henry Henderson
1920-1930	Harold McFarland Bertha McFarland	• Fred A Plymire • H. Nagel • Julius West and Emma West • Mrs. Marie Junte • Emma Wifist • Mary Russell • William K Thomas and Lily Thomas • Edgar H Golns Jr and Orvilla Golns • J Harry West

EDS 4: 3849 Martin Luther King Jr. Way, ca. 1969 “Drive-in Liquor Store” commercial building

Year	Owner	History/Storefront Occupants
ca. 1969	Leonard E. and Lola S. May/George O. and Cordelia S. Cough	• According to the 1912 (updated in 1951) Sanborn Fire Insurance map, prior to the construction of the ca. 1960 “drive-in liquor store” commercial building, there was a 7-unit apartment building within in the property with an address of 3849 Grove Street. • In 1969, in partnership, Leonard E. and Lola S. May and George O. and Cordelia S. Cough

Year	Owner	History/Storefront Occupants
		opened the "drive-thru liquor store". Although the "Gallagher's Liquors" sign appears original to the building, it is not clear who "Gallagher" is referring to.

EDS 5: 663 Apgar Street, ca. 1900 two-unit flats building and ca. 1911 Accessory Dwelling Unit (ADU)

Year	Owner	History/Occupants
ca. 1900	Unknown	• The ca. 1900 two-unit flats building was originally constructed as a two unit flat associated with addresses 663-665 Apgar Street, and it appears the ADU building was constructed in ca. 1911 as a garage; though it was assigned an address, as shown on the 1911 Sanborn Fire Insurance map, of 663 ½ Apgar Street.
1910	Unknown	• Elizabeth Riddle and her daughter Myrtle Riddle • Budds Themelia and his wife Susan, daughter Carrie.
1957	Mitchell and Mabel Lynch	N/A
1950-1993	Unknown	• Helen T Guion • Marcus Spencer

EDS 6: 671 Apgar Street, ca. 1950 "attached" cottages and ca. 1950 three-car garage

Year	Owner	History/Occupants
1951-1964	LeRoy and Eva Fay Haywood	N/A

EDS 7: 668 W. MacArthur Boulevard, ca. 1908 house and ca. 1908 ADU

Year	Owner	History/Occupants
1910	Bernard and Catherine Bordenave	• Bernard and Catherine, along with their son Albert owned the ca. 1908 house • Previous Address: 658-662 38th Street • As early as 1910, the ca. 1908 "ADU" appears to have been used as a rental unit, as it has a separate address at 658 ½ 38th Street and is a "stand along" house.
1949-1951	Margaret Wilson	N/A
1953	David Williams	N/A

EDS 8: 670 W. MacArthur Blvd, ca. 1913 house

Year	Owner	History/Occupants
1913	Unknown	N/A
1943-1954	Unknown	• Gable and Eva. L Thornton • Irving W Thornton

EDS 9: 674 W. MacArthur Boulevard, ca. 1906 house

Year	Owner	History/Occupants
1910	Bernard and Catherine Bordenave	• It appears Bernard and Catherine also owned this ca. 1906 house • Previous Address: 662 38th Street
1949	Janet M. Ruggles	N/A
1953	Unknown	• Gladys F. Scales

EDS 10: 678 W. MacArthur Boulevard, ca. 1903 two-unit flats building

Year	Owner	History/Occupants
1910	Alexander and Martha Woods	• According to the 1910 Sanborn Fire Insurance map, the building is associated with addresses 670-678; 666-664 in 1910 and consists of "2 flats". • Also, living with the Wood family in the 664 flat is Alexander's brother-in-law, George Dugdell. • The other units at 678 were occupied by Edward and Juliette Selby, as well as Clara Anderson and her three children.
1943-1954	Unknown	• George and Josie Johnson • Marie Groves • Kay Reinbold • Dorothy Leath • Ted Anderson • Mary Melkonian

EDS 11: 669 W. MacArthur Boulevard, ca. 1914 motel

Year	Owner	History/Occupants
1914	N/A.	• The ca. 1914 motel was originally constructed as seven individual rental units with kitchenettes.
1943-1951	Unknown	• M Mendonca • Vernon M. Muhr
1958	N/A	• Hugh Hunger, Apartment 4
1979	N/A	• By 1979 the former rental cottages were converted to motel. • MacArthur Motel

EDS 12: 665 MacArthur Boulevard, ca. 1900 two unit flats building (former single-family house)

Year	Owner	History/Occupants
Ca. 1900	N/A	• The ca. 1900 was originally constructed as a house and appears to have been converted to a two unit flat in ca. 1911.
1910-1941	Nicholas Vetter Mamie Vetter (w)	N/A

Year	Owner	History/Occupants
1950-1993	Unknown	• Eric W Forste • Jean Richardson • Fredric Forste

EDS 13: 3725 Martin Luther King Jr. Way, ca. 1906 three unit apartment building and ca. 1910 garage

Year	Owner	History/Occupants
ca. 1910		• The building appears to have been constructed as a three unit apartment building.
1914 - 1942	Unknown	• Charles F. and Ella Amerman. According the 1910 U.S. Federal Census, Charles was a foreman at the "railroad yard" and was living in the house as a renter with his wife Ella Adelle, and their son Charles A., who was married to Adele Cook and they had one daughter naned Shirley. Charles Sr. Died in 1917, and Charles Jr. continued to live at the house.
1927	Unknown	• Mary Caroll
1928		• Mary Flawn

EDS 14: No physical address (APN 012-965-2)

Currently the parcel is a vacant lot, but was previously associated with the ca. 1912 gas station (EDS 15).

EDS 15: 657 W. MacArthur, ca. 1912 gas station

Year	Owner	History
ca. 1912 - present	Unknown	• The property was first developed in ca. 1912 as a gas station, and in the last 30 years added "Hand Wash" service as well. The gas station appears to have closed in 2010.

EDS 16: 3720 Martin Luther King Jr. Way, ca. 1910 commercial building (religious building)

Year	Owner	History/Occupants
ca. 1910	N/A	• Prior to the construction of the church (EDS 17), the ca. 1910 commercial building, which is now merged with the ca. 1965 church, was a separate commercial building that included two store fronts. The building appears to have been "merged" with the ca. 1965 Church when the church building was constructed.
ca. 1965 -1993	Unknown	• J V Shines • Good Samaritan Cathedral Church of God in Christ

EDS 17: 625 W. MacArthur Boulevard, ca. 1965 religious building

Year	Owner	History/Occupants
Previous to ca. 1965	N/A	• Prior to the construction of the church, the parcel was home to a corner gas station, which was demolished in 1965.
ca. 1965 -1993	Unknown	• J V Shines • Good Samaritan Cathedral Church of God in Christ.

EDS 18: 3806 Martin Luther King Jr. Way, ca. 1970 commercial building

Year	Owner	History/Occupants
1910-1970	Thomas Taucred Valerga Hannah Valerga (w)	• Prior to the current automotive repair building being constructed, the parcel housed two buildings that included a drug store and an adjacent retail store. It appears that the two stores were either partially or completely demolished in ca. 1970 and the current ca. 1970 building was constructed.
1970	Unknown	N/A

EDS 19: 3810 Martin Luther King Jr. Way, ca. 1910 house and ca. 1970 commercial addition

Year	Owner	History/Occupants
ca. 1910	Unknown	• Prior to the construction of the ca. 1970 storefront in front of the primary façade of the house, the parcel was the location of a single ca. 1910 house during a time when the block was mainly residential housing, except for the storefronts that were located along the corner at what is now the location of EDS 18. The house is previously associated with the address 3808 and 3810 Grove Street, and according to the 1911-1912 Sanborn Fire Insurance map, was a "dwelling", though it appears that it was later converted to a two-unit building.
1948-1950	Unknown	• ca. 1970 a one-story "Storefront" was constructed in front of the ca. 1910 house.

EDS 20: 3820 Martin Luther King Jr. Way, ca. 1930 commercial building

Year	Owner	History/Occupants
ca. 1930	Unknown	N/A
1949 - 1953	Unknown	• The location housed the furniture store called "Distinctive Interiors".
1954	Unknown	• The location housed "Cannier's Home Furnishers".
1965-1970	Unknown	• The location housed the business called "Creative Promotions", which sold artificial followers and plants.

Year	Owner	History/Occupants
2014	Rockridge Properties, LLC	• vacant

EDS 21: 3834 Martin Luther King Jr. Way, ca. 1930 commercial building

Year	Owner	History/Occupants
ca. 1910	N/A	• Prior to the construction of the ca. 1930 commercial building the parcel was home to a single family house. The house was either moved or demolition in the late 1920s, and the ca. 1930 commercial building was erected in its place.
ca. 1930 – 1960s	Unknown	• During this time, it appears that the building housed various furniture stores, of which the names were not determined.
2000 - 2010	Unknown	• The building appears to be the location of Sunday church services conducted by the "Christian Bible Way Church"; run by Pastor Dorthy McGhee.

EDS 22: 3838 Martin Luther King Jr. Way, ca. 1906 two unit flats building

Year	Owner	History/Occupants
ca. 1906	Unknown	• Previously associated with addresses 3836 – 3838 Grove Street and was a two unit flat that may have previously served as a single-family house.
1917	Unknown	• Associated with John Joseph and Mary Barrett, though it unclear if they also owned the house.
1918	Unknown	• Charley Miller, renter. Charley is shown as living at 3838 Grove Street and is listed as a draftsman. • Carl C. Hubbard, renter.
1920 - 1925	Ely and Martha Scott	• Ely (aka Eli) and Martha Scott, owners, are shown as living at 3836 Grove Street for about 5 years. Martha Scott and her parents traveled overland by ox to Oregon in 1863, and later she settled in Oakland with her husband Ely. Martha and Ely married in 1873.
1925	Unknown	• James E. Robinson, renter
1930	Unknown	• Herman Zellar, renter
1932	Unknown	• Samuel A McHugh, renter
1942	Unknown	• John and Anna Nordlander, renter
1973	Valva Realty	• vacant

EDS 23: 3840 Martin Luther King Jr. Way, ca. 1906 two-unit flat building (former single-family house)

Year	Owner	History/Occupants
ca. 1906	Unknown	• Previously a single-family house, it appears that in the 1920s the house was converted into a two-unit apartment building.
1925-1930	Unknown	• Simmons and Margaret Fits • George Edmond • Claire and Aileen Hennessey • Telio Todar
1938	Mrs. Margaret Z. FitzSimmons	N/A
1944	Mrs. Katherine B Wharton	• Mrs. Wharton is listed as a restaurateur in the 1944 U.S. Cities Directory for Oakland.

EDS 24: 3848 Martin Luther King Jr. Way, ca. 1908 multi-unit apartment building

Year	Owner	History/Occupants
ca. 1908	Unknown	• The ca. 1908 four-unit apartment building previously associated with addresses that included 615, 617, 619, and 649 Apgar Street and 3842 Grove Street.
1928		• James Avis
1939-1940	Mrs. Elizabeth Jackson	N/A
1941	Thomas and Mildred Olson	N/A
1943	Edward and Anna Legh-Page	N/A

ARCHITECTURAL STYLES

The following section provides a brief understanding of the architecture styles associated with the three buildings within the Direct APE and the 27 buildings within the Indirect APE. These architectural styles include the Victoria era, Italian Renaissance Revival, "High Peak" Dutch Colonial Revival, Storefront Commercial, Mid-Century Modern, and Vernacular.

VICTORIAN ERA ARCHITECTURE (1870 – 1910)

Victorian era architecture is associated with styles and forms that are complex and irregular in the massing, materials, and details of modest homes to large mansions. The use of Victorian era styles in California were initially born out of the Industrial Revolution, with the advent of rail transportation access to national markets, and growing wealth in the west. The Victorian era embraced new materials and technologies to create houses like never seen before. Designers broke away from the symmetry of early American architecture, and applied decoration liberally, combining features borrowed from many different eras. The Victorian era of construction changed the landscape of architecture, not only for California, but of the entire U.S. and marked an explosion of creative designs and the emergence of intricate, daring forms and techniques. Although the Victorian Era ended in 1901 with the death of Queen Victoria, the architectural styles associated with this era continued for a short while later in California, as the West Coast was typically five or ten years behind the East Coast and Britain in adopting the latest styles of the time. In California, several specific styles were popular during this period such as the Queen Anne, Eastlake, Shingle, Stick, and Folk Victorian estyles.[23]

ITALIAN RENAISSANCE REVIVAL (1890 – 1930)

The Italian Renaissance Revival style developed at the very end of the Victorian period of architecture. Like the Romanesque styles and other later classically-inspired styles, the Italian Renaissance Revival style looked to Italy and the ancient world for inspiration. This style and the earlier Italianate style both were loosely based on Italian palazzos of the sixteenth century. These Italian Renaissance Revival style buildings were often used in grand homes and public buildings where an imposing style was desired. The style gained particular popularity in California in the early 1900s. The most predominant feature of this style is its imposing scale and formal design incorporating classical details such as columns and round arches and balustrades. This style can take several distinct forms with the use of various materials, but often includes masonry construction. Character defining features may include a large rectangular form, a hipped or flat roof, a central dormer, porch arcades, and porticos, broadly overhanging, bracketed eaves, main entry accentuated with decorative columns.

"HIGH-PEAKED" DUTCH COLONIAL REVIVAL

The "High-Peaked" Dutch Colonial Revival style roof is a cold-climate invention, devised to liberate structures from the heavy weight of snow accumulations, which were extremely popular in Europe, particularly in Germany. These houses were designed to accommodate two, three, and even four stories within the roof gable, with rows of dormer windows ascending along the pitch, which became a somewhat popular style for multi-unit housing in the San Francisco Bay Area at the turn of the century. Features often include small corner porticos, often supported by a Neoclassical column and the gable frequently boasts a Palladian or a prow window, which is sometimes balustraded. The exterior walls are often clad with narrow clapboards or shingles, with a typical arrangement being shingling on the second floor and clapboarding on the ground floor level. One of the earliest known High-Peaked Colonial Revival house in the East Bay is the residence designed by Edgar A. Mathews at 1535 St. Charles Street in Alameda, but can be seen through Oakland and Berkeley as well.[24]

According to an article by Daniella Thompson, written for the Berkeley Architectural Heritage Association (BAHA) in 2006,

> "*The one who popularized it was the prolific Oakland architect Alfred William Smith (1864–1933). Smith's success with High-Peaked Colonial Revival was documented in an Oakland Enquirer article published in June 1899:*

[23] Norma Tyler, Ilene R. Tyler, and Ted J. Ligibel, *Historic Preservation, An Introduction to the History, Principals, and Practices*, New York: W.W. Norton & Company, 2009).

[24] Daniella Thompson. "High-Peaked Colonial Revival, a Bay Area Phenomenon", Berkeley Architectural Heritage Association. http://berkeleyheritage.com/, 2006.

> *One of the most distinctive features of recent local building operations is the wonderful popularity suddenly achieved by the style of house known as the Dutch Colonial, whose principal characteristic is a high peaked roof. The idea in this city originated with J. H. Simpson, who since he first began building such structures, has put up ten. However, the style has been adapted and enlarged upon by Architect A. W. Smith who since the 10th of January of last year [1898] has put up no less than twenty-seven houses, all on this peculiar line of architecture. [...] Mr. Smith ascribes the popularity to the growth of the artistic in the building public, which has caused a departure from the strict rules of architecture and given rise to the development of the picturesque style.*
>
> *The style became so popular that many builders began imitating it. Between 1900 and 1905, High-Peaked Colonial Revival was all the rage. Even "name" architects such as Julia Morgan, Albert Dodge Coplin, and Thomas D. Newsom were commissioned to design residences in this style. When the houses were constructed on a speculative basis, the builder would typically put up two or three in a row, making sure to give each house distinct detailing to differentiate it from its brethren. Good examples of such clusters may be seen on the 2000 block of Woolsey St.; the 3000 block of Martin Luther King, Jr. Way; the 2300 block of Webster St.; and the 2100 block of Haste Street. Sometimes identical designs may be found on adjacent streets or even a good distance apart. The trio on MLK Jr. Way exhibits the same design found in a pair on the 2800 block of San Pablo Ave., which was built by A.W. Smith. Curiously, descendants of the builder Carl Ericsson believe that it was he and not Smith who built the MLK threesome."*[25]

CRAFTSMAN ARCHITECTURE (CA. 1905 – 1930)

The following section is intended to provide a brief understanding of the architectural style associated with the Craftsman houses within the Indirect APE that are designed in the Craftsman architectural style, which was popular design in California in the first decades of the twentieth century.

The American Craftsman style is the quintessential house style of America. More popular and more replicated than most others it is the sum of all that America is. It stands for simplicity, excellence and utility. Simplicity in design, excellence in craftsmanship and utility in its functionality. Craftsman houses were inspired mainly by two California brothers – Charles Sumner Greene and Henry Mather Greene who practiced together in Pasadena from 1893 to 1914 (i.e. California Craftsman or California Bungalow Craftsman). In about 1903, they began to design simple Craftsman-type bungalows. By 1909, they had designed and executed several exceptional landmark examples. Influenced by the English Arts and Crafts Movement, an interest in oriental wooden architecture, and their early training in the manual arts appear to have led the Greenes to design and build these intricately detailed buildings. These and similar residences were given extensive publicity in some of the most popular magazines of the day, thus familiarizing the rest of the nation with the style. As a result, a flood of pattern books appeared, offering plans for Craftsman bungalows; some even offered

[25] Daniella Thompson. "High-Peaked Colonial Revival, a Bay Area Phenomenon", Berkeley Architectural Heritage Association. http://berkeleyheritage.com/, 2006.

completely pre-cut packages of lumber and detailing to be assembled by local labor. Through these vehicles, the Craftsman house quickly became the most popular and fashionable smaller house in the country.[26]

Common architectural design features of Craftsman architecture include the following:

- Low-pitched roof lines gabled or hipped roof
- Deeply overhanging eaves
- Front or side gable roofs with exposed rafters or decorative brackets under eaves
- Front porch beneath extension of the main roof
- Tapered, square columns ("battered" columns) supporting the roof
- 3-over-1 or 6-over-1 double-hung windows
- Hand-crafted stone or woodwork
- Mixed materials throughout structure

STOREFRONT COMMERCIAL ARCHITECTURE

Storefront commercial architecture developed on "Main Street" storefronts in the U.S. and appears to have begun with the idea that storefronts were the porches of Main Street buildings and were designed to attract and invite the attention of customers. But they were also constructed to combine design with function and, therefore, many of the buildings consist of second stories that were often where the owners of the stores lived with their families. Storefront buildings were designed to showcase merchandise, while allowing for the protection of the goods. In addition, storefronts also posed a unique dilemma regarding architectural style because they were often designed in an eclectic manner, which combined features perceived as attractive to potential customers with those that were popular at the time. As such, many storefront commercial buildings include design elements from other architectural styles. Another unique element to storefront architecture is that the primary façade is often the subject of more frequent alterations. This is due in part to changes in the popularity of architectural styles, but more often to accommodate new uses and business identities.

MID-CENTURY MODERN (1940 – 1970)

Post-World War II suburban development in the Bay Area took on its own regional variant of the Mid-Century Modern style. The Mid-Century Modern architectural movement and style was born out of the International Style after World War II, but with a more organic and less industrial character.[27] In the Bay Area, Mid-Century Modern style was considered to be the "Second Bay Area Tradition", a type of modernism, which followed the "First Bay Area Tradition," which celebrated the more Arts and Crafts-focused works of Julia Morgan and Bernard Maybeck in the early 20th century.[28]

[26] Virginia McAlester, *A Field Guild to American Houses* (New York: Alfred A. Knopf, 2013).
[27] GPA Consulting, *City of Fremont Postwar Development and Architecture Historic Context Statement, 1945-1970*, Prepared for the City of Fremont, Public Draft, March 2017, 57.
[28] GPA Consulting, *Postwar Development*, 57.

The Mid-Century Modern style that developed as the "Second Bay Area Tradition" was regionally distinctive with its heavy use of local wood—typically redwood siding or exposed post-and-beam structural systems—as well as open plans, glass walls, and low pitched or flat roofs.[29] In the East Bay, the Mid-Century Modern style was used extensively as one of the primary styles of choice for suburban developments, with architects such as Wurster and Gardner Dailey introducing flat roof motifs and horizontal massing to the East Bay.[30] While this style was mainly used for the large-scale suburban development following World War II, it was also applied to commercial buildings and school buildings, which had canted walls, dominant roofs, and brick and stone veneer.[31]

Mid-Century Modern - Commercial Architecture

Perhaps in response to criticisms that modern architecture that was too sterile, architects began experimenting with shapes, materials, and color. Mid-Century Modern is a term used to describe the evolution of the International Style after World War II. Mid-Century Modern architecture is more organic and less doctrinaire than the International Style. It is characterized by more solid wall surfaces. It was during this period that stacked brick became a popular material in commercial and educational buildings. Locally, many of the small-scale commercial buildings constructed in the 1960s utilized stacked brick or stone as a primary exterior material, rather than concrete and glass. In residential buildings, and some commercial buildings, the post-and-beam became the preferred method of construction for Mid-Century Modern architects.

MINIMAL TRADITIONAL STYLE (CA. 1935 – 1950)

During the Great Depression, the FHA set limitations on the form and style of houses that could be constructed using its Federal mortgage programs and in a 1940 publication by the FHA, these guidelines were explicitly stated, including some design guidelines: "Simplicity in exterior design gives the small house the appearance of maximum size." [32] The Minimal Traditional style emerged from this language, as an understated interpretation of more eclectic Colonial and Period Revival styles that preceded it.[33] This simpler style flourished during this new era of prefabrication, as it could be easily mass-produced, and utilized only basic decorative elements for aesthetics, such as window shutters, wood siding, and brick veneer.

The Minimal Traditional style borrowed forms from previously popular styles, and houses were often designed as small, one-story buildings with a side-gable or hipped roof with little to no overhang, multi-light double-hung windows, and very minimal architectural decoration.

Minimal Traditional is often characterized by the following elements:

- One story (occasionally two stories) in height
- One- to two-car garage, either attached to or detached from residence
- One piece tilt-up wood garage door, often with simple geometric design in wood trim

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[29] GPA Consulting, *Postwar Development*, 57.
[30] Ibid, 57.
[31] Ibid, 57-58.
[32] McAlester, *A Field Guide to American Houses*, 588.
[33] Ibid.

- Stucco and various forms of wood siding, including lapped, shingle, and board-and-batten siding
- Occasionally includes brick veneer
- Modest character with stripped down traditional architectural details, including faux shutters and bay windows with concave awnings
- Gabled or hipped roofs
- Asphalt shingled roofing
- Occasionally scallop-edged canopies
- Modest porches with simple wood porch support elements
- Wood double-hung or steel casement sash windows

VERNACULAR ARCHITECTURE

The term "vernacular architecture", as opposed to traditional, vernacular, or folk buildings, first appeared in the post-WWII period of the 1950s and 1960s when architects sought to appropriate simple traditional buildings to legitimize prevalent functionalist theories of design. Vernacular architecture was characterized as a functional shelter for people, animals and stores, "built to meet needs", constructed according to the availability and performance of materials, and formed in response to environmental and climatic conditions. This regional specific nature of the architecture in a rather simple, functional form defines "vernacular architecture" without attributing a specifically defined architectural style, as the attribution of a studied and accepted architectural style to such a regional and functional type would not be appropriate. The definition of the term "vernacular architecture" is not universally agreed upon, and is sometimes extended to include the "everyday": city neighborhoods, market towns, roadside diners, suburban housing developments, barns, and anonymous industrial complexes. However, recently the Vernacular Architecture Forum (VAF) more closely align with the earlier description focused on regional and functional elements, which is gaining wider acceptance in the field of architectural history.

As such, this use of the term is carefully considered when evaluating buildings that appear to have "no style" or one that does fit the traditional known architectural styles. Whether thatched cottages or trailer parks, vernacular architecture is typically defined as those buildings that are outside the main-stream of professional architecture, and may carry a form, design, or use of materials that is fit for the region and function of the building, structure, or object.

HISTORIC RESOURCE SURVEY

On July 29, 2019, EDS Principal Architectural Historian, Stacey De Shazo, M.A., completed an architectural survey of the Direct and Indirect APEs that includes a total of 30 built environment resources at least 50 years in age within 23 of the 27 adjacent parcels. The survey and evaluation were completed in compliance with Section 106 of the NHPA. All 30 built environment resources were photographed, documented, and evaluated for eligibility for listing on the NRHP, and documented on DPR 523 forms.

The following section details the results of the architectural survey of the properties located within the Direct APE and the Indirect APE that contain built environment resources at least 50 years in age.

DIRECT APE (EDS 1A): 3801 - 3807 MARTIN LUTHER KING JR. WAY

The Direct APE consist of four separate parcels (EDS 1a, 1b, 1c, and 1d) (see Figure 8), of which only 1a, located at **3801 - 3807 Martin Luther King Jr. Way**, contains three historic built environment resources including a ca. 1890 three-unit flat, ca. 1910 commercial building, and a ca. 1950 shed (Figure 12).

Figure 12. Photo showing the ca. 1890 three-unit flat (left), ca. 1950 shed (middle), and the ca. 1910 commercial building, facing north from W. MacArthur Boulevard.

ca. 1890 Three-Unit Flat

The ca. 1890 three-unit flat is most closely associated with the Victorian era "Eastlake" style. The wood-framed two-story building consists of an asymmetrical plan with a projecting bay and a multi-faceted roof (Figure 13) and does not appear to have been altered from its original form. The wood framed building consists of horizontal wood channel siding and corner trim detail. All the windows on the building are covered in plywood and may have been removed from the building; however, there is evidence of simple trim in sections that are exposed. The projecting front bay along the **east elevation** consists of a gable roof with eave returns and decorative cornice brackets. There are also two square bay windows topped with "Second Empire" style roof elements clad in wood shingles and decorative brackets. There is a porch "bay" along the **south elevation** that consists of what was once the entrance to the second story "flat"; however, the stairs have been removed and the access to the small porch is covered with plywood (Figure 14). The main entrance to the ground floor "flat" is also along the south elevation; however, door is boarded-up with plywood. The cornice along the south elevation consists of decorative wood brackets, and several windows that are covered in plywood. There is also a course belt that separates the ground floor from the second floor. The **west elevation** consists of a rear entry, which may have been the main entry to the third unit flat, that is situated along a recessed section of the northwest corner of the building. The **north elevation** was covered by overgrown bushes that made it difficult to document; however, this elevation consists windows that are covered in plywood, and the decorative details, such as bracketed eaves and corner trim work (Figure 15).

Figure 13. Photo showing the east elevation, facing west.

Figure 14. Photo showing the west and south elevations, facing north, northeast.

Figure 15. North elevation, facing south.

ca. 1910 Commercial Building

The ca. 1910 commercial building is constructed with elements of "storefront" commercial design. The two-story building is rectangular in form, except for a slight recessed portion along the northwest corner of the building, and does not appear to have been altered from its original form (Figure 16). The building consists of flat roof and canted storefront bay. There is a decorative parapet and cornice trim work along the south and east elevations of the building. As well as "castellation" or cut-outs along the parapet with Spanish clay tile that allows for drainage from the flat roof. The building is clad in rough stucco along the south and east elevations; however, the original horizontal wood boards are visible along the north elevations. It is likely that the building was modified in the 1920s when the ownership changed and when the "Spanish Colonial Revival" design was popular in California. Along the southeast corner of the building is the canted storefront bay with a second story angled bay window, which is supported by a single square post (Figure 17). There is a contemporary sign affixed to the bay that states "RCA Terry's TV". All the windows and doors along the building are boarded up with plywood; however, it appears, based on the applied stucco, that there is likely minimal trim work detail on the window and door surrounds. There is also a brick chimney, which is visible along the north elevation, which was likely added to allow for the use of the upstairs as a housing rental (Figure 18).

Figure 16. South elevation, facing north.

Figure 17. Photo shoring the canted bay and signage.

Figure 18. North elevation, facing south.

ca. 1950 Shed

The ca. 1950 shed is a wood framed building constructed in a rectangular plan and appears to have no design.

The building was likely originally a shed and then later converted for use a garage. The building is clad in horizontal wood boards and consists of a flat roof. The north elevation consists of a single diamond shaped window that appears to have been added after the building was constructed (Figure 19). The south elevation is boarded up with plywood (see Figure 12) and may cover open bays.

Figure 19. Photo showing the north elevation of the ca. 1950 shed.

INDIRECT APE

The following section documents the Indirect APE that includes 23 parcels with 27 built environment resources.

EDS 2: 3837 Martin Luther King Jr. Way, ca. 1900 storefront commercial building

The ca. 1910 three-story storefront commercial building and second and third story residential units are designed with elements of storefront commercial architectural style (Figure 20). The roof is a front facing gable roof and parapet with extending eaves along the cornice of the parapet. The east elevation (primary façade) is clad in what appears to be wood along the storefront façade and horizontal wood boards along the second and third floors. The storefront is recessed and angled. There are what appears to be two storefront windows, and an area that has two double hung windows and an additional ground floor door near the southeast corner of the building, which may indicate that the ground floor was converted into a residential unit at some point. Access to the second and third floors is via a door near the northeast corner of the building and appears to consist of a transom over a wood door; however, currently there is a metal door and metal bars in this area and as such the details are difficult to document. There is a storefront cornet that includes simple brackets and trim work. Along the second story there is an angled bay window, with replacement vinyl windows, and a single multilight vinyl window. There is a metal fire escape along this elevation that includes decorative details along the second story fire escape "balcony". The third story consists of a par of double hung vinyl windows and a metal fire escape balcony, along with stairs that to the roof. The west elevation (rear façade) appears to consist of a three-story gable roof addition, as well as a third shed addition of which both appear to have been added in the 1930s or 1940s. However, visibility was limited to what could be viewed from the street view.

Figure 20. East elevation, facing west.

EDS 3: 3843 Martin Luther King Jr. Way, ca. 1906 multi-unit apartment building

The ca. 1906, multi-unit apartment building is constructed in the "High-Peaked" Dutch Colonial Revival architectural style; however, the building has been altered along the rear elevation over the years (Figure 21). The building's rectangular mass is situated under a single gable roof with laterally projecting hipped roof dormers. The roof is clad in asphalt shingles and there is a single brick chimney along the roof ridge. The east elevation (primary façade) consists of small corner portico, at the northeast elevation, which is supported by Ionic columns. Set within the portico is the main entry door topped with a transom light window. The ground floor is clad in narrow wood clapboard and consist of a large picture window with a transom light, which is flanked by two original arched window openings that appear to have been replaced with double-hung vinyl windows. The gable consists of two inverted "prow windows" with four double-hung wood windows;

however, the original gable cladding (likely shingles) has been removed and replaced with what appears to be a metal or a plastic cladding material. There is a bay window along south elevation and two additions along the rear of the house although visibility was limited due to the privacy fence along the east elevation and the access was limited to street view.

Figure 21. East elevation, facing west.

EDS 4: 3849 Martin Luther King Jr. Way, ca. 1969 "Drive-in Liquor Store" commercial building

The ca. 1969 building was constructed as a "Drive-in liquor store" commercial building. The building is constructed of concrete block in the rectangular plan with a flat roof. The primary façade (east elevation) consists of a centered storefront with a recessed and angled entry flanked on both sides by a metal framed storefront windows with transoms (Figure 22). There is a storefront cornice that is clad in vertical wood boards. One of the character-defining features of the building is a large neon sign that states "Gallagher's Liquors" and includes a large arrow pointing downward toward the entrance of the store. Along the north elevation is a single side entry door with a metal security gate. Along the west elevation (rear façade) of the building is a gated parking lot (Figure 23). The west elevation consists of the location of the drive-in window that is topped by a transom window. The windows are now covered in metal bars. There is also a rear entry door with a metal security gate.

Figure 22. East elevation, facing west.

Figure 23. Photo showing the parking lot behind the liquor store.

EDS 5: 663 Apgar Street, ca. 1900 two unit flats building and ca. 1911 ADU

The ca. 1900 two-unit flats building is designed with elements of the Italian Renaissance Revival architectural style. The two-story building is rectangular in plan with a symmetrical design (Figure 24). There is hipped roof clad in asphalt shingles and a centered hipped dormer. The ground floor consists of a centered, angled bay window that is flanked by two porch porticos supported with ionic, tapered and round columns. There are wood stairs that lead to identical recessed front entries that consists of what appears to be two original glazed and paneled wood framed doors. All the original wood windows have been removed from the primary façade (north elevation), as well as the east and west elevations, which are visible from the street view, appear to have been replaced with sliding wood aluminum windows. It also appears that the window openings along the second story of the primary façade (north elevation) have been enlarged to accommodate contemporary sliding windows.

The **ca. 1911 ADU** is situated behind the ca. 1900 building and only partially visible from the street view, as such minimal details are provided. The ca. 1911 ADU is a two story building, with a flat roof, and what appears to be a ground floor garage and a second floor residential unit. There is a side entry staircase along the west elevation that appears to be the main entrance to the second floor residential unit.

Figure 24. North elevation, facing south; red arrow showing the ca. 1970 ADU in the foreground.

EDS 6: 671 Apgar Street, ca. 1950 "attached" cottages and ca. 1950 three-car garage

The property at 671 Apgar Street includes three ca. 1950 "attached" cottages and a three-car garage located at the rear of the cottages. The **ca. 1950 "attached" cottages** are constructed in the Minimal Tradition architectural style (Figure 25). The "cottages" building is clad in stucco with wood scalloping in the primary gable eaves. The building is constructed in rectangular plan with a front gable-pitched roof with a lower gable that extends to include a porch roof eave along the primary façade (north elevation). There is also a wide chimney along the northeast corner of the primary façade and the rectangular form also consists of a hipped roof extension along the west elevation. There is an octagonal-shaped window within the recessed porch and there is a contemporary door that faces west. There are three recessed doors along the west elevation, and it appears that the original windows within the building have all been replaced with combination of sliding and double-hung vinyl windows.

The **ca. 1950 three-car garage**, though not completely visible from the street view, consists of a rectangular plan building with three garage doors. There building does not appear to be designed in any particular style.

Figure 25. Photo showing the ca. 1950 attached cottages, facing south.

EDS 7: 668 W. MacArthur Boulevard, ca. 1908 house and ca. 1908 ADU

The ca. 1908 house is designed with elements of Italian Renaissance Revival design. The two story building is constructed in a rectangular plan with a hipped roof that is clad in asphalt shingles (Figure 26). There is a central, flat roof dormer with decorative dentil. The roof has overhanging eaves and trim work along the roof cornice. The building appears to be clad in replacement siding, but due to the limited access this could not be confirmed. The main entry appears to have been altered and extended to the elevation plane of the enclosed porch, which may have originally consisted of a corner porch portico. The front door has been replaced with a contemporary front door. The enclosed porch consists of original multi-light wood windows; however, the windows along the second story have been replace with vinyl double hung windows set within original wood trim details including decorative rectangular wood crowns above the windows and below the window sills. There are angular bay windows with replacement vinyl double-hung windows along the east elevation, as well as two narrow horizontal vinyl replacement windows. There also appears to be an addition along the rear, though this was not completely visible from the street view.

There is a **ca. 1908 ADU building** along the rear of the ca. 1908 house that is not constructed within any architectural style. The building is a side gable, single story building contemporary vinyl windows.

Figure 26. South elevation, facing north.

EDS 8: 670 W. MacArthur Boulevard, ca. 1913 house

The **ca. 1913 house** is constructed with Italian Renaissance Revival and Craftsman elements, but has been modified. The building appears to have originally been a one story house with a basement that was raised to add a garage under the first floor (Figure 27). The house consists of a hipped roof and lower projecting hipped roof form, with a red brick chimney along the roof. The first floor extends over a ground floor garage. There is a wide staircase with contemporary handrail that leads to a corner porch portico. The portico includes decorative tapered columns that are situated on a wood clad porch wall. The garage door is contemporary, and the windows are contemporary replacement faux multi-light vinyl windows. Neither the side elevations nor the rear elevation was accessible from the street view and so were not documented.

Figure 27. South elevation, facing north.

EDS 9: 674 W. MacArthur Boulevard, ca. 1906 house

The **ca. 1906 house** is constructed with elements of Italian Renaissance Revival; however, the building has been significantly modified along the primary facade. The building appears to have originally been a one story house with a basement that was raised to add a garage under the first floor (Figure 28). The house consists of a hipped roof and hipped roof dormer. The eaves of the roof consist of decorative trim work and a cornice. The building is clad in a decorative cladding that consists of both narrow boards and wide boards. There is an angled bay window that does not appear to be original to the building, and extends over a narrow ground floor garage that was likely added in the 1920s or 1930s. There is a staircase that leads to a corner porch portico. The portico includes decorative ionic columns that are situated on a wood clad porch wall. The garage door is constructed of wood and appears to be hinged door. The windows on the house are contemporary replacement vinyl windows. The side elevations were partially visible and include a bay window along the east elevation and west elevation. There is a shared driveway along the west façade that allows access to the rear of the building; however, the rear façade (north elevation) was not accessible from the street view.

Figure 28. South elevation, facing north.

EDS 10: 678 W. MacArthur Boulevard, ca. 1903 two-unit flats building

The **ca. 1903 two-units flats building** is designed in the Italian Renaissance Revival architectural style. The building consists of rectangular plan with a hipped roof and a center hipped roof dormer (Figure 29). The building is clad in narrow wood clapboards. The primary façade consists of two-story "bay" and a corner that projects slightly beyond the south elevation plain. Access to the units is along the east elevation and includes a "portico" under the stairs to the ground floor entry unit that is support by round porch columns. The second story unit is accessed via what appears to be original wood stairs and handrails with metal handrails added to the exterior wall of the building and along the balustrade railing that lead to an extended hipped roof porch that is supported by round porch columns. The windows along the visible elevations appear to all be vinyl replacement windows.

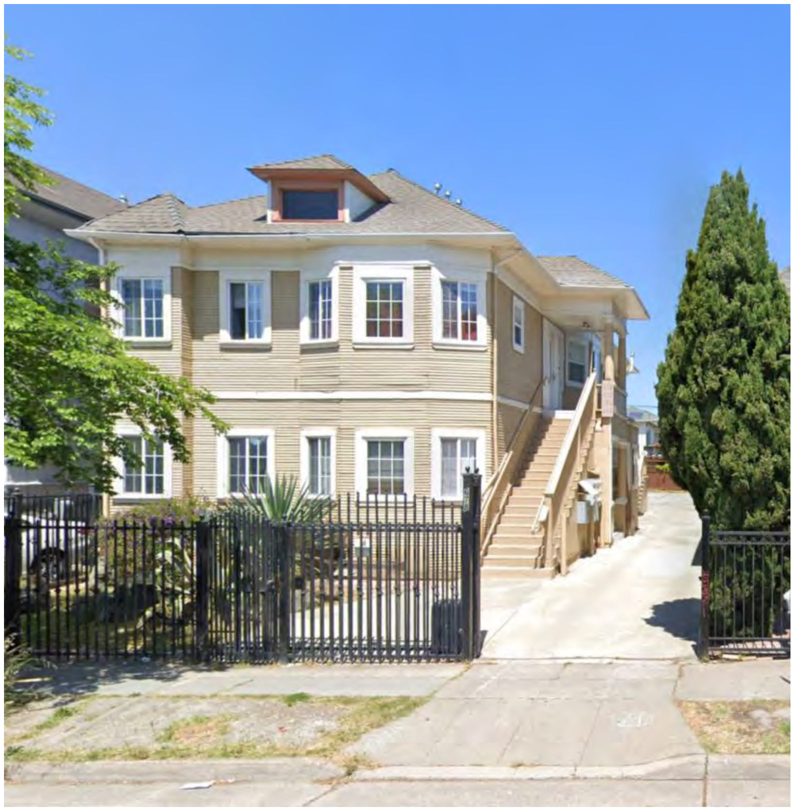

Figure 29. South elevation, facing north.

EDS 11: 669 W. MacArthur Boulevard, ca. 1914 motel

The **ca. 1914 motel** is designed as "attached" cottages (which consists of two forms that are evaluated as one as they are connected in design and use). The style of the ca. 1914 motel, is unclear as it has been significantly modified since it was converted to a motel (date unknown; though likely 1990s or 2000s). As such, it is unclear what was the original style of the cottage (Figure 25). The motel consists of two rectangular forms, of which one is slightly longer, as it has two additional rental units. The two identical forms, which are constructed in a rectangular plan with a front gable-low pitched roof along the primary façade (north elevation). The current motel is clad in stucco with Spanish clay tile copping along the roof eaves. It appears that the original windows within the forms have all been replaced with combination of sliding vinyl windows and faux multi-light windows. Access to the motel rooms is along the interior facades of the two forms via concrete stairs with iron rails.

Figure 30. North elevation, facing south.

EDS 12: 665 W. MacArthur Boulevard, ca. 1900 two unit flats building

The **ca. 1900 two unit flats building** was originally designed in the Italian Renaissance Revival architectural style (Figure 31). The building is a two-story, rectangular plan with a hipped roof. It appears that the building was originally constructed as a single-family home, but was modified in ca. 1911 to created two flats. The building consists of a hipped roof projecting form along the northwest corner of the main block of the building. The building is clad in stucco, which was likely applied over original wood cladding; however, the wood cladding may have been removed. There are two units, of which one is accessed via a primary façade staircase that is situated away from the primary façade plain and appears to be constructed of wood with wood handrails and leads to a contemporary front door with decorative bracketed door header that appears to be original. The second unit is accessed via the east facade ground floor and is accessed along a contemporary gabled porch along the northeast corner of the building. There are decorative details along the building that include decorative roof cornice trim. All the windows are replacement vinyl windows.

Figure 31. North elevation, facing south.

EDS 13: 3725 Martin Luther King Jr. Way, ca. 1906 three unit apartment building and ca. 1910 garage

The **ca. 1906 is a three unit apartment building** is designed with elements of Italian Renaissance Revival architectural style. The two-story building is rectangular in plan with a symmetrical design (Figure 32Figure 24). There is hipped roof clad in asphalt shingles and a centered hipped dormer. The ground floor consists of a centered, angled bay window that is flanked by two porch porticos supported with round columns. There are concrete stairs that lead to identical recessed front entries that consist of what appears to contemporary doors with metal screens. All the original wood windows have been removed from the primary façade (north elevation), as well as the east and west elevations, which are visible from the street view, and replaced with double-hung vinyl windows.

There is a **ca. 1910 garage** that is located along the rear of the building; however, it was not accessible or visible during the survey, but was viewed online via Google maps, dated May 2019.

Figure 32. East elevation, facing west.

EDS 14: No physical address, no buildings present

Currently, the parcel is a vacant lot, but was previously associated with the ca. 1912 gas station (EDS 15).

EDS 15: 657 W. MacArthur Boulevard, ca. 1912 gas station

The original design of the ca. 1912 gas station is difficult to confirm as it has been modified over the years to suit the needs of the business that occupied the building; therefore, it is categorized as Vernacular form (Figure 33); however, it is likely that the building had elements of a specific style that are no longer present. The building is rectangular in plan and consists of a rounded façade along the northeast corner where the primary front entrance is located and three service bays along the north elevation. There is also a shed addition along the west façade that was added to serve as the space for a "hand carwash". The east elevation consists of transom windows over bathroom doors. The gas station pumps and additional structures that may have been constructed over the gas station islands have been removed.

Figure 33. North elevation, facing south.

EDS 16: 3720 Martin Luther King Jr. Way, ca. 1910 commercial building (religious building)

Prior to the construction of the church (EDS 17), the ca. 1910, which is now merged with the ca. 1965 church, was a separate commercial building that included two store fronts. The building appears to have been "merged" with the ca. 1965 Church when the church building was constructed. The building currently consists of a stucco exterior and has been modified significantly including removal of the original fenestrations (Figure 34).

Figure 34. West elevation, facing east.

EDS 17: 625 W. MacArthur Boulevard, ca. 1965 religious building

The **ca. 1965 religious building** is designed in the Mid-Century Modern architectural style. The building consists of a dominate front gable room plan with a side gable addition (Figure 35). The building is clad in stucco. There is a is a moderate pitch roof and a narrow vertical element clad in stucco and stone with an over-sized cross placed on top that is highly visible along W. MacArthur Boulevard. Along the north elevation there is a tall portico entry porch supported by round columns and two sets of double doors that are the main entry to the church. Above the portico are a series of narrow windows, which are also present along the rectangular addition and along the west elevation. There are letters that are positioned along the north elevation exterior wall that state “Good Samaritan Cathedral Church of God”.

Figure 35. North elevation, facing south.

EDS 18: 3806 Martin Luther King Jr. Way, ca. 1970 commercial building

The ca. 1970 commercial building does not appear to have a design, but is constructed as a form. The building is rectangular in plan and consists of a flat roof. The building is concrete block construction. The primary entrance to the building is along the west elevation, which includes a small side entry door and a roll-up metal service door. There is also a service bay along the east elevation that allows access via a rear entry way parking lot. There is a sign at the northeast corner of W. Mac Arthur Boulevard and Martin Luther King Jr. Way that is on a metal post that states "HK AUTOCARE" and also includes Korean words as well.

Figure 36. West elevation, facing south, southeast.

EDS 19: 3810 Martin Luther King Jr. Way, ca. 1910 house and ca. 1970 commercial addition

The building consists of the original ca. 1910 house (rear) and a ca. 1970 commercial addition that is attached to the primary façade (west elevation) of the house (Figure 37). The original two story house has been significantly modified, and it appears that the original features and fenestrations of the house have been removed and replaced with contemporary elements that include a stucco façade and vinyl sliding windows within non-original window openings. The only remaining feature of the original ca. 1910 house is the rectangular plan form and the hipped roof. The ca. 1970 commercial addition along the primary façade is attached to the ca. 1910 house along the original west façade of the house. The one-story commercial building consists of a side entry door and storefront windows that have been covered over with plywood. One of the original storefronts has a smaller window opening inserted with a vinyl replacement window.

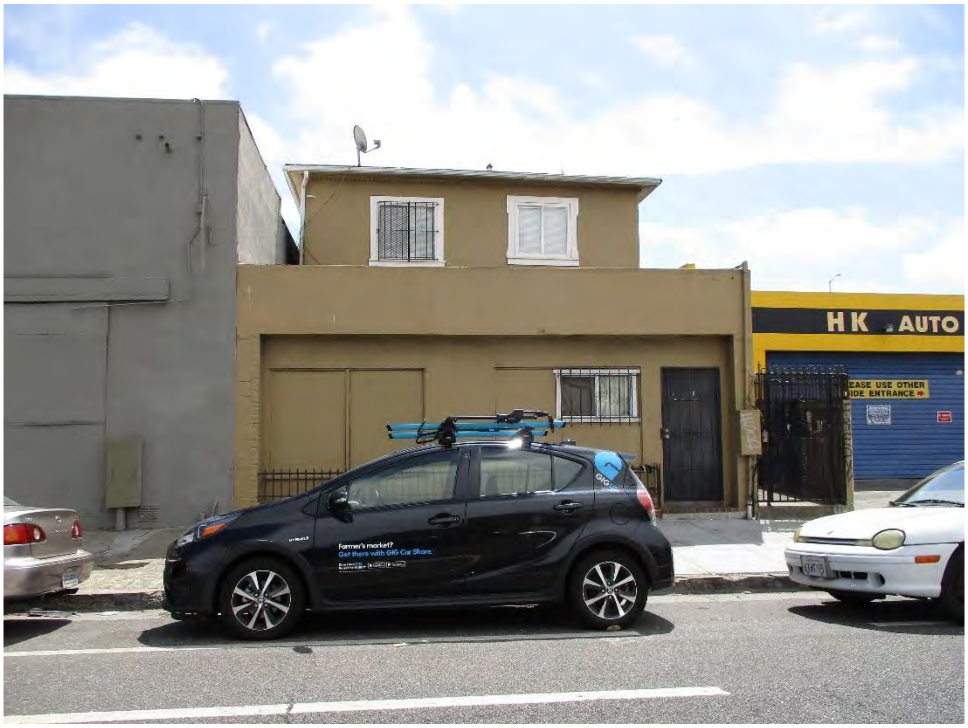

Figure 37. West elevation, facing east.

EDS 20: 3820 Martin Luther King Jr. Way, ca. 1930 commercial building

The **ca. 1930 commercial building** in designed with elements of storefront commercial style. The building is rectangular in plan and consists of a flat roof (Figure 38). The building is clad in stucco and consists of an angled side-entry door and what appears to be boarded up storefront picture windows. There is also a double door along the northwest corner of the building, which likely allowed for deliveries to the former furniture store. The building also consists of the frame of original signage that has a Mid-Century modern design style and is located along the storefront cornice and roof; however, the original sign details have been removed.

Figure 38. West elevation, facing east.

EDS 21: 3834 Martin Luther King Jr. Way, ca. 1930 commercial building

The **ca. 1930 commercial building** is constructed as a commercial building form. It is rectangular in plan and consists a flat roof (Figure 39). The building is clad in stucco and the primary façade has been modified. There are two recessed bays with narrow horizontal windows. The two bays flank a double-door front entry that serves at the main entrance to the building. Above the doors is a sign that states “Christian Bible Way Church Pastor Dorthy McGhee 9832 Martin Luther King Jr. Way”. There is also an angled side entry along the southwest elevation that consists of a modified storefront with aluminum plate framed windows and doors.

Figure 39. West elevation, facing east.

EDS 22: 3838 Martin Luther King Jr. Way, ca. 1906 two unit flats building

The **ca. 1906 two unit flat building** is designed in the Italian Renaissance Revival architectural style. The two-story building is rectangular in plan with a symmetrical designed (Figure 40). There is hipped roof clad in asphalt shingles and a centered hipped dormer. The building is clad in narrow clapboard. The ground floor consists of a centered, angled bay window that is flanked by two porch porticos supported with square, tapered columns. There are what appear to be original wood stairs and handrails that lead to identical recessed front entries that consist of what appears to contemporary doors behind metal security screens. Above the bay is decorative trim work that includes dentil and also brackets at the intersection of the ground and second story and along the roof cornice. All the original double-hung wood windows are present along the west elevation (primary façade) and along the north and south facades.

Figure 40. West elevation, facing east.

EDS 23: 3840 Martin Luther King Jr. Way, ca. 1906 two-unit flat building (originally a single-family house)

The **ca. 1906 two-unit building** is constructed in the "High-Peaked" Dutch Colonial Revival architectural style (Figure 41). The building is designed with a rectangular mass that is situated under a single gable roof with laterally projecting shed roof dormers that extend from the roof ridge. The roof is clad in asphalt shingles and the building appears to be clad in either a metal or a plastic cladding material. The west elevation (primary façade) consists of a wide corner portico, at the northwest elevation, which is supported by round columns. There are wide stairs that lead to the porch portico, which consists of rounded arch openings. There are two main entry doors to the flats along the porch. The doors are contemporary replacement doors, and both doors are located behind metal security screens. There is an angled bay window along the ground floor that consists of replacement vinyl windows and is clad with metal bars. The second story consists of two "prow windows" with two vinyl faux multi-light double-hung windows. There appears to be a basement, as there is a large grate along the lower portion of the west elevation.

Figure 41. West façade, facing east.

EDS 24: 3848 Martin Luther King Jr. Way, ca. 1908 multi-unit apartment building

The **ca. 1908 multi-unit apartment building** is designed in the Italian Renaissance Revival architectural style (Figure 42 and Figure 43). The two-story building consists of a rectangular form and a hipped roof and angled roof corners. There is a centered hipped roof dormer and a brick chimney. There are broadly over-hanging eaves and closed soffits. There is decorative dentil molding along the roof cornice and detailed trim work. The building is clad in narrow wood clapboard. The west elevation consists of an elaborate porch portico supported by six wood columns with capitals set on a decorative stone and wood support with trim work. There are original wood entry stairs that lead to a porch with a stone porch floor and wood beadboard ceiling. The main entry door was not visible as it was covered by a metal security gate. The west elevation includes a decorative belt course that divides the ground floor from the second floor. There are angled bay windows on all four corners of the west elevation of the ground and second floors that consist of original double-hung wood windows with lugs, as well as decorative trim work located under the window sills of each bay window that extends beyond the window casing. The is a smaller centered, double-hung wood window with lugs that is situated above the porch portico that is original. There are metal bars on the lower windows for security. The north elevation consists of four apartment entries along the ground floor that include wood stairs within knee walls, and bracketed framed door cornices and detailed trim work. The roof cornice includes dentil and trim work, and there is a belt course that extends along this elevation as well. In addition, the four corner bays that are present on the west elevation are also present on the north elevation. There are also numerous double-hung wood windows and decorative trim work that extend beyond the window casings. There are also two sets of ground and second floor bays that are set within the center of the north elevation that include a series of double-hung wood windows and two smaller centered double-hung wood windows.

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Figure 42. West façade, facing east.

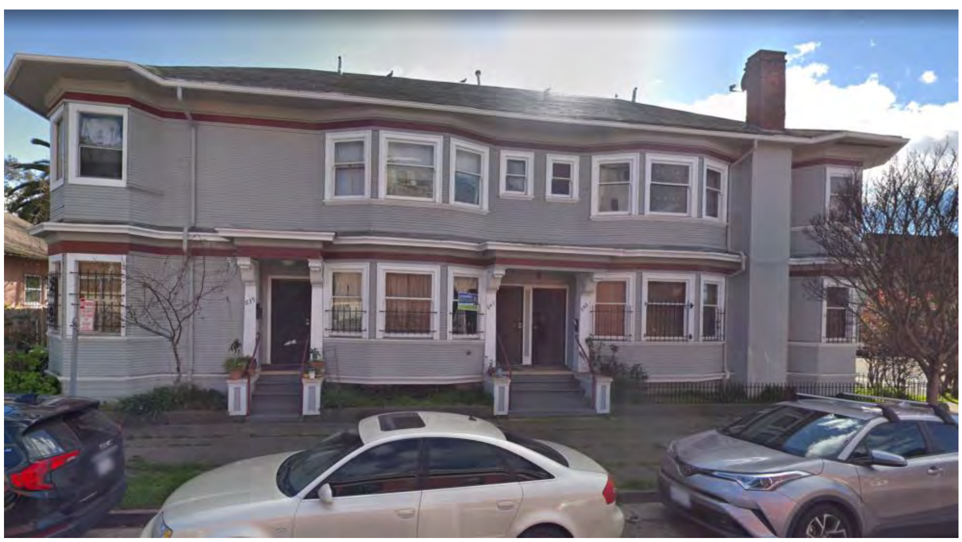

Figure 43. North façade, facing south.

EVALUATION FOR HISTORICAL SIGNIFICANCE

The following section summarizes the potential historic significance of the 27 properties containing 30 built environment resources that are at least 50 years of age located within the Direct and Indirect APEs.

NATIONAL REGISTER OF HISTORIC PLACES

The NRHP is the official list of the Nation's historic places worthy of preservation. Authorized by the NHPA of 1966, the NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. To be considered eligible, a property must meet one or more of the NRHP criteria for significance and must retain the necessary aspects of integrity needed to convey significance under the criterion for which it is eligible.

NRHP EVALUATION

There are 27 properties containing 30 built environment resources within the APEs that includes three buildings within the Direct APE (EDS 1a, 1b, 1c, and 1d) and 27 buildings within the Indirect APE (EDS 2 – 24). The 24 buildings within all 27 properties were evaluated to determine individual eligibility for listing on the NRHP.

The three built environment resources within the Direct APE (EDS 1a) were evaluated in association with the theme of storefront commercial architecture and Victorian era style within various periods of significance. The 27 buildings within the Indirect APE were evaluated for the architectural themes that include Victoria era, Italian Renaissance Revival, "High Peak" Dutch Colonial Revival, Storefront Commercial, Mid-Century Modern, and Vernacular within various periods of significance, associated with their individual dates of construction or estimated dates of construction.

NRHP EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

None of the 30 buildings within the 27 properties were found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, none of the 30 buildings within the Direct APE or the Indirect APE are eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history for all 30 built environment resources within the Direct and Indirect APEs were thoroughly researched, and it does not appear that any of them are associated with a person that is important to local, California, or national history. In addition, the occupants of commercial building and residents in apartments change fairly regularly, making it difficult for a commercial building or apartment building to convey significance under this criterion.

Therefore, none of the 30 built environment resources within the Direct APE or the Indirect APE appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The **ca. 1908 multi-unit apartment building** (EDS 24) is an excellent example of the Italian Renaissance Revival style, with several distinctive elements reflecting this architectural trend most prominent in the 1890s up to the 1930s including a rectangular form, hipped roof, centered hipped roof dormer, broadly over-hanging eaves, closed soffits, decorative dentil molding and detailed trim work, wood clapboard, porch portico supported by round columns, decorative belt course that divides the ground floor from the second floor, angle bay windows, double-hung wood windows with lugs, and bracketed framed door cornices and detailed trim work. As such, ca. 1908 multi-unit apartment building is representative of the Italian Renaissance Revival architecture with a period of significance of ca. 1908, which is the estimated date the building was constructed.

Therefore, the ca. 1908 multi-unit apartment building appears to be eligible for individual listing in the NRHP under Criterion C.

None of the remaining 29 buildings within the Direct or Indirect APEs were found to be significant under any architectural styles; therefore, the remaining 29 buildings within the Direct and Indirect APEs do not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

None of the three (3) buildings with the Direct APE or the 27 buildings within the Indirect APE appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, none of the three (3) within the Direct APE or the 27 buildings within the Indirect APE appear eligible for listing on the NRHP under Criterion D.

Information related to the potential for archaeological resources to be present within the Direct APE can be found in the Archaeological Site Sensitivity Study report prepared by EDS Principal Archaeologist, Sally Evans, M.A., RPA, titled "*Historic Property Survey for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California*".[34]

[34] Sally Evans, *Historic Property Survey for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California,* Evans & De Shazo, 2019.

HISTORIC INTEGRITY

To qualify for listing in the NRHP, a property must possess significance under one or more of the above listed criteria and have historic integrity. There are seven variables, or aspects, that are used to judge historic integrity, including location, design, setting, materials, workmanship, feeling and association.[35] A resource must possess the aspects of integrity that relate to the historical theme(s) and period of significance identified for the built environment resources. National Register Bulletin 15 explains, "only after significance is fully established can you proceed to the issue of integrity."

Since the ca. 1908 multi-unit apartment building was the only built environment resource that was found to be significant under one of the four NRHP eligibility criteria, it is the only resource that was reviewed for integrity.

The following section provides integrity-related details regarding the ca. 1908 multi-unit apartment building.

Location. The ca. 1908 multi-unit apartment building retains integrity of location because it remains at the original location where it was constructed.

Therefore, the ca. 1908 multi-unit apartment building does retain integrity of location.

Design. The ca. 1908 multi-unit apartment building was designed in the Italian Renaissance Revival architectural style, and includes including a rectangular form, hipped roof, centered hipped roof dormer, broadly over-hanging eaves, closed soffits, decorative dentil molding and detailed trim work, wood clapboard, porch portico supported by round columns, decorative belt course that divides the ground floor from the second floor, angle bay windows, double-hung wood windows with lugs, and bracketed framed door cornices and detailed trim work.

Therefore, the ca. 1908 multi-unit apartment building retains integrity of design.

Setting. The setting of the ca. 1908 multi-unit apartment building is within a neighborhood in West Oakland known as Longfellow, which developed as an affordable urban neighborhood situated along a key commuter route in Oakland. Although initially the neighborhood consisted of mainly houses, storefront commercial buildings were present by the 1920s and as the population grew additional businesses developed within the neighborhood. In the 1960s' State Route 24 was constructed, which is located west of the subject property; however, the neighborhood maintain its local urban setting and many of the houses that currently surround the ca. 1908 multi-unit apartment building are original to when the subject building was constructed, and help maintain the original setting as an urban neighborhood with a mix of residential and commercial buildings.

Therefore, the ca. 1908 multi-unit apartment building retains integrity of setting.

Materials. The ca. 1908 multi-unit apartment building retains the majority of its original materials, including the wood cladding, decorative wood elements, wood windows, dentil, columns, and trim work.

[35] National Park Service, *National Register Bulletin: How to Apply the National Register Criteria for Evaluation* (Washington, D.C.: United States Department of the Interior, 1997).

Therefore, the ca. 1908 multi-unit apartment building retains integrity of materials.

Workmanship. The nature of workmanship is in the details of the design, form, and materials that are clearly reflected in the original design and evidenced on the ca. 1908 multi-unit apartment building that includes elements that require knowledge of tooling, carving, painting, and joinery.

Therefore, the ca. 1908 multi-unit apartment building retains integrity of workmanship.

Feeling. Feeling is the quality that a historic property has in evoking the aesthetic or historic sense of a past period. The ca. 1908 multi-unit apartment building retains the design and materials necessary to convey the feeling of an Italian Renaissance Revival building constructed during the period of 1890 to 1930 when this style was popular in the U.S.

Therefore, the ca. 1908 multi-unit apartment building retains integrity of feeling.

Association. The ca. 1908 multi-unit apartment building remains associated with Italian Renaissance Revival constructed within the period of significance for this style.

Therefore, the ca. 1908 multi-unit apartment building retains integrity of association.

In summary, the ca. 1908 multi-unit apartment building was found to be meet the NRHP under Criterion C for its association with Italian Renaissance Revival architecture for the period of significance of ca. 1908. In addition, the building retains all seven aspects of integrity. Therefore, the ca. 1908 multi-unit apartment building appears eligible for the NRHP and is considered a Historic Property for the purpose of Section 106 of the NRHP.

ASSESSMENT OF EFFECTS [PER 36 CFR 800.11(E)(4)]

Procedures for assessing effects to historic properties are discussed in 36 CFR 800.5. An undertaking results in an adverse effect to a cultural resource listed on or eligible for listing in the NRHP when it alters the characteristics that qualify the resource for inclusion in the NRHP (i.e. its integrity). Adverse effects are most often a result of physical destruction, damage, or alteration of a resource; alteration of the character of the surrounding environment that contributes to the resource's integrity; introduction of visual, audible, or atmospheric intrusions out of character with the resource or its setting; neglect of the resource resulting in its deterioration or destruction; or transfer, lease, or sale of the property out of Federal ownership [36 CFR 800.5(a)(2)].

The **Direct APE** (Project Area) consists of three built environment resource (EDS 1a) at least 50 years of age, of which none of the buildings were determined eligible for listing on the NRHP; and as such, none of the three buildings within the Direct APE are considered Historic Properties under Section 106 of the NHPA. Therefore, a finding of *No Adverse Effects* is recommended for built environment resources within the Direct APE.

The **Indirect APE** consists of 27 built environment resources at least 50 years of age (EDS 2 through EDS 24), one of which, the ca. 1908 multi-unit apartment building (EDS 24), was determined eligible for listing on the NRHP under Criterion C for association with Italian Renaissance Revival architectural style with a period of significance of ca. 1908. Since this building is considered a Historic Property under Section 106 of the NRHP, an assessment of effects was completed.

CA. 1908 MULTI-UNIT APARTMENT BUILDING (EDS 24) – EFFECTS DETERMINATION

Based on the proposed Project design shown in (dated 5/13/2019), EDS is recommending a finding of "no adverse effects" to the ca. 1908 multi-unit apartment building. In accordance with the documentation standards (36 CFR § 800.11) the following section provides an explanation as to how the criteria of "no adverse effects" was determined.

- There are no impacts that would have a direct effect on location, design, materials, workmanship, of the ca. 1908 multi-unit apartment building, as the building is not within the Direct APE and there are no proposed direct changes to the building or property.
- EDS considered alterations to integrity by conducting a viewshed analysis that to address the Project's effect on "feeling" and "association". The viewshed analysis carefully considered the effects of the placement, design, and style of the new building on the ca. 1908 multi-unit apartment building to ensure that the introduction of the new building would not diminish the integrity of the ca. 1908 multi-unit apartment building and the characteristics that qualify it for listing on NRHP. It was determined that although the new building does change the street scape view along the W. MacArthur Boulevard and Martin Luther King Jr. Way, the ca. 1908 multi-unit apartment building is situated for the most part along Apgar Street and is not adjacent to the location of the new building, but is situated 150 feet from the new building location and separated by a road, several houses, and several commercial buildings, which will serve to buffer the ca. 1908 multi-unit apartment building from the propose new building so that there will be minimal visual intrusion to the ca. 1908 multi-unit apartment building, and will not detract from its feeling and association with Italian Renaissance Revival architecture.

Figure 44. Rendering of the proposed Project at 3801 Martin Luther King Jr. Way (dated 5/8/2019, HRIT Architects).

CONCLUSIONS

In accordance with NEPA and Section 106 of the NHPA regulations and guidelines, EDS completed an HRE of 30 built environment resource within 27 parcels to determine if any of them are eligible for the NRHP and if the proposed Project would have any adverse effects to built environment Historic Properties. The HRE included extensive research and a field survey conducted EDS Principal Architectural Historian, Stacey De Shazo, M.A., who exceeds the Secretary of the Interior's Professional Qualification Standards in Architectural History and History.

The Direct APE includes four adjacent parcels that total 0.49 acres, including a 0.13 acre parcel at 3807 Martin Luther King Jr. Way, a 0.15 acre parcel with no physical address, a 0.14 acre parcel at 3823 Martin Luther King Jr. Way, and a 0.07 acre parcel at 3829 Martin Luther King Jr. Way, in Oakland, Alameda County, California that currently contains three built environment resources at least 50 years in age. The three buildings were evaluated for their potential individual eligibility for listing in the NRHP under the themes of Victorian era style and storefront commercial (architecture and architect) with several periods of significance that are associated with their date of construction. The HRE determined that none of the three buildings are individually eligible for listing in the NRHP, and therefore none of the three buildings are considered Historic Properties under Section 106 of the NHPA.

The Indirect APE consists of 27 parcels with 30 built environment resources that were each evaluated for their potential individual eligibility for listing in the NRHP under the theme of architecture, including Victoria era design, Italian Renaissance Revival, "High Peak" Dutch Colonial Revival, Storefront Commercial, Mid-Century Modern, and Vernacular. Of the 27 build environment resources that were evaluated, only the ca. 1908 multi-unit apartment building (EDS 24) was found to be individually eligible for listing on the NRHP under Criterion C related to the theme of "Italian Renaissance Revival" architecture for the period of significance of ca. 1908. Due to this finding, the ca. 1908 multi-unit apartment building is considered a Historic Property for the purpose of Section 106 of the NHPA. EDS completed an assessment of effects in accordance with 36 CFR 800.5., and found that the proposed Project will not diminish the integrity of the ca. 1908 multi-unit apartment building or the reason for its eligibility for listing on the NRHP. Therefore, EDS recommends a finding of "no adverse effects" to built environment Historic Properties located within the Direct and Indirect APEs.

Due to the finding of "no adverse effects" to built environment historic properties, no Project-specific recommendations are warranted at this time.

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Appendix A

DPR Forms

State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 **of** 8 ***Resource Name or #:** 3807 Martin Luther King Jr. Way
P1. Other Identifier:
***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
***a. County** Alameda **and**
***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S **; R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**
c. Address 3807 Martin Luther King Jr. Way City Oakland Zip 94609
d. UTM: Zone 10S, 564311 mE/ 4186919 mN
e. Other Locational Data: The resource is located within a 0.11-acre property at 3807 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number 012-964-7. The property is situated along the southwest corner of West MacArthur Boulevard and Martin Luther King Jr. Way in the Longfellow neighborhood of Oakland, approximately 400-feet west of State Route 24 and approximately 950-feet north of Interstate 580.

***P3a. Description:** The resource includes three historic built environment resources that include a ca. 1890 three-unit flat, ca. 1910 commercial building, and a ca. 1950 shed. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP2: Single-Family Property, Assessory; HP4. Ancillary Building; HP6; Commercial Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other
P5b. Description of Photo: South elevation, facing north, 07/29/2019
***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1890 three-unit flat, ca. 1910 commercial building, and a ca. 1950 shed (City of Oakland)
***P7. Owner and Address:** Name withheld by owner
***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472
***P9. Date Recorded:** 07/29/2019
***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.
***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

ca. 1890 Three-Unit Flat

The ca. 1890 three-unit flat is designed in the Eastlake style. The wood-framed two-story building consists of an asymmetrical plan with a projecting bay and a multi-faceted roof, and does not appear to have been altered from its original form. The wood framed building consists of horizontal wood channel siding and corner trim detail. All the windows on the building are covered in plywood and may have been removed from the building; however, there is evidence of simple trim in sections that are exposed. The projecting front bay along the **east elevation** consists of a gable roof with eave returns and decorative cornice brackets. There are also two square bay windows topped with “Second Empire” style roof elements clad in wood shingles and decorative brackets. There is a porch “bay” along the **south elevation** that consists of what was once the entrance to the second story “flat”; however, the stairs have been removed and the access to the small porch is covered with plywood. The main entrance to the ground floor “flat” is also along the south elevation; however, the door is boarded-up with plywood. The cornice along the south elevation consists of decorative wood brackets, and several windows that are covered in plywood. There is also a course belt that separates the ground floor from the second floor. The **west elevation** consists of a rear entry, which may have been the main entry to the third unit flat, that is situated along a recessed section of the northwest corner of the building. The **north elevation** was covered by overgrown bushes that made it difficult to document; however, this elevation consists windows that are covered in plywood, and decorative details, such as bracketed eaves and corner trim work.

Photo showing the east elevation, facing west.

Photo showing the west and south elevations, facing north, northeast.

North elevation, facing south.

ca. 1910 Commercial Building

The ca. 1910 commercial building is constructed with elements of “storefront” commercial design. The two-story building is rectangular in form, except for a slight recessed portion along the northwest corner of the building, and does not appear to have been altered from its original form. The building consists of flat roof and canted storefront bay. There is a decorative parapet and cornice trim work along the south and east elevations of the building. As well as "castellation" or cut-outs along the parapet with Spanish clay tile that allows for drainage from the flat roof. The building is clad in rough stucco along the south and east elevations; however, the original horizontal wood boards are visible along the north elevations. It is likely that the building was modified in the 1920s when the ownership changed and when the "Spanish Colonial Revival" design was popular in California. Along the southeast corner of the building is the canted storefront bay with a second story angled bay window, which is supported by a single square post. There is a contemporary sign affixed to the bay that states "RCA Terry's TV". All the windows and doors along the building are boarded up with plywood; however, it appears, based on the applied stucco, that there is likely minimal trim work detail on the window and door surrounds. There is also a brick chimney, which is visible along the north elevation, which was likely added to allow for the use of the upstairs as a housing rental.

South elevation, facing north.

Photo shoring the canted bay and signage.

North elevation, facing south.

ca. 1950 Shed

The ca. 1950 shed is a wood framed building constructed in a rectangular plan and appears to have no design. The building was likely originally a shed and then later converted for use a garage. The building is clad in horizontal wood boards and consists of a flat roof. The north elevation consists of a single diamond shaped window that appears to have been added after the building was constructed. The south elevation is boarded up with plywood and may cover open bays.

Photo showing the north elevation of the ca. 1950 shed.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 3807 Martin Luther King Jr. Way, which includes a ca. 1890 three-unit flat, ca. 1910 commercial building, and a ca. 1950 shed, was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 3807 Martin Luther King Jr. Way, which includes a ca. 1890 three-unit flat, ca. 1910 commercial building, and a ca. 1950 shed was thoroughly researched, and it does not appear that any of the built environment resources are associated with any persons that are important to local, California, or national history.

Therefore, none of the built environment resources within the property appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1900 three-unit flat was constructed in the "Victoria Era" there is no definitive style and ca. 1900 commercial building does have storefront elements none of these buildings were found to be significant under these styles. In addition the ca. 1950 shed is not associated with a known style. As such, none of the buildings within the property including the ca. 1890 three-unit flat, ca. 1910 commercial building, and a ca. 1950 shed were not found to be significant under criterion C under any architectural style.

Therefore, *none of the built environment resources within the property appear eligible for individual listing on the NRHP under Criterion C.*

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

None of the three (3) buildings within the property appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, none of the built environment resources within the property appear eligible for listing on the NRHP under Criterion D.

Information related to the potential for archaeological resources to be present can be found in the Archaeological Site Sensitivity Study report prepared by EDS Principal Archaeologist, Sally Evans, M.A., RPA, titled "*Historic Property Survey for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California*".[1]

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[1] Sally Evans, *Historic Property Survey for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California,* Evans & De Shazo, 2019.

LOCATION MAP

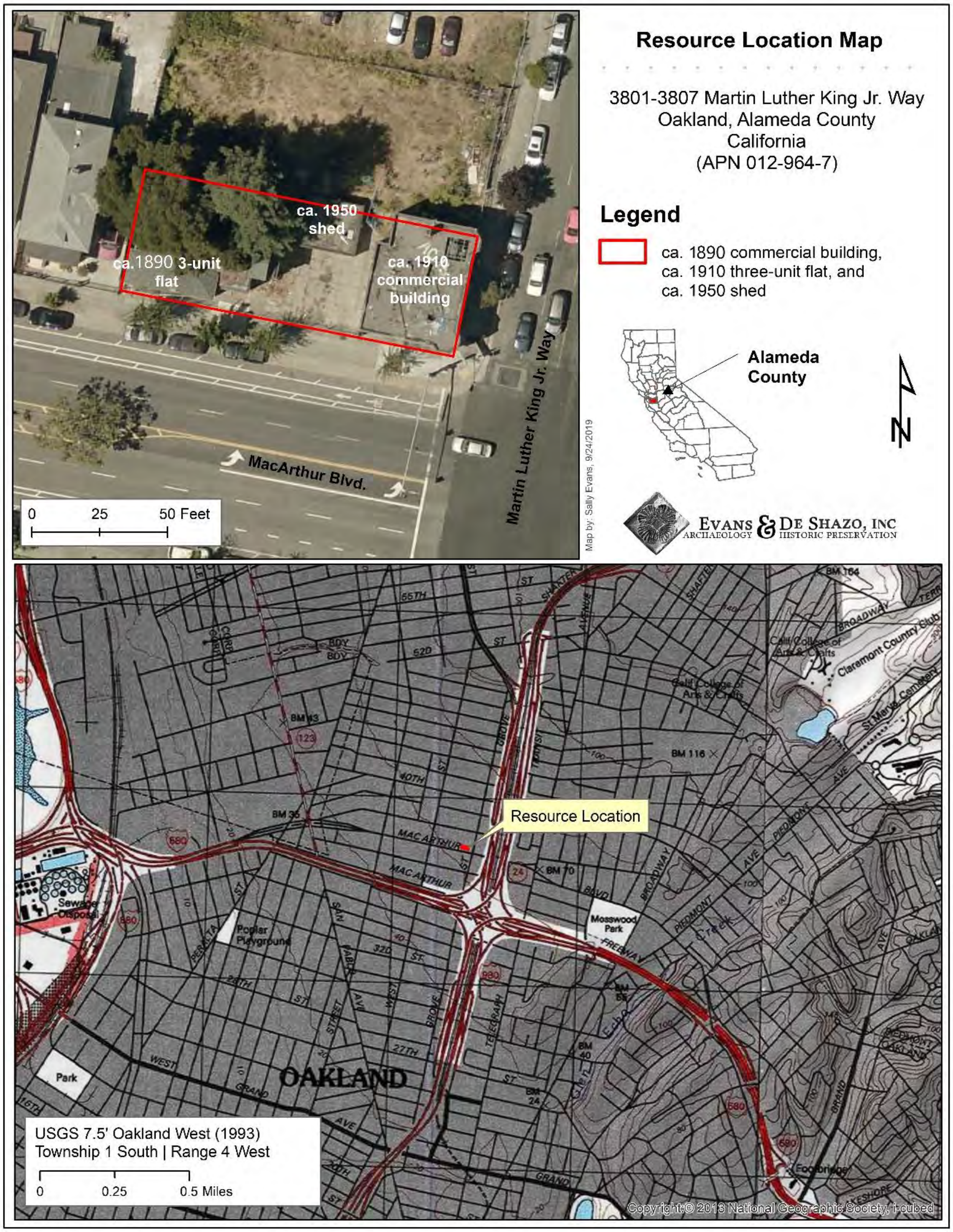
Primary #

HRI#

Trinomial

Page 8 **of** 8 ***Resource Name or #** 3807 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California □ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # ____________
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code   Reviewer   Date

***Resource Name or #:** 3837 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** □ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; □ **of** □ **of Sec** ; MD **B.M.**

c. Address 3837 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564314 mE/ 4186968 mN

e. Other Locational Data: The resource is located within a 0.09-acre property at 3837 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number 012-964-003. The property is situated southwest of the intersection of Apgar Street and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland, and lies 500-feet west of State Route 24 and approximately 1,000-feet north of Interstate 580.

***P3a. Description:** The ca. 1910 three-story storefront commercial building and second and third story residential units are designed with elements of storefront commercial architectural style. The roof is a front facing gable roof and parapet with extending eaves along the cornice of the parapet. The east elevation (primary façade) is clad in what appears to be wood along the storefront façade and horizontal wood boards along the second and third floors. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP6; Commercial Building

***P4. Resources Present:** ☒ Building □ Structure □ Object □ Site □ District □ Element of District □ Other

P5b. Description of Photo: East elevation, facing north, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic □ Prehistoric □ Both
ca. 1900 storefront commercial building (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** □NONE ☒Location Map ☒Continuation Sheet □Building, Structure, and Object Record □Archaeological Record □District Record □Linear Feature Record □Milling Station Record □Rock Art Record □Artifact Record □Photograph Record □ Other (List):

(Continued from Primary, Page 1)

The storefront is recessed and angled. There are what appears to be two storefront windows, and an area that has two double hung windows and an additional ground floor door near the southeast corner of the building, which may indicate that the ground floor was converted into a residential unit at some point. Access to the second and third floors is via a door near the northeast corner of the building and appears to consist of a transom over a wood door; however, currently there is a metal door and metal bars in this area, and as such, the details are difficult to document. There is a storefront cornet that includes simple brackets and trim work. Along the second story there is an angled bay window with replacement vinyl windows and a single multilight vinyl window. There is a metal fire escape along this elevation that includes decorative details along the second story fire escape “balcony”. The third story consists of a pair of double hung vinyl windows and a metal fire escape balcony, along with stairs that to the roof. The west elevation (rear façade) appears to consist of a three-story gable roof addition, as well as a third shed addition, of which both appear to have been added in the 1930s or 1940s. However, visibility was limited to what could be viewed from the street view.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. **Is associated with events that have made a significant contribution to the broad patterns of our history.**
The property at 3837 Martin Luther King Jr. Way, which includes ca. 1900 storefront commercial building, was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. **That are associated with the lives of significant persons in our past.**
The ownership and occupancy history of the property at 3837 Martin Luther King Jr. Way, which includes a ca. 1900 storefront commercial building was thoroughly researched, and it does not appear that any of the built environment resources are associated with any persons that are important to local, California, or national history.

Therefore, ca. 1900 storefront commercial building does not appear eligible for listing on the NRHP under Criterion B.

C. **That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.**
Although the ca. 1900 building is designed in the storefront commercial style, it was not found to be significant under criterion C for this architectural style.

Therefore, ca. 1900 storefront commercial building does not appear eligible for individual listing on the NRHP under Criterion C.

D. **Has yielded, or may be likely to yield, information important in prehistory or history.**

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1900 storefront commercial building with the property does not appear to be the principal source of information for construction or design techniques that can yield important information.

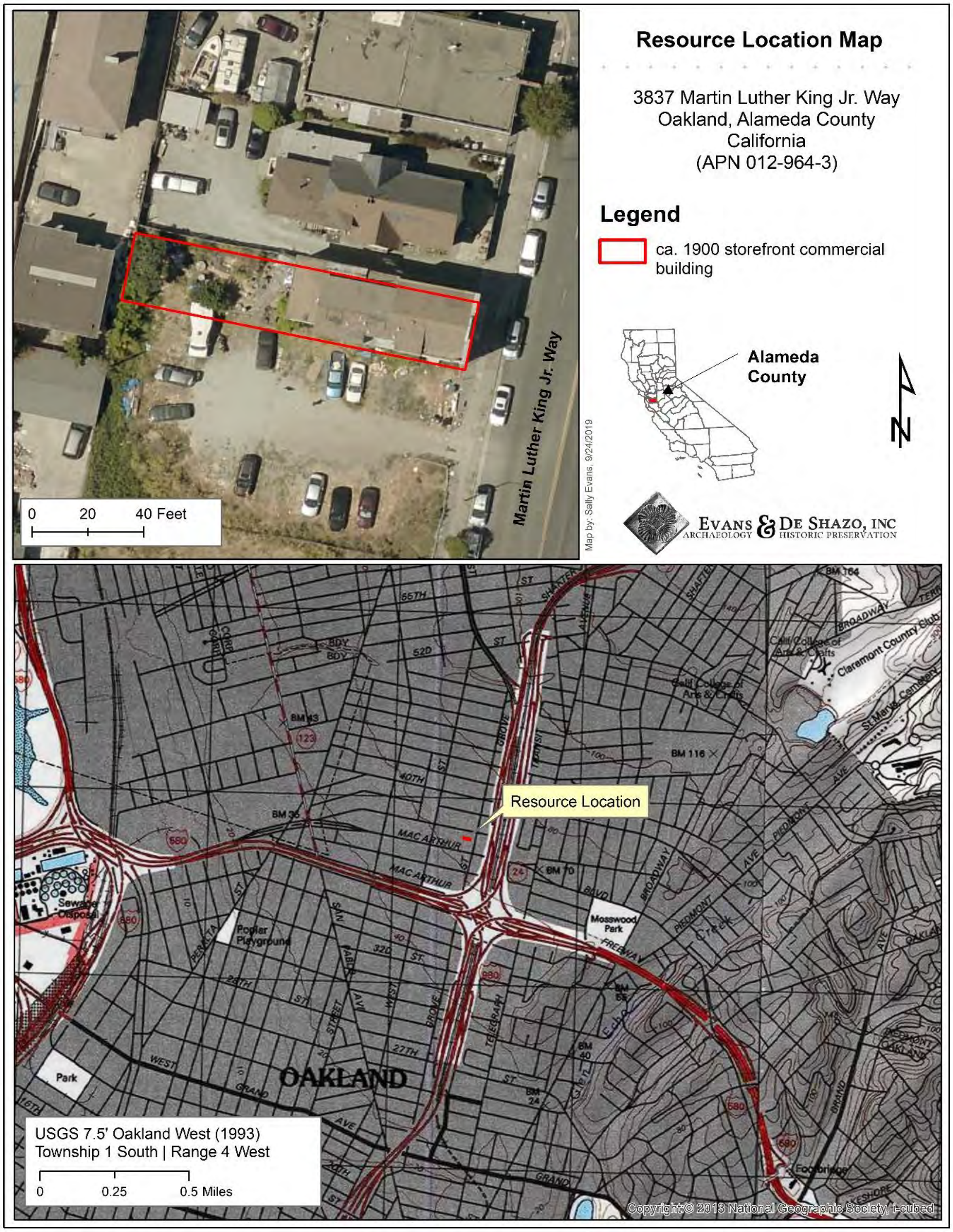
Therefore, none of the built environment resources within the property appear eligible for listing on the NRHP under Criterion D.

The property was not evaluated to determine if there are archaeological resources present, and so it cannot be determined if the property contains associated archaeological deposits that will yield, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

State of California Natural Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 4 **of** 4 ***Resource Name or #** 3837 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** 3843 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; **of** **of Sec** ; MD **B.M.**

c. Address 3843 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564314 mE/ 4186980 mN

e. Other Locational Data: The resource is located within a 0.73-acre property at 3807 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number 012-964-002. The property is situated southwest of the intersection of Apgar Street and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland, approximately 500-feet west of State Route 24 and approximately 1,000-feet north of Interstate 580.

***P3a. Description:** The ca. 1906, multi-unit apartment building is constructed in the "High-Peaked" Dutch Colonial Revival architectural style; however, the building has been altered along the rear elevation over the years. The building's rectangular mass is situated under a single gable roof with laterally projecting hipped roof dormers. The roof is clad in asphalt shingles and there is a single brick chimney along the roof ridge. The east elevation (primary façade) consists of small corner portico, at the northeast elevation, which is supported by Ionic columns. Set within the portico is the main entry door topped with a transom light window (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP3. Multiple Family Property

***P4. Resources Present:** ☒ Building Structure Object Site District Element of District Other

P5b. Description of Photo: East elevation, facing west, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic Prehistoric Both
ca. 1906 multi-unit apartment building (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation:** Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** NONE ☒Location Map ☒Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List):

(Continued from Primary, Page 1)

The ground floor is clad in narrow wood clapboard and consist of a large picture window with a transom light, which is flanked by two original arched window openings that appear to have been replaced with double-hung vinyl windows. The gable consists of two inverted "prow windows" with four double-hung wood windows; however, the original gable cladding (likely shingles) has been removed and replaced with what appears to be a metal or a plastic cladding material. There is a bay window along south elevation and two additions along the rear of the house although visibility was limited due to the privacy fence along the east elevation and the access was limited to street view.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 3843 Martin Luther King Jr. Way, which includes ca. 1906 multi-unit apartment building, was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 3843 Martin Luther King Jr. Way, which includes a ca. 1906 multi-unit apartment building was thoroughly researched, and it does not appear that any of the built environment resources are associated with any persons that are important to local, California, or national history.

Therefore, ca. 1906 multi-unit apartment building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Although the ca. 1906 multi-unit apartment building is designed in the "High Peak" Dutch Colonial architectural style, it was not found to be significant under criterion C for this architectural style.

Therefore, ca. 1906 multi-unit apartment building does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important

information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1906 multi-unit apartment building with the property does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, none of the built environment resources within the property appear eligible for listing on the NRHP under Criterion D.

The property was not evaluated to determine if there are archaeological resources present, and so it cannot be determined if the property contains associated archaeological deposits that will yield, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

State of California ☐ Natural Resources Agency | Primary #

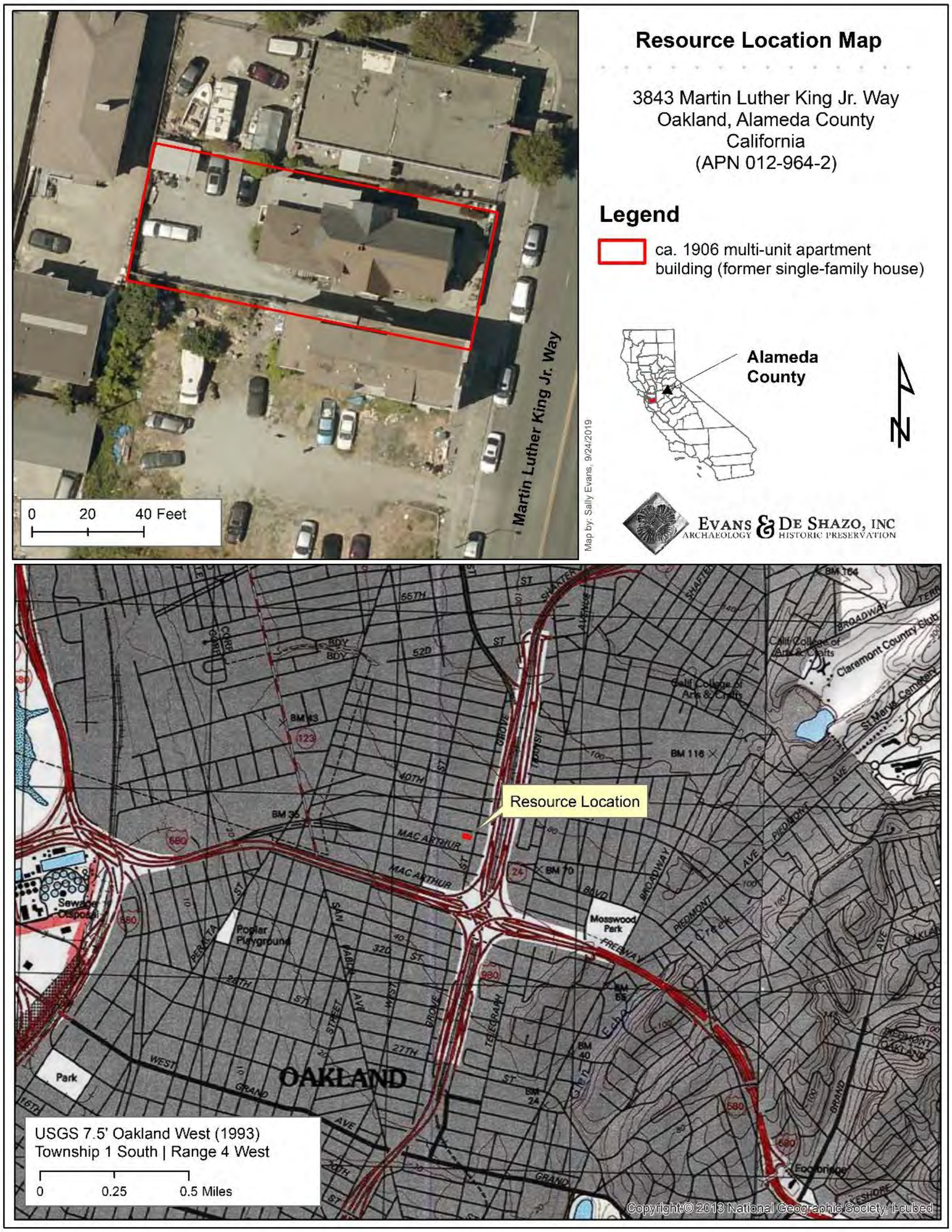
DEPARTMENT OF PARKS AND RECREATION | HRI#

LOCATION MAP

Trinomial

Page 4 **of** 4 ***Resource Name or #** 3843 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

***Resource Name or #:** 3849 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

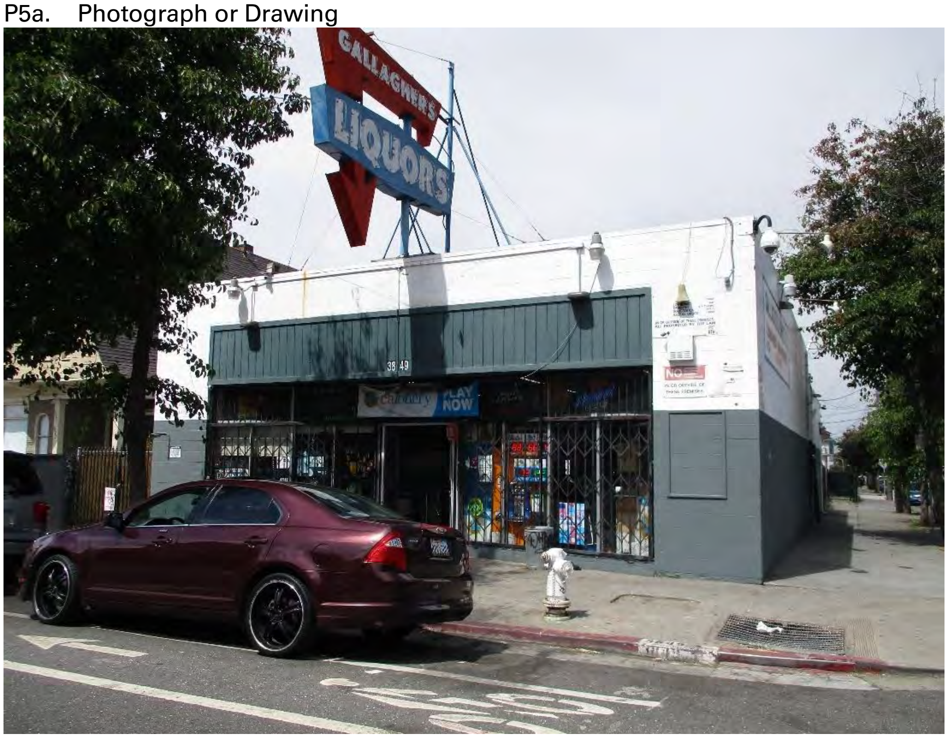
c. Address 3849 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564314 mE/ 4186996 mN

e. Other Locational Data: The resource is located within a 0.13-acre property at 3849 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number 012-964-001. The property is situated southwest of the intersection of Apgar Street and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland. The parcel lies 500-feet west of State Route 24 and approximately 1,000-feet north of Interstate 580.

***P3a. Description:** The ca. 1969 building was constructed as a "Drive-in liquor store" commercial building. The building is constructed of concrete block in the rectangular plan with a flat roof. The primary façade (east elevation) consists of a centered storefront with a recessed and angled entry flanked on both sides by a metal framed storefront windows with transoms (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing



***P3b. Resource Attributes:** HP6. commercial building

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: East elevation, facing west, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1969 commercial building (City of Oakland)

***P7. Owner and Address:**
Name withheld by owner

***P8. Recorded by:**
Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

There is a storefront cornice that is clad in vertical wood boards. One of the character-defining features of the building is a large neon sign that states “Gallagher’s Liquors” and includes a large arrow pointing downward toward the entrance of the store. Along the north elevation is a single side entry door with a metal security gate. Along the west elevation (rear façade) of the building is a gated parking lot. The west elevation consists of the location of the drive-in window that is topped by a transom window. The windows are now covered in metal bars. There is also a rear entry door with a metal security gate.

Photo showing the parking lot behind the liquor store.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 3849 Martin Luther King Jr. Way, which includes ca. 1969 “drive-in liquor store” commercial building, was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 3849 Martin Luther King Jr. Way, which includes a includes ca. 1969 “drive-in liquor store” commercial building was thoroughly researched, and it does not appear that any of the built environment resources are associated with any persons that are important to local, California, or national history.

Therefore, ca. 1969 "drive-in liquor store" commercial building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1969 "drive-in liquor store" commercial building was not found to be significant under criterion C under any architectural styles.

Therefore, ca. 1969 "drive-in liquor store" commercial building does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1969 "drive-in liquor store" commercial building within the property does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, none of the built environment resources within the property appear eligible for listing on the NRHP under Criterion D.

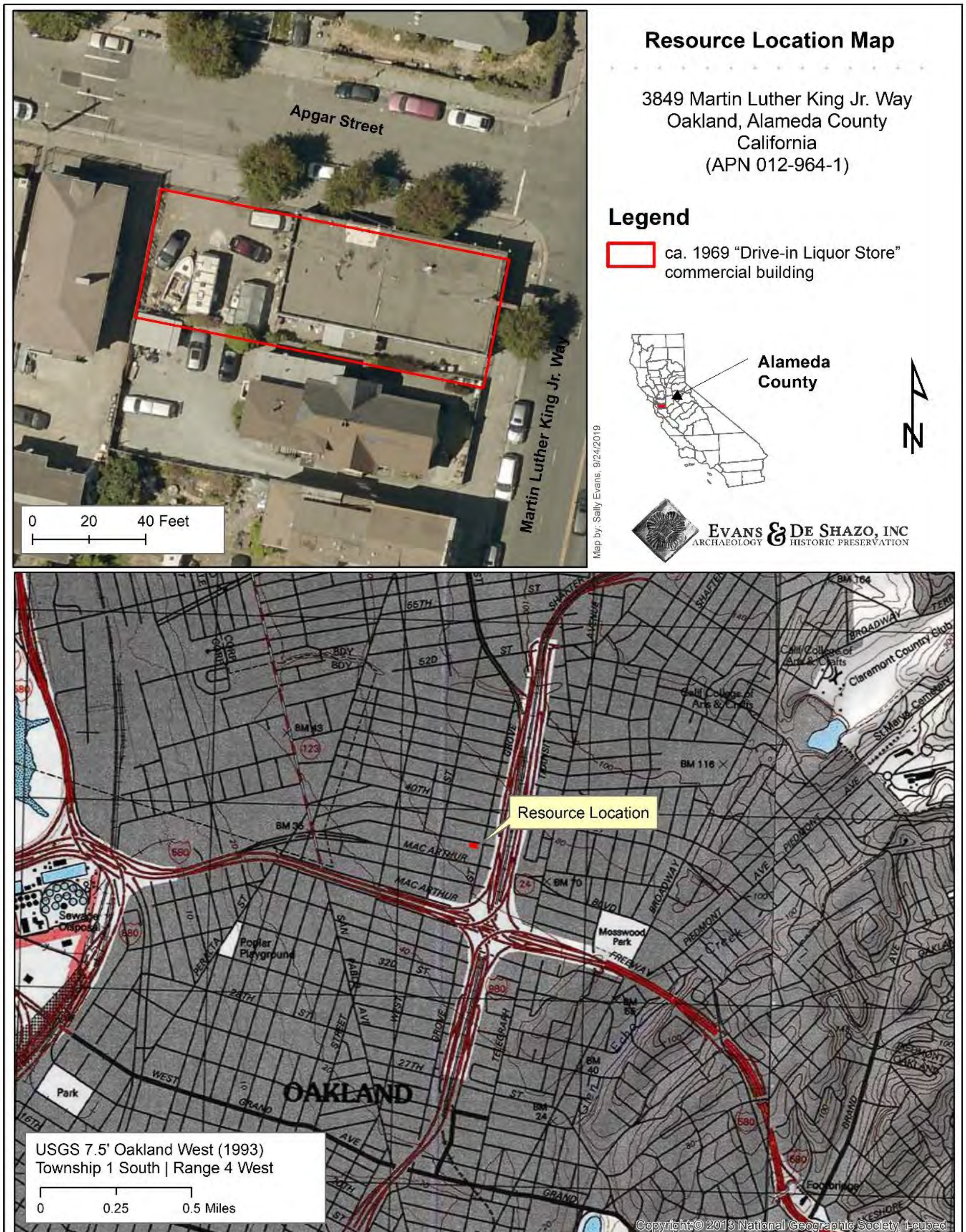
The property was not evaluated to determine if there are archaeological resources present, and so it cannot be determined if the property contains associated archaeological deposits that will yield, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Primary #
HRI#
Trinomial

LOCATION MAP

Page 4 **of** 4 ***Resource Name or #** 3849 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** 663 Apgar Street

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

c. Address 663 Apgar Street City Oakland Zip 94609

d. UTM: Zone 10S, 564274 mE/ 4186997 mN

e. Other Locational Data: The resource is located within a 0.09-acre property at 663 Apgar Street, Oakland, Alameda County, California, within Assessor Parcel Number 012-964-041. The property is situated west of the intersection of Apgar Street and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland. The parcel lies 400-feet west of State Route 24 and approximately 1,100-feet north of Interstate 580.

***P3a. Description:** The resource consists of a ca. 1900 two-unit flats building and a ca. 1911 Accessory Dwelling Unit (ADU). The ca. 1900 two-unit flats building is designed with elements of the Italian Renaissance Revival architectural style. The two-story building is rectangular in plan with a symmetrical design. There is hipped roof clad in asphalt shingles and a centered hipped dormer. The ground floor consists of a centered, angled bay window that is flanked by two porch porticos supported with ionic tapered and round columns. There are wood stairs that lead to identical recessed front entries that consists of what appears to be two an original glazed and paneled wood framed doors. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP3. Multiple Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: East elevation, facing west, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1906 multi-unit apartment building (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

All the original wood windows have been removed from the primary façade (north elevation), as well as the east and west elevations, which are visible from the street view, and replaced with sliding wood aluminum windows. It also appears that the window openings along the second story of the primary façade (north elevation) have been enlarged to accommodate contemporary sliding windows.

The **ca. 1911 ADU** is situated behind the ca. 1900 building and is only partially visible from the street view, as such minimal details are provided. The ca. 1911 ADU is a two story building, with a flat roof, and what appears to be a ground floor garage and a second floor residential unit. There is a side entry staircase along the west elevation that appears to be the main entrance to the second floor residential unit.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 663 Apgar Street, which includes a ca. 1900 two unit flats building and ca. 1911 ADU, was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 663 Apgar Street, which includes ca. 1900 two unit flats building and ca. 1911 ADU, was thoroughly researched, and it does not appear that any of the built environment resources are associated with any persons that are important to local, California, or national history.

Therefore, the property does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Although the ca. 1900 two unit flats building is designed in the Italian Renaissance architectural style, it was not found significant under criterion C. The ca. 1911 ADU is not associated with a style.

Therefore, the ca. 1900 two unit flats building and ca. 1911 ADU do not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important

information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1900 two unit flats building and ca. 1911 ADU within the property do not appear to be the principal source of information for construction or design techniques that can yield important information.

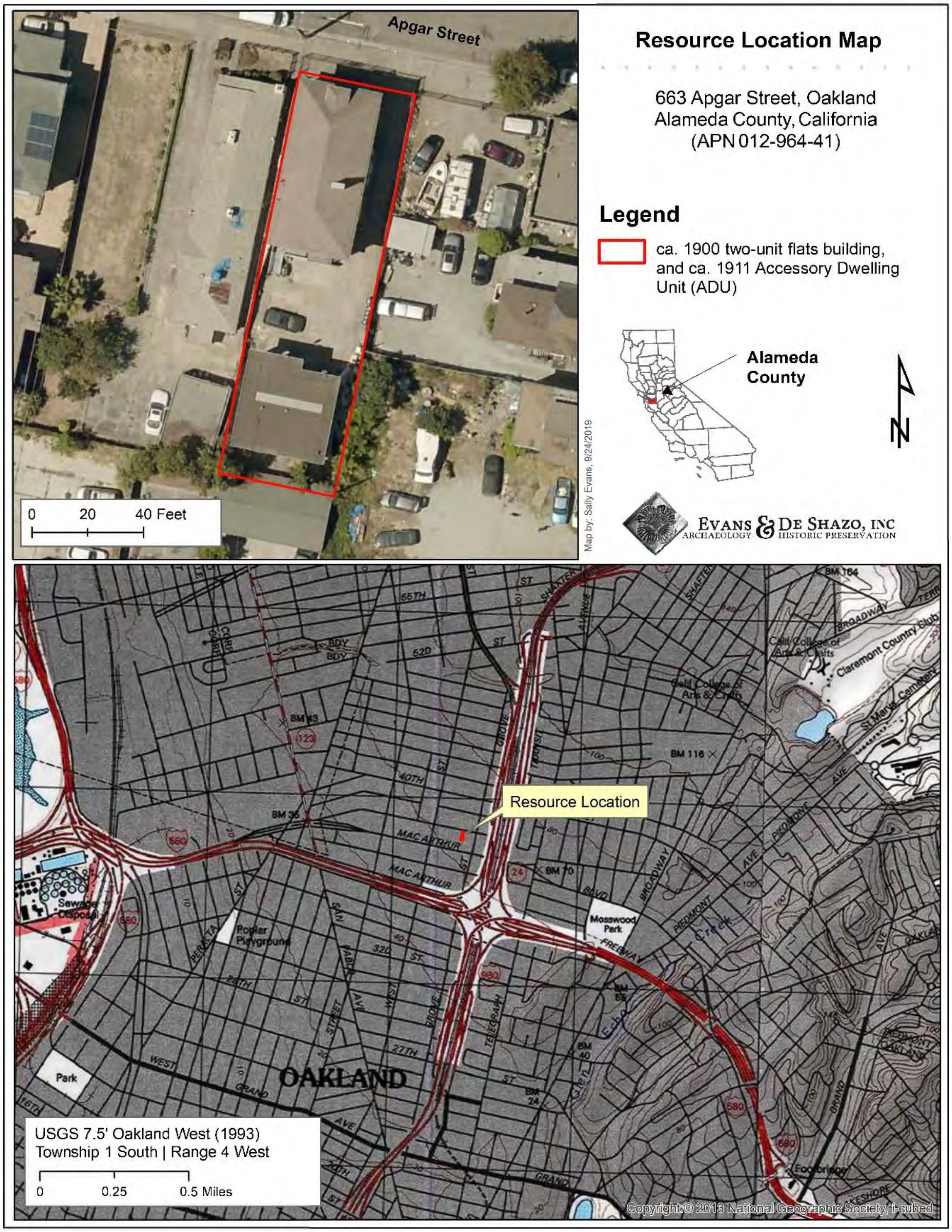
Therefore, none of the built environment resources within the property appear eligible for listing on the NRHP under Criterion D.

The property was not evaluated to determine if there are archaeological resources present, and so it cannot be determined if the property contains associated archaeological deposits that will yield, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

State of California □ Natural Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 4 **of** 4 ***Resource Name or #** 663 Apgar Street

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # ______________
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code   Reviewer   Date

***Resource Name or #:** 671 Apgar Street

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

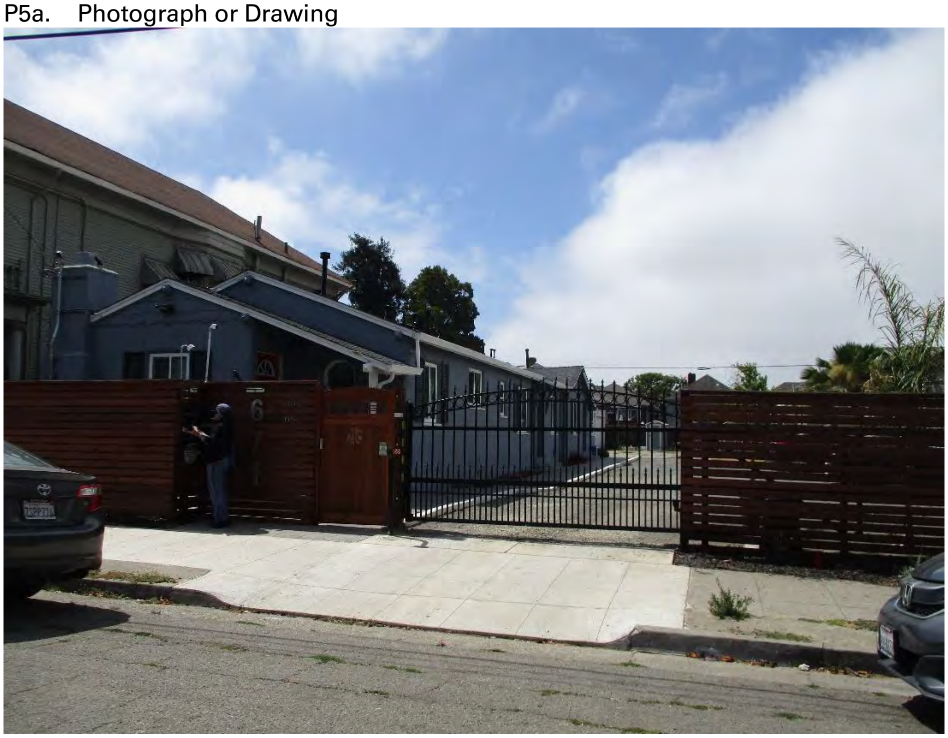
c. Address 671 Apgar Street City Oakland Zip 94609

d. UTM: Zone 10S, 564274 mE/ 4186997 mN

e. Other Locational Data: The resource is located within a 0.09-acre property at 3849 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number 012-964-004. The property is situated west of the intersection of Apgar Street and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland. The parcel lies 450-feet west of State Route 24 and approximately 1,100-feet north of Interstate 580.

***P3a. Description:** The resource includes three ca. 1950 “attached” cottages and a three-car garage located at the rear of the cottages. The ca. 1950 “attached” cottages are constructed in the Minimal Tradition architectural style. The “cottages” building is clad in stucco with wood scalloping in the primary gable eaves. The building is constructed in rectangular plan with a front gable-pitched roof with a lower gable that extends to include a porch roof eave along the primary façade (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing



***P3b. Resource Attributes:** HP3. Multiple Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: North elevation, facing south, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1950 “attached” cottages and ca. 1950 three-car garage (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

There is also a wide chimney along the northeast corner of the primary façade, and the rectangular form also consists of a hipped roof extension along the west elevation. There is an octagonal-shaped window within the recessed porch and there is a contemporary door that faces west. There are three recessed doors along the west elevation, and it appears that the original windows within the building have all been replaced with combination of sliding and double-hung vinyl windows.

The **ca. 1950 three-car garage**, though not completely visible from the street view, consists of a rectangular plan building with three garage doors. There building does not appear to be designed in any particular style.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 671 Apgar Street, which includes ca. 1950 "attached" cottages and ca. 1950 three-car garage, was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 371 Apgar Street, which includes ca. 1950 "attached" cottages and ca. 1950 three-car garage, was thoroughly researched, and it does not appear that any of the built environment resources are associated with any persons that are important to local, California, or national history.

Therefore, the property does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Although the ca. 1950 "attached" cottages, appear to be designed in the Minimal Tradition architectural style, it was not found to be significant under criterion C. The ca. 1950 three-car garage is not associated with any style.

Therefore, the ca. 1950 "attached" cottages and ca. 1950 three-car garage do not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important

information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1950 “attached” cottages and ca. 1950 three-car garage within the property do not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, none of the built environment resources within the property appear eligible for listing on the NRHP under Criterion D.

The property was not evaluated to determine if there are archaeological resources present, and so it cannot be determined if the property contains associated archaeological deposits that will yield, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

State of California Natural Resources Agency | Primary #

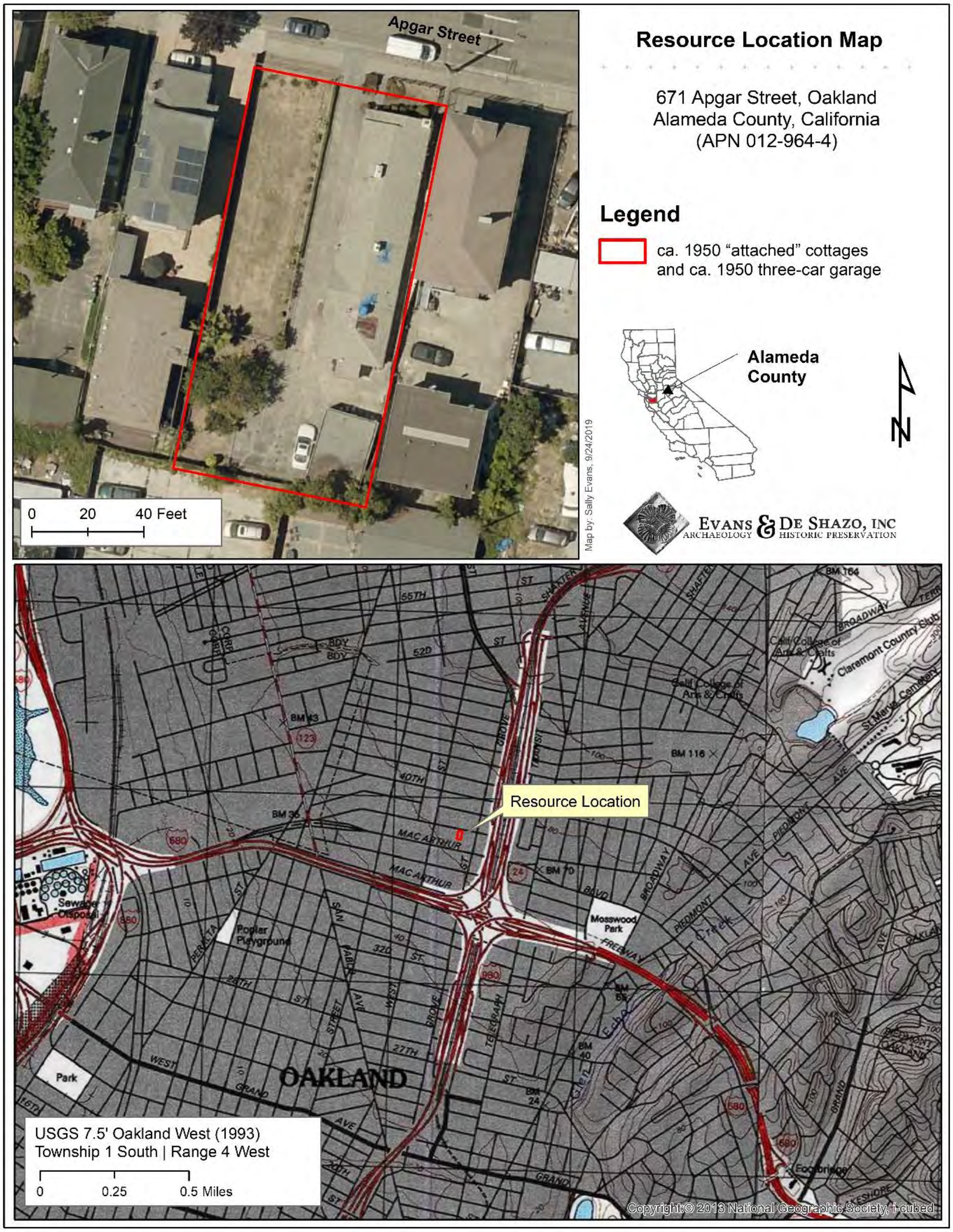
DEPARTMENT OF PARKS AND RECREATION | HRI#

LOCATION MAP

Trinomial

 ***Resource Name or #** 671 Apgar Street

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** 668 W MacArthur Boulevard

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

c. Address 668 W MacArthur Boulevard City Oakland Zip 94609

d. UTM: Zone 10S, 564270 mE/ 4186927 mN

e. Other Locational Data: The resource is located within a 0.5-acre property at 668 W. MacArthur Boulevard, Oakland, Alameda County, California, within Assessor Parcel Number 012-964-008. The property is situated in the Longfellow neighborhood of northern Oakland, approximately 500-feet west of State Route 24 and approximately 850-feet north of Interstate 580.

***P3a. Description:** The ca. 1908 house is designed with elements of Italian Renaissance Revival design. The two story building is constructed in a rectangular plan with a hipped roof that is clad in asphalt shingles. There is a central, flat roof dormer with decorative dentil. The roof has overhanging eaves and trim work along the roof cornice. The building appears to be clad in replacement siding, but due to the limited access, this could not be confirmed. The main entry appears to have been altered and extended to the elevation plane of the enclosed porch, which may have originally consisted of a corner porch portico. The front door has been replaced with a contemporary front door. **(See Continuation Sheet, Page 2)**

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP2: Single-Family Property; Assessory; HP4. Ancillary Building

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: South elevation, facing north, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca.1908 house, ca. 1908 Accessory Dwelling unit (City of Oakland)

***P7. Owner and Address:**
Name withheld by owner

***P8. Recorded by:**
Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

The enclosed porch consists of original multi-light wood windows; however, the windows along the second story have been replace with vinyl double-hung windows, set within original wood trim details including decorative rectangular wood crowns above the windows and below the window sills. There are angular bay windows with replacement vinyl double-hung windows along the east elevation, as well as two narrow horizontal vinyl replacement windows. There also appears to be an addition along the rear, though this was not completely visible from the street view.

There is a **ca. 1908 Accessor Dwelling Unit (ADU) building** along the rear of the ca. 1908 house that is not constructed within any architectural style. The building is a side gable, single story building with contemporary vinyl windows.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 668 W. MacArthur Boulevard, which includes a ca. 1908 house and ca. 1908 ADU building, was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 668 W. MacArthur Boulevard, which includes a ca. 1908 house and ca. 1908 ADU building was thoroughly researched, and it does not appear that any of the built environment resources are associated with any persons that are important to local, California, or national history.

Therefore, none of the built environment resources within the property do not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Although the ca. 1908 house is constructed in the Italian Renaissance Revival style, the building was not found to be significant under criterion C under this style. The ca. 1908 ADU was not constructed within any known style.

Therefore, *none of the built environment resources within the property appear eligible for individual listing on the NRHP under Criterion C.*

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1908 house and ca. 1908 ADU building do not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1908 house and ca. 1908 ADU building do not appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency Primary #

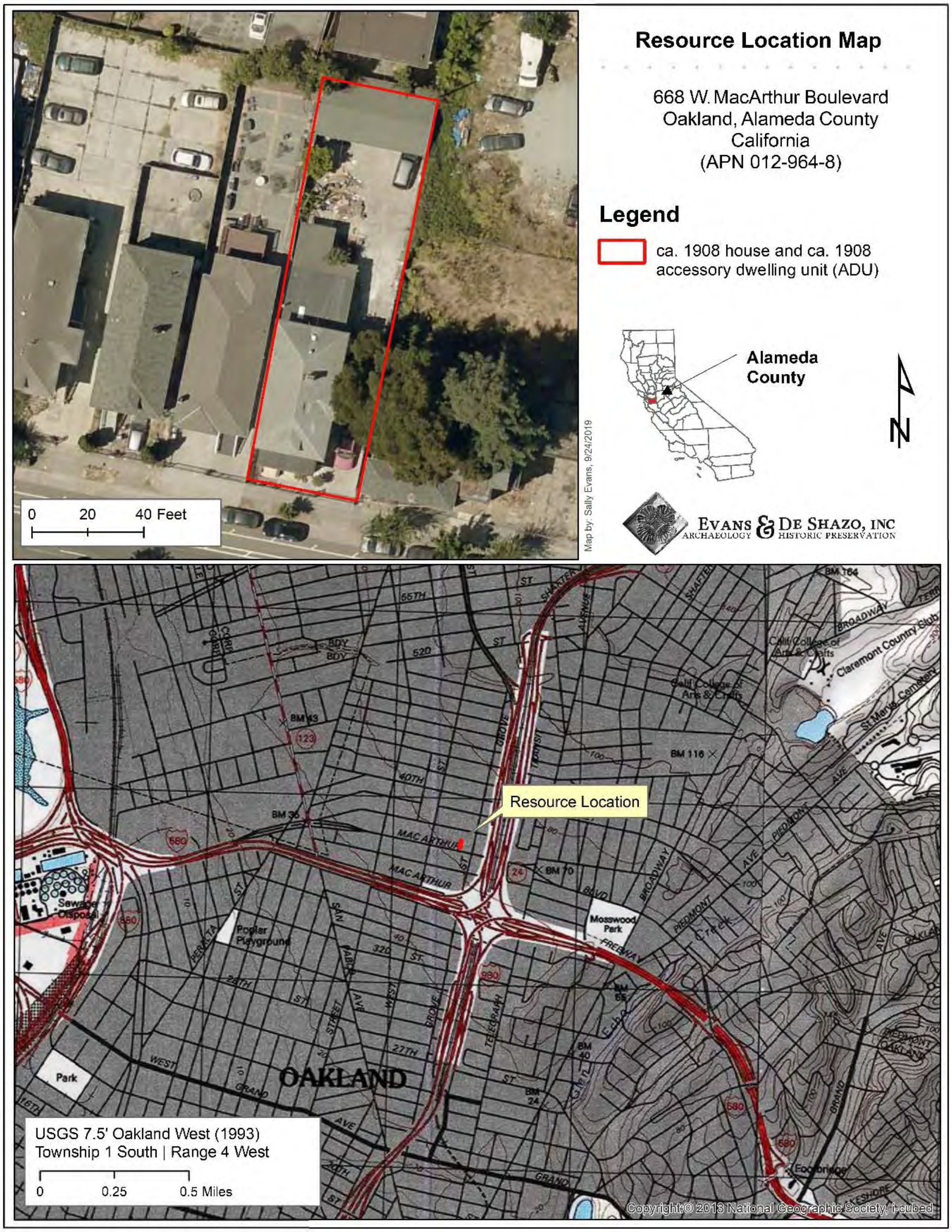
DEPARTMENT OF PARKS AND RECREATION HRI#

LOCATION MAP

Trinomial

Page 4 **of** 4 ***Resource Name or #** 668 W. MacArthur Boulevard

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

***Resource Name or #:** 670 W MacArthur Boulevard

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

c. Address 670 West Mac Arthur Boulevard City Oakland Zip 94609

d. UTM: Zone 10S, 564270 mE/ 4186927 mN

e. Other Locational Data: The resource is located within a 0.03-acre property at 670 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number 012-964-009. The property is situated west of the intersection of West MacArthur Boulevard and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland, and lies 500-feet west of State Route 24 and approximately 850-feet north of Interstate 580.

***P3a. Description:** The ca. 1913 house is constructed with Italian Renaissance Revival and Craftsman elements, but has been modified. The building appears to have originally been a one story house with a basement that was raised to add a garage under the first floor. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP2. Single family property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: South elevation, facing north, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1913 house (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

***Resource Name or #:** 670 W MacArthur Boulevard

P1. Other Identifier:

CONTINUATION SHEET

Property Name: 670 W MacArthur Boulevard

(Continued from Primary, Page 1)

The house consists of a hipped roof and lower projecting hipped roof form, with a red brick chimney along the roof. The first floor extends over a ground floor garage. There is a wide staircase with contemporary handrails that leads to a corner porch portico. The portico includes decorative tapered columns that are situated on a wood clad porch wall. The garage door is contemporary, and the windows are contemporary replacement faux multi-light vinyl windows. Neither the side elevations nor the rear elevation was accessible from the street view and so were not documented.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 670 W MacArthur Boulevard, which includes a ca. 1913 house, was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 670 W MacArthur Boulevard, which includes a ca. 1913 house, was thoroughly researched, and it does not appear that it is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1913 house does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Although the ca. 1913 house appears to be designed in the Renaissance Revival style with elements of Craftsman design, the house was not found to be significant under criterion C under this architectural style.

Therefore, *ca. 1913 house within the property does not appear eligible for individual listing on the NRHP under Criterion C.*

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

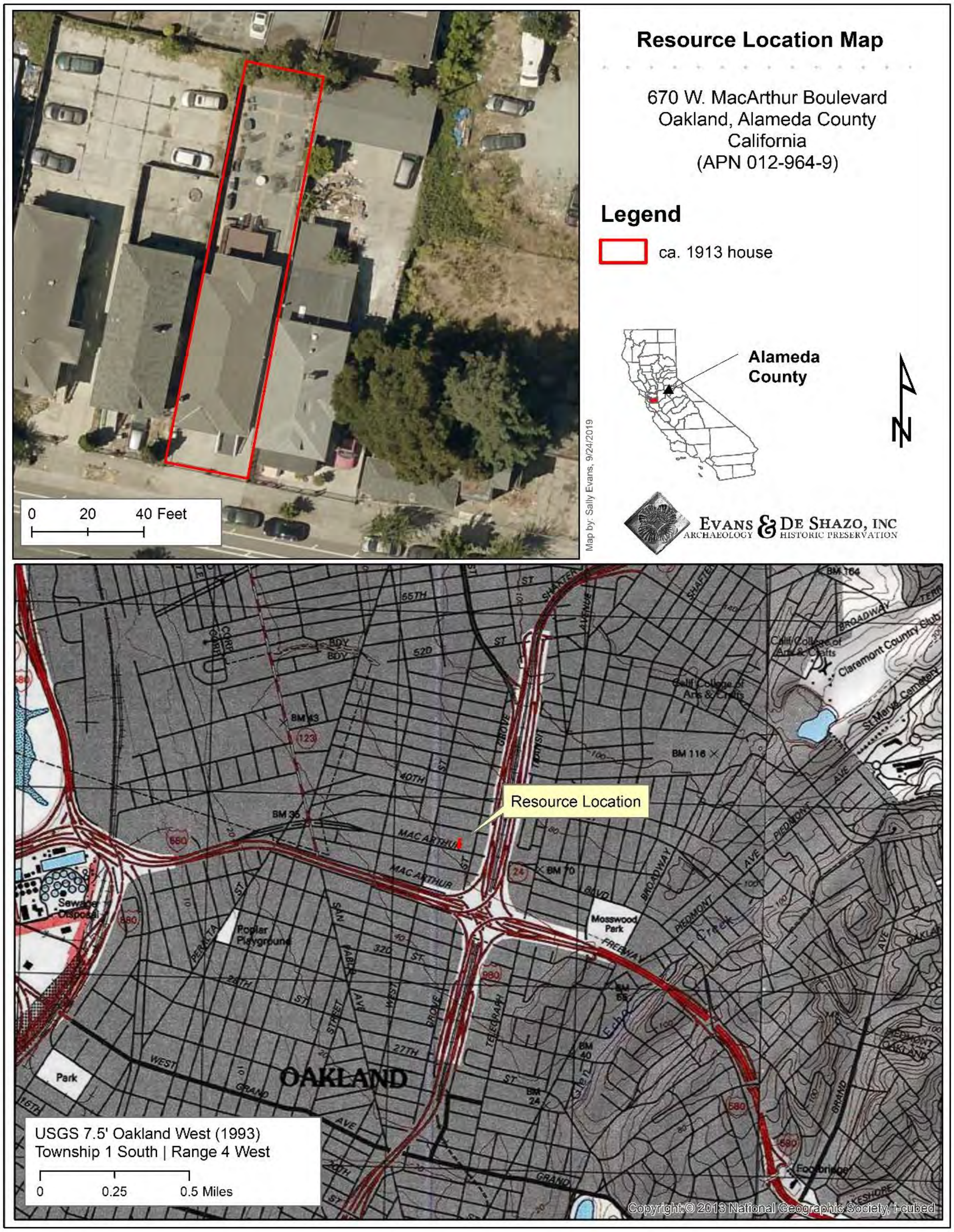
The ca. 1913 house does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, The ca. 1913 house does not appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 4 **of** 4 ***Resource Name or #** 670 W. MacArthur Boulevard

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ▢ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code   Reviewer   Date

 ***Resource Name or #:** 674 W. MacArthur Boulevard

P1. Other Identifier:

***P2. Location:** ▢ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ▢ **of** ▢ **of Sec** ; MD **B.M.**

c. Address 674 W. MacArthur Boulevard City Oakland Zip 94609

d. UTM: Zone 10S, 564270 mE/ 4186927 mN

e. Other Locational Data: The resource is located within a 0.09-acre property at 674 W. MacArthur Boulevard, Oakland, Alameda County, California, within Assessor Parcel Number 012-964-001. The property is situated west of the intersection of W. MacArthur Boulevard and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland. The parcel lies 550-feet west of State Route 24 and approximately 850-feet north of Interstate 580.

***P3a. Description:** The ca. 1906 house is constructed with elements of Italian Renaissance Revival; however, the building has been significantly modified along the primary facade. The building appears to have originally been a one story house with a basement that was raised to add a garage under the first floor. The house consists of a hipped roof and hipped roof dormer. The eaves of the roof consist of decorative trim work and a cornice. The building is clad in a decorative cladding that consists of both narrow boards and wide boards. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP2: Single-Family Property,

***P4. Resources Present:** ☒ Building ▢ Structure ▢ Object ▢ Site ▢ District ▢ Element of District ▢ Other

P5b. Description of Photo: South elevation, facing north, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ▢ Prehistoric ▢ Both
ca. 1906 house (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ▢NONE ☒Location Map ☒Continuation Sheet ▢Building, Structure, and Object Record ▢Archaeological Record ▢District Record ▢Linear Feature Record ▢Milling Station Record ▢Rock Art Record ▢Artifact Record ▢Photograph Record ▢ Other (List):

(Continued from Primary, Page 1)

There is an angled bay window that does not appear to be original to the building, and extends over a narrow ground floor garage that was likely added in the 1920s or 1930s. There is a staircase that leads to a corner porch portico. The portico includes decorative ionic columns that are situated on a wood clad porch wall. The garage door is constructed of wood and appears to be hinged door. The windows on the house are contemporary replacement vinyl windows. The side elevations were partially visible and include a bay window along the east elevation and west elevation. There is a shared driveway along the west façade that allows access to the rear of the building; however, the rear façade (north elevation) was not accessible from the street view.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 674 W. MacArthur Boulevard, which includes a ca. 1906 house, was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 674 W. MacArthur Boulevard, which includes a ca. 1906 house, was thoroughly researched, and it does not appear that the ca. 1906 building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1906 house does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Although the ca. 1906 house appears to be designed with elements of the Italian Renaissance Revival style, it was not found to be significant under criterion C under this architectural style.

Therefore, *ca. 1906 house does not appear eligible for individual listing on the NRHP under Criterion C.*

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1906 house does not appear to be the principal source of information for construction or design techniques that can yield important information.

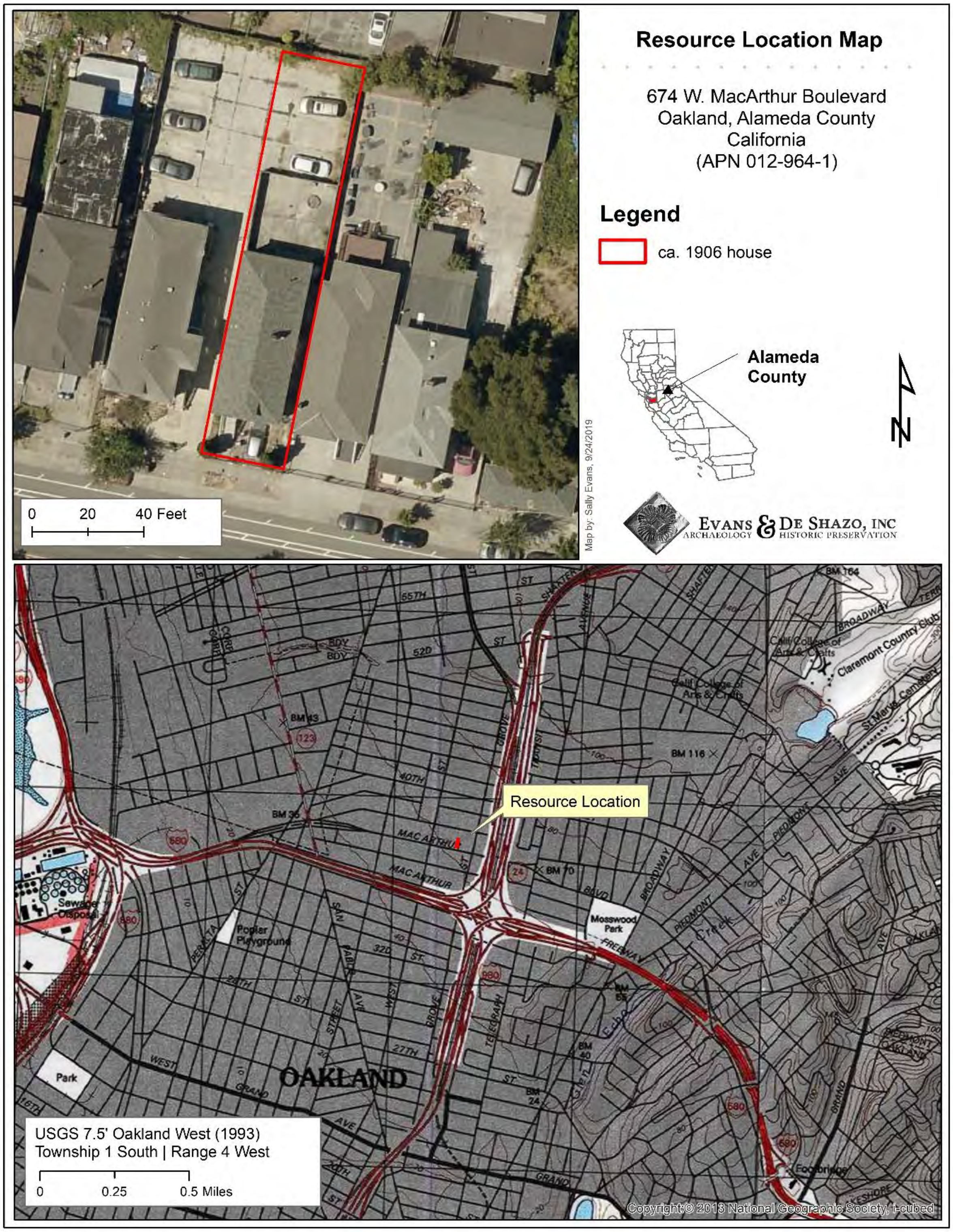
Therefore, none of the built environment resources within the property appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

Page 4 **of** 4 ***Resource Name or #** 674 W. MacArthur Boulevard

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code　　　Reviewer　　　Date

***Resource Name or #:** 678 W. MacArthur Boulevard

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

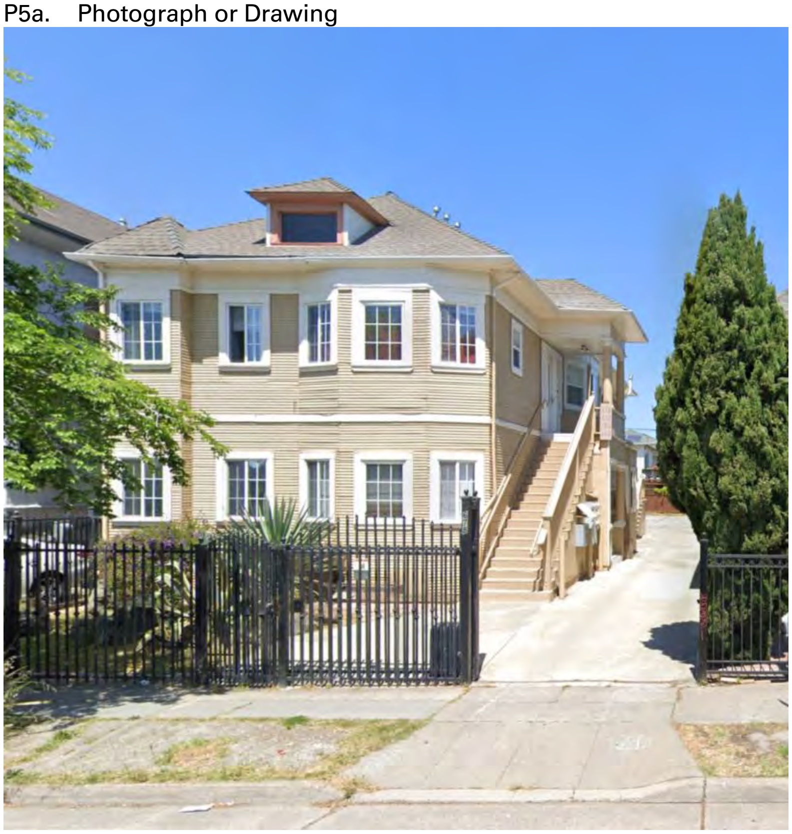
c. Address 678 W. MacArthur Boulevard City Oakland Zip 94609

d. UTM: Zone 10S, 564270 mE/ 4186927 mN

e. Other Locational Data: The resource is located at 678 W. MacArthur Boulevard, Oakland, Alameda County, California, within Assessor Parcel Number 012-964-011. The property is situated west of the intersection of W. MacArthur Boulevard and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland. The property lies 575-feet west of State Route 24 and approximately 850-feet north of Interstate 580.

***P3a. Description:** The ca. 1903 two-units flats building is designed in the Italian Renaissance Revival architectural style. The building consists of rectangular plan with a hipped roof and a center hipped roof dormer. The building is clad in narrow wood clapboards. The primary façade consists of two-story "bay" and a corner that projects slightly beyond the south elevation plain. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing



***P3b. Resource Attributes:** HP3: Multiple Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: South elevation, facing north, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1903 two-unit flats building (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

Access to the units is along the east elevation and includes a "portico" under the stairs to the ground floor entry unit that is support by round porch columns. The second story unit is accessed via what appears to be original wood stairs and handrails with metal handrails added to the exterior wall of the building and along the balustrade railing that lead to an extended hipped roof porch that is supported by round porch columns. The windows along the visible elevations appear to all be vinyl replacement windows.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 678 W. MacArthur Boulevard, which includes a ca. 1903 two-units flats building, was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the *ca. 1903 two-units flats building* is *not eligible for listing on the NRHP under Criterion A.*

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the ca. 1903 two-units flats building was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1903 two-units flats building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Although the ca. 1903 two-units flats building appears to be designed in the Italian Renaissance Revival style, it was not found to be significant under criterion C under this architectural style.

Therefore, the ca. 1903 two-units flats building does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

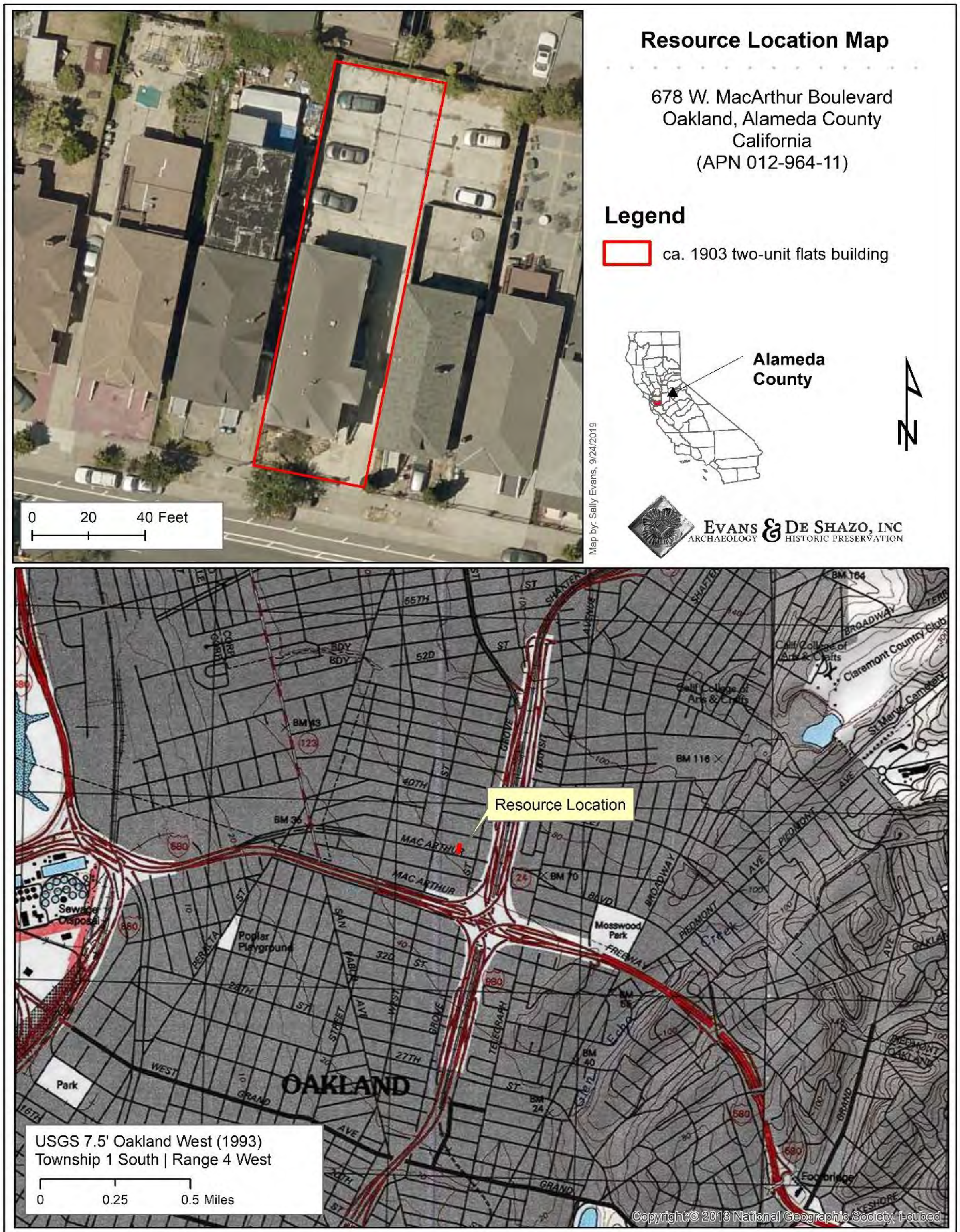
The ca. 1903 two-units flats building does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1903 two-units flats building does not appear eligible for listing on the NRHP under Criterion D.

State of California □ Natural Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 4 **of** 4 ***Resource Name or #** 678 W. MacArthur Boulevard

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 of 3 ***Resource Name or #:** 669 W. MacArthur Boulevard

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

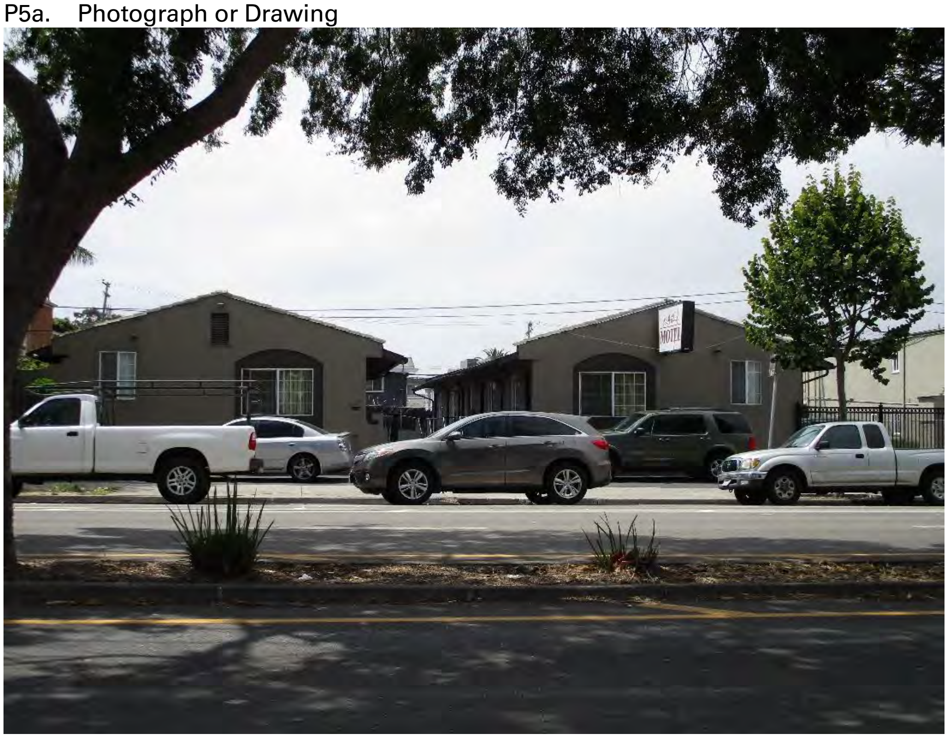
c. Address 669 W. MacArthur Boulevard City Oakland Zip 94609

d. UTM: Zone 10S, 564244 mE/ 4186879 mN

e. Other Locational Data: The resource is located within a 0.22-acre property at 669 W. MacArthur Boulevard, Oakland, Alameda County, California, within Assessor Parcel Number 012-965-035. The property is situated southwest of the intersection of W. MacArthur Boulevard and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland. The parcel lies 575-feet west of State Route 24 and approximately 650-feet north of Interstate 580.

***P3a. Description:** The ca. 1914 motel is designed as “attached” cottages (which consists of two forms that are documented and evaluated as one form as they are connected in design and use). The style of the ca. 1914 motel, is unclear as it has been significantly modified since it was converted to a motel (date unknown; though likely 1990s or 2000s). As such, it is unclear what was the original style of the cottage (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing



***P3b. Resource Attributes:** HP5; Hotel/Motel

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: North elevation, facing south, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1914 motel (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

CONTINUATION SHEET

(Continued from Primary, Page 1)

The ca. 1914 motel consists of two rectangular forms, of which one is slightly longer, as it has two additional rental units. The two identical forms, which are constructed in a rectangular plan with a front gable-low pitched roof along the primary façade (north elevation). The current motel is clad in stucco with Spanish clay tile copping along the roof eaves. It appears that the original windows within the forms have all been replaced with a combination of sliding vinyl windows and faux multi-light windows. Access to the motel rooms is along the interior facades of the two forms via concrete stairs with iron rails.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 669 W. MacArthur Boulevard, which includes a ca. 1914 motel, was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the ca. 1914 motel was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1914 motel does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The property that includes a ca. 1914 motel are forms that severe a specific function, and was not found to be associated within any particular architectural style due to significant changes to the motel in recent years. As such, it was not found to be significant under criterion C under any style.

Therefore, the *ca. 1914 motel does not appear eligible for individual listing on the NRHP under Criterion C.*

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

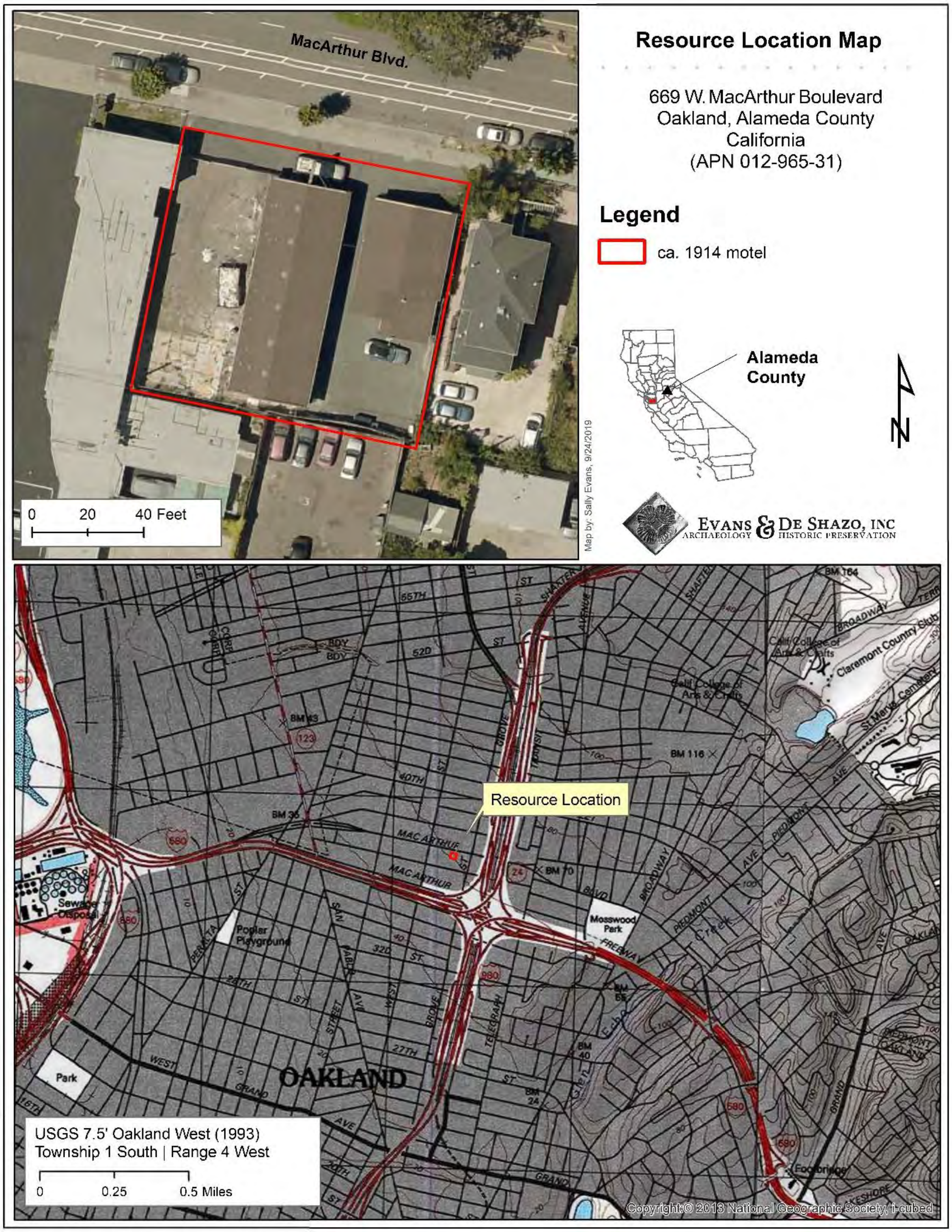
The ca. 1914 motel does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1914 motel does not appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 3 **of** 3 ***Resource Name or #** 669 W. MacArthur Boulevard

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code   Reviewer   Date

***Resource Name or #:** 665 W. MacArthur Boulevard

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

c. Address 665 W. MacArthur Boulevard City Oakland Zip 94609

d. UTM: Zone 10S, 564259 mE/ 4186876 mN

e. Other Locational Data: The resource is located within a 0.04-acre property at 665 W. MacArthur Boulevard, Oakland, Alameda County, California, within Assessor Parcel Number 012-965-032. The property is situated southwest of the intersection of W. MacArthur Boulevard and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland. The parcel lies 550-feet west of State Route 24 and approximately 650-feet north of Interstate 580.

***P3a. Description:** The ca. 1900 two unit flats building was originally designed in the Italian Renaissance Revival architectural style. The building is a two-story, rectangular plan with a hipped roof. It appears that the building was originally constructed as a single-family home, but was modified in ca. 1911 to created two flats. The building consists of a hipped roof projecting form along the northwest corner of the main block of the building. The building is clad in stucco, which was likely applied over original wood cladding; however, the wood cladding may have been removed. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP3. Multiple Family Property:

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: North elevation, facing south, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1900 two unit flats building (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

There are two units, of which one is accessed via a primary façade staircase that is situated away from the primary façade plain and appears to be constructed of wood with wood handrails and leads to a contemporary front door with decorative bracketed door header that appears to be original. The second unit is accessed via the east facade ground floor and is accessed along a contemporary gabled porch along the northeast corner of the building. There are decorative details along the building that include decorative roof cornice trim. All the windows are replacement vinyl windows.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The ca. 1900 two unit flats building was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the ca. 1900 two unit flats building *is not eligible for listing on the NRHP under Criterion A.*

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 665 W. MacArthur Boulevard, which includes a ca. 1900 two unit flats building, was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1900 two unit flats building within the property does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1900 two unit flats building was originally designed in the Italian Renaissance Revival style, but was not found to be significant under criterion C under this style.

Therefore, ca. 1900 two unit flats building within the property does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1900 two unit flats building within the property does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1900 two unit flats building *does appear eligible for listing on the NRHP under Criterion D.*

State of California □ Natural Resources Agency Primary #

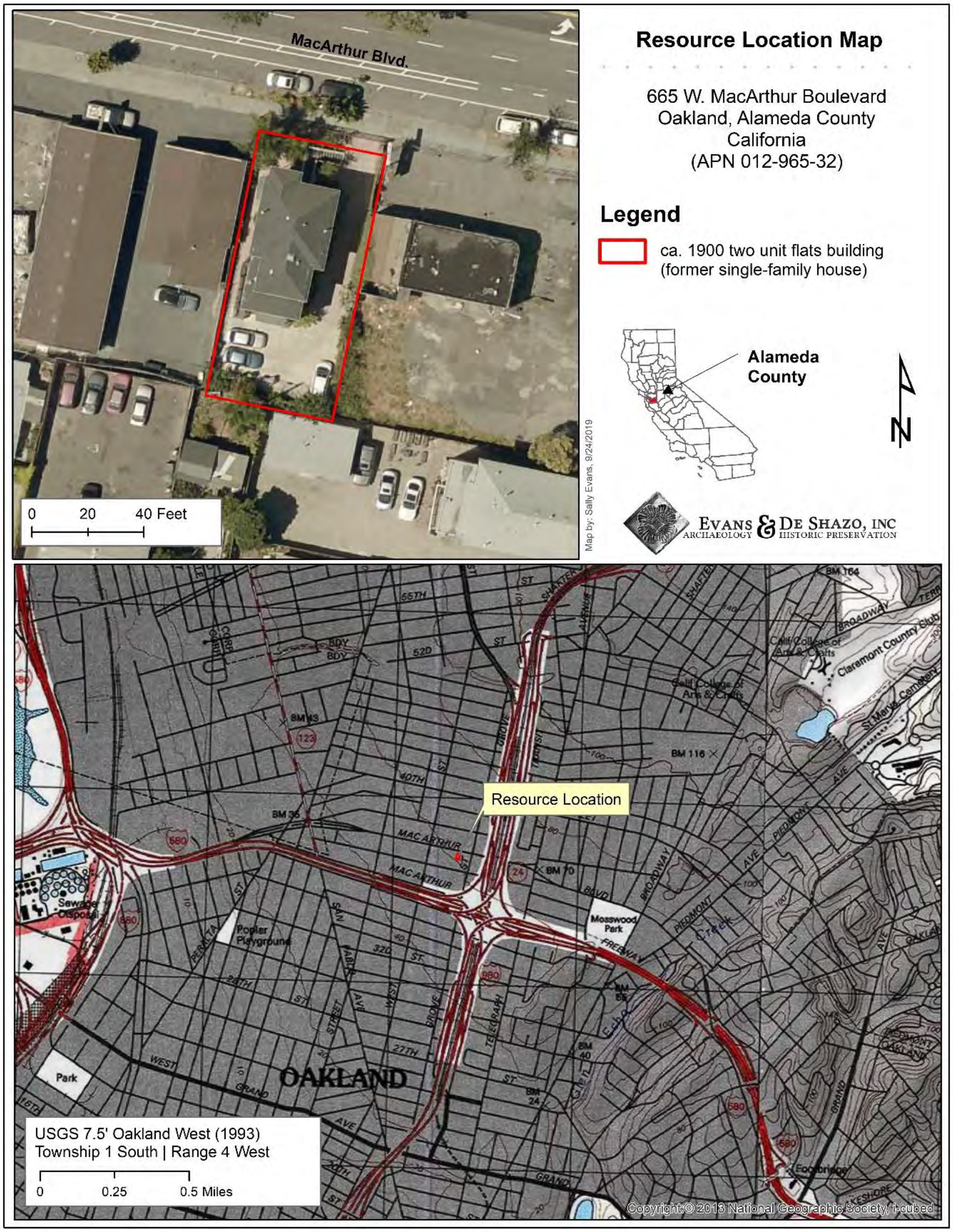
DEPARTMENT OF PARKS AND RECREATION HRI#

LOCATION MAP

Trinomial

Page 4 **of** 4 ***Resource Name or #** 665 W. MacArthur Boulevard

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ▯ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code   Reviewer   Date

Page 1 **of** 4   ***Resource Name or #:** 3725 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** ▯ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ▯ **of** ▯ **of Sec** ; MD **B.M.**

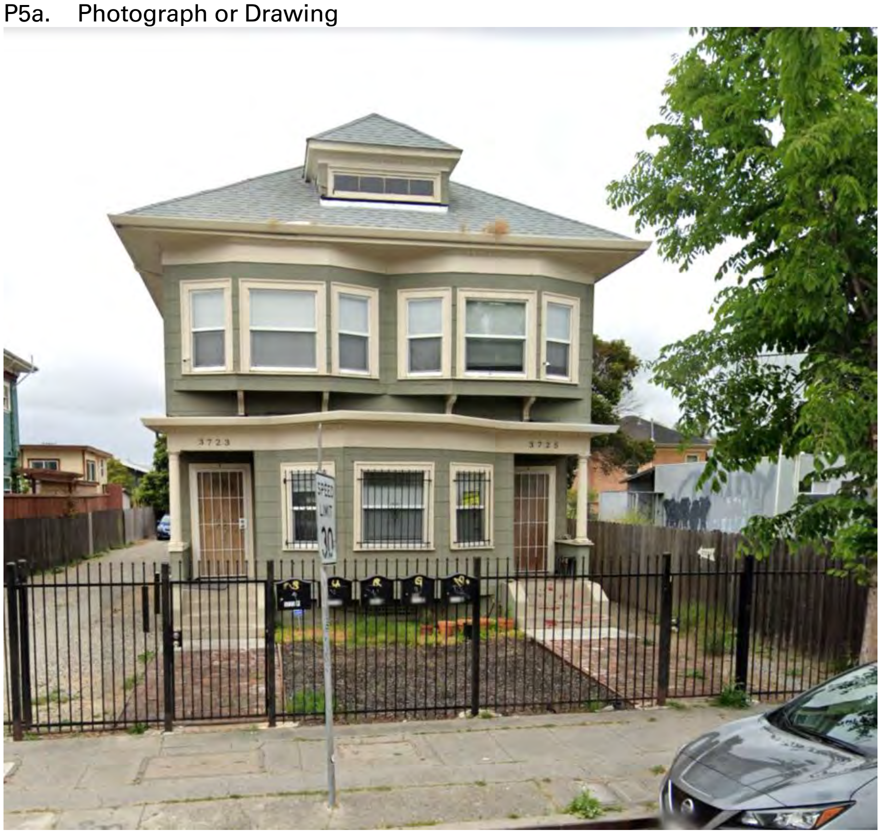
c. Address 3725 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564289 mE/ 4186845 mN

e. Other Locational Data: The resource is located within a 0.07-acre property at 3725 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number 012-965-003. The property is situated southwest of the intersection of W. MacArthur Boulevard and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland. The parcel lies 200-feet west of State Route 24 and approximately 900-feet north of Interstate 580.

***P3a. Description:** The property consists of a ca. 1906 three unit apartment building and a ca. 1910 garage. The ca. 1906 three unit apartment building is designed with elements of Italian Renaissance Revival architectural style. The two-story building is rectangular in plan with a symmetrical design. There is hipped roof clad in asphalt shingles and a centered hipped dormer. The ground floor consists of a centered, angled bay window that is flanked by two porch porticos supported with round columns. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing



***P3b. Resource Attributes:** HP3. Multiple Family Property, Assessory; HP4. Ancillary Building;

***P4. Resources Present:** ☒ Building ▯ Structure ▯ Object ▯ Site ▯ District ▯ Element of District ▯ Other

P5b. Description of Photo: East elevation, facing west, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ▯ Prehistoric ▯ Both
ca. 1906 three unit apartment building and ca. 1910 garage (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ▯NONE ☒Location Map ☒Continuation Sheet ▯Building, Structure, and Object Record ▯Archaeological Record ▯District Record ▯Linear Feature Record ▯Milling Station Record ▯Rock Art Record ▯Artifact Record ▯Photograph Record ▯ Other (List):

(Continued from Primary, Page 1)

There are concrete stairs that lead to identical recessed front entries that consist of what appears to contemporary doors with metal screens. All the original wood windows have been removed from the primary façade (north elevation), as well as the east and west elevations, which are visible from the street view, and replaced with double-hung vinyl windows.

There is a **ca. 1910 garage** that is located along the rear of the building; however, it was not accessible or visible during the survey, but was viewed online via Google maps, dated May 2019.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 3725 Martin Luther King Jr. Way, which includes a ca. 1906 three unit apartment building and ca. 1910 garage**,** was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 3725 Martin Luther King Jr. Way, which includes ca. 1906 three unit apartment building and ca. 1910 garage, was thoroughly researched, and it does not appear that the Property is associated with any persons that are important to local, California, or national history.

Therefore, the property that includes the ca. 1906 three unit apartment building and ca. 1910 garage do not *appear eligible for listing on the NRHP under Criterion B.*

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Although the ca. 1906 three unit apartment building appears to be designed in the Italian Renaissance Revival style, it was not found to be significant under criterion C for this style. In addition the ca. 1910 garage is not associated with a known style.

Therefore, the ca. 1906 three unit apartment building and ca. 1910 garage do not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important

information, such as how local availability of materials or construction expertise affected the evolution of local building development.

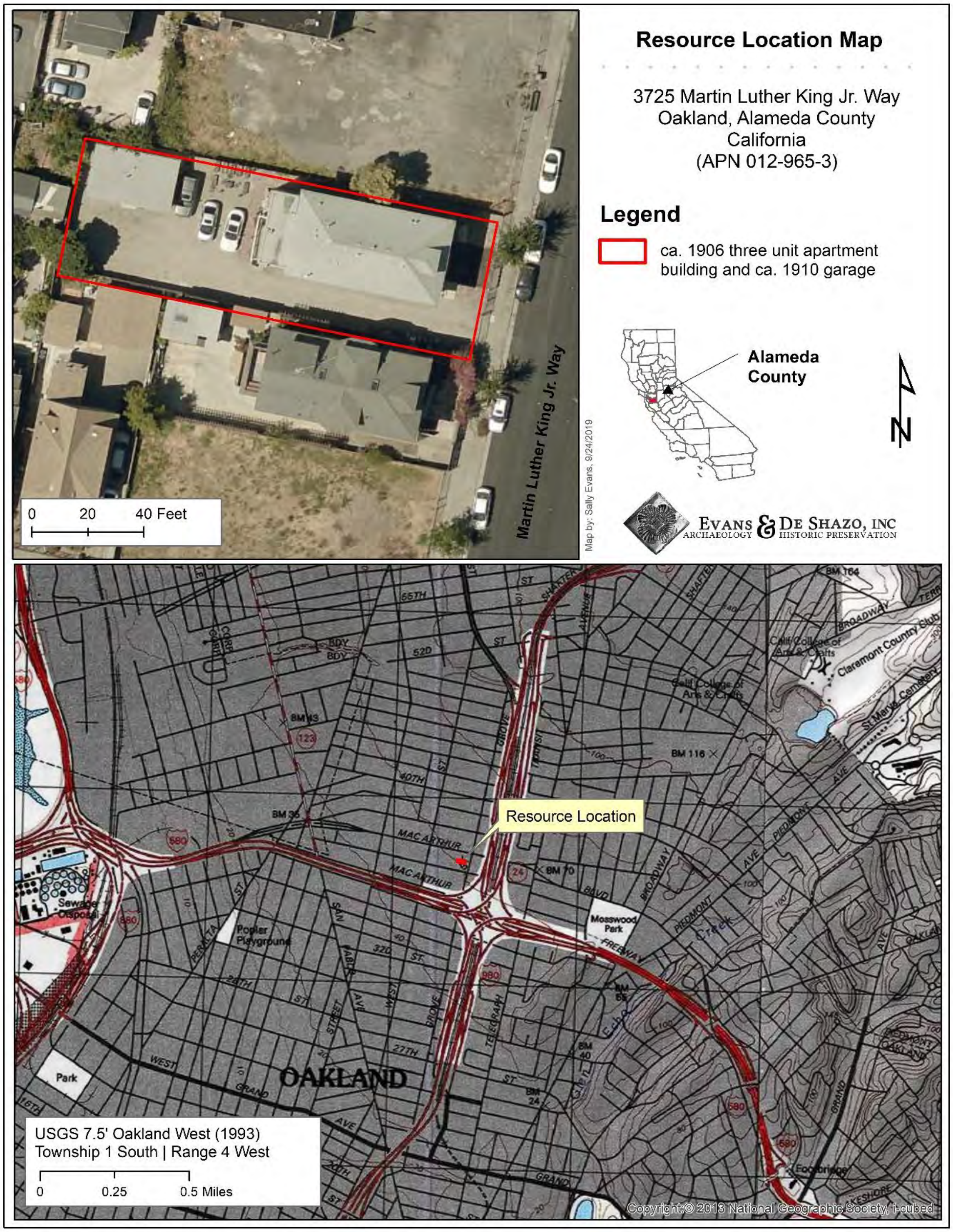
The ca. 1906 three unit apartment building and ca. 1910 garage within the property do not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1906 three unit apartment building and ca. 1910 garage do not appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 4 **of** 4 ***Resource Name or #** 3725 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

***Resource Name or #:** 657 W. MacArthur Boulevard

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

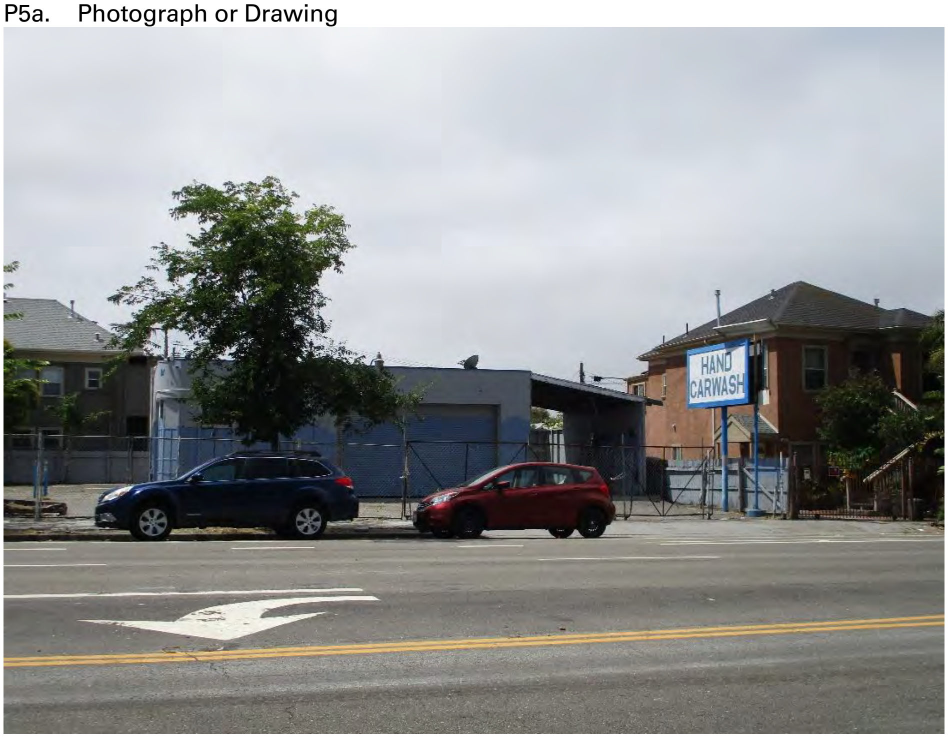
c. Address 657 W. MacArthur Boulevard City Oakland Zip 94609

d. UTM: Zone 10S , 564286 mE/ 4186876 mN

e. Other Locational Data: : The resource is located within a 0.28-acre property at 657 W. MacArthur Boulevard, Oakland, Alameda County, California, within Assessor Parcel Number 012-965-001. The property is situated at the southwest corner of the intersection of West MacArthur Boulevard and Martin Luther King Jr. Way in the Longfellow neighborhood of north Oakland. The parcel lies 500-feet west of State Route 24 and approximately 650-feet north of Interstate 580.

***P3a. Description:** The ca. 1912 gas station building. The original design of the ca. 1912 gas station is difficult to confirm, as it has been modified over the years to suit the needs of the business that occupied the building; therefore, it is categorized as Vernacular. The building is rectangular in plan and consists of a rounded façade along the northeast corner where the primary front entrance is located and three service bays along the north elevation. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing



***P3b. Resource Attributes:** HP6; Commercial Building

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: North elevation, facing south, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1912 gas station (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

There is also a shed addition along the west façade that was added to serve as the space for a "hand carwash". The east elevation consists of transom windows over bathroom doors. The gas station pumps and additional structures that may have been constructed over the gas station islands have been removed.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 657 W. MacArthur Boulevard that includes a ca. 1912 gas stationwas not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the ca. 1912 gas station building does not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 657 W. MacArthur Boulevard that includes the ca. 1912 gas station building was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1912 gas station building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1912 gas station is a building that severed a particular function, and as such is categorized as a Vernacular form (Figure 33); however, it is likely that the building had elements of a specific style that are no longer present, which defined the building. As such, it was not found to be significant under criterion C under any architectural style.

Therefore, the ca. 1912 gas station building does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

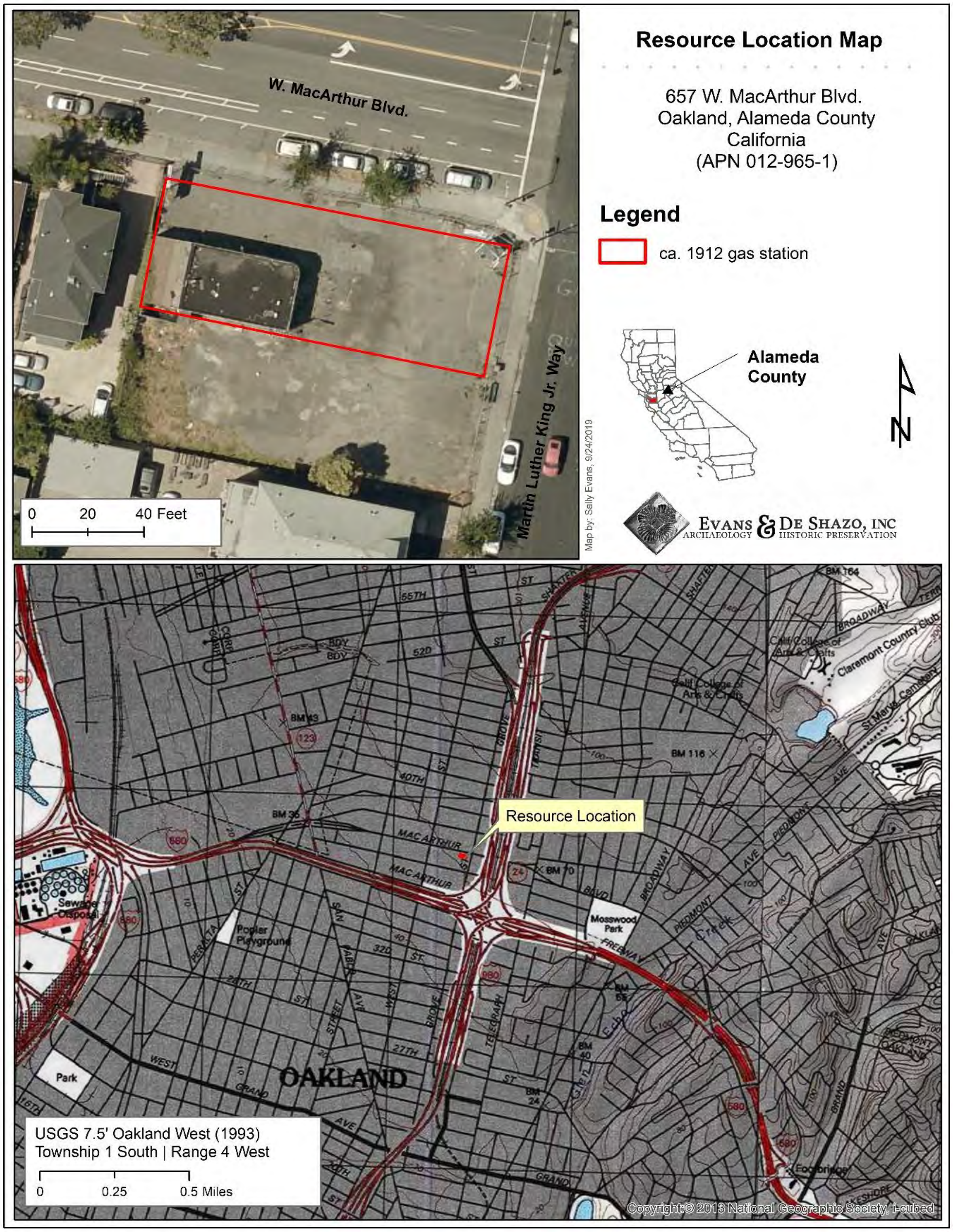
The ca. 1912 gas station does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1912 gas station does not appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 3 **of** 3 ***Resource Name or #** 657 W. MacArthur Boulevard

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California □ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

***Resource Name or #:** 3720 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** □ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; □ **of** □ **of Sec** ; MD **B.M.**

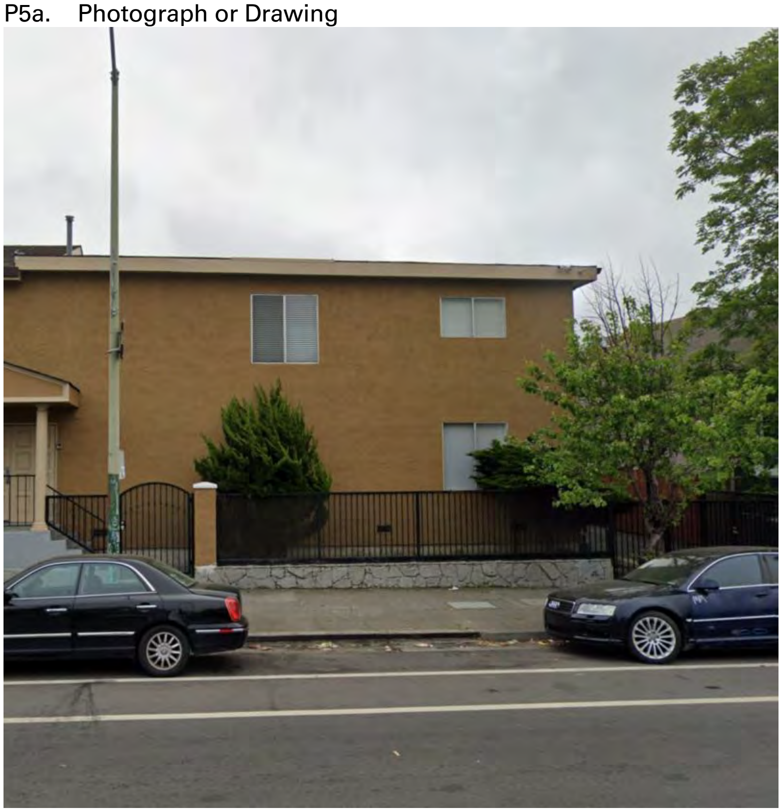
c. Address 3720 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564336 mE/ 4186830 mN

e. Other Locational Data: The resource is located within a 0.14-acre property at 3720 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number (APN) 012-966-028. The property is situated southeast of the intersection of MacArthur Boulevard and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland. The parcel lies 180-feet west of State Route 24 and approximately 900-feet north of Interstate 580.

***P3a. Description:** The ca. 1910 commercial building, which is now merged with the adjacent ca. 1965 church to the north within a separate parcel that was documented on separate DPR 523 forms (625 MacArthur Boulevard within APN 012-966-29-1). Before being merged with the adjacent building, the ca. 1910 commercial building originally included two store fronts. The building appears to have been "merged" with the ca. 1965 church when the church building was constructed. The ca. 1910 commercial building currently consists of a stucco exterior and has been modified significantly including removal of the original fenestrations. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing



***P3b. Resource Attributes:** HP6; Commercial Building

***P4. Resources Present:** ☒ Building □ Structure □ Object □ Site □ District □ Element of District □ Other

P5b. Description of Photo: West elevation, facing east, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic □ Prehistoric □ Both
ca. 1910 commercial building (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** □NONE ☒Location Map ☒Continuation Sheet □Building, Structure, and Object Record □Archaeological Record □District Record □Linear Feature Record □Milling Station Record □Rock Art Record □Artifact Record □Photograph Record □ Other (List):

(Continued from Primary, Page 1)

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 3720 Martin Luther King Jr. Way, which includes a ca. 1910 commercial building**,** was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 3720 Martin Luther King Jr. Way, which includes a ca. 1910 commercial building, which was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1910 commercial building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1910 commercial building was originally association with storefront commercial architecture, but no longer retains any known architectural style. As such, it was not found to be significant under criterion C.

Therefore, ca. 1910 commercial building does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1910 commercial building does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1910 commercial building does not appear eligible for listing on the NRHP under Criterion D.

State of California ⎕ Natural Resources Agency | Primary #

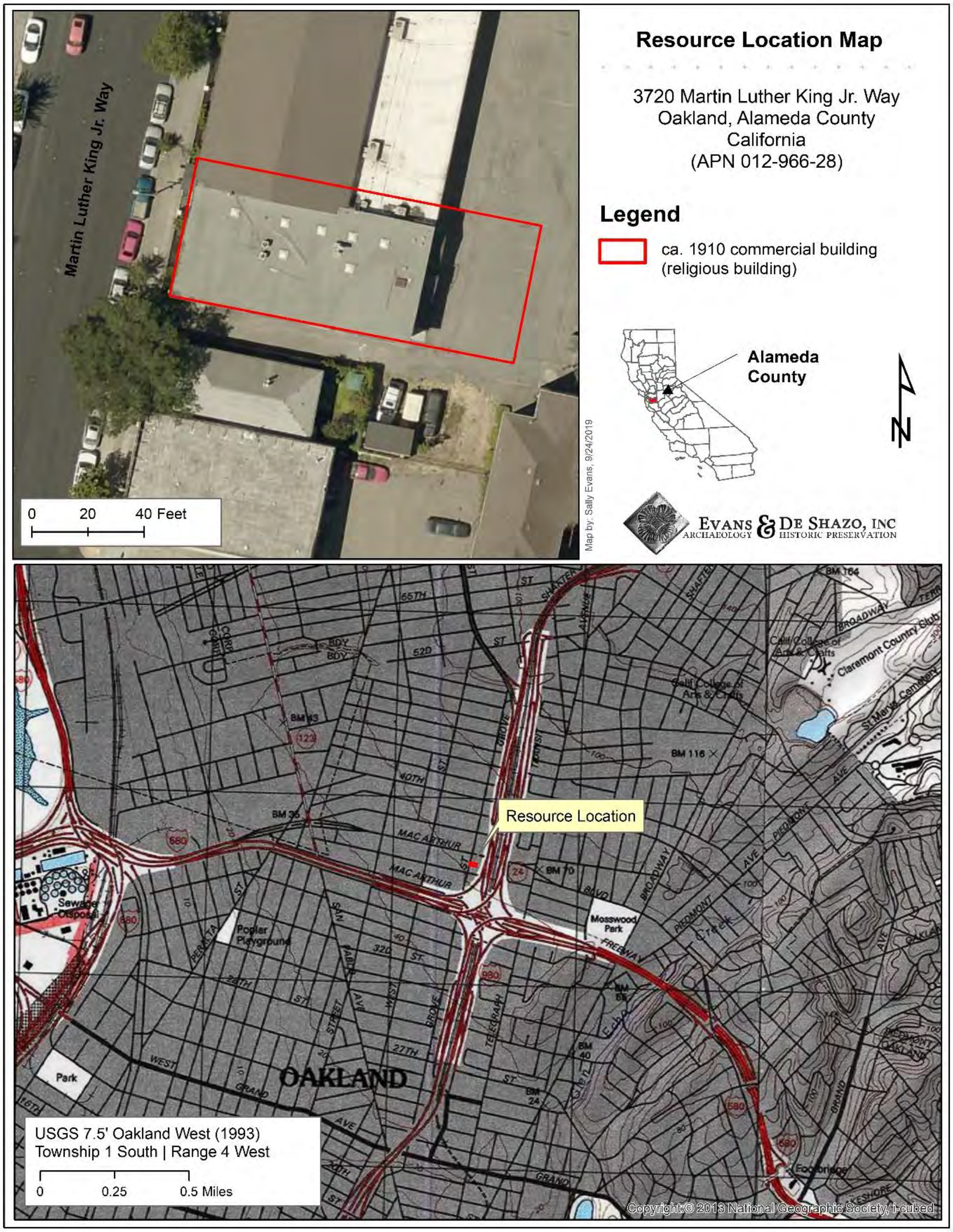
DEPARTMENT OF PARKS AND RECREATION | HRI#

LOCATION MAP

Trinomial

Page 3 **of** 3 ***Resource Name or #** 3720 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California □ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** 625 W. MacArthur Boulevard

P1. Other Identifier:

***P2. Location:** □ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; □ **of** □ **of Sec** ; MD **B.M.**

c. Address 625 W. MacArthur Boulevard City Oakland Zip 94609

d. UTM: Zone 10S, 564286 mE/ 4186876 mN

e. Other Locational Data: The resource is located within a 0.27-acre property at 625 W. MacArthur Boulevard, Oakland, Alameda County, California, within Assessor Parcel Number 012-966-029-001. The property is situated at the west corner of the intersection of West MacArthur Boulevard and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland. The parcel lies 400-feet west of State Route 24 and approximately 650-feet north of Interstate 580.

***P3a. Description:** The ca. 1965 religious building is designed in the Mid-Century Modern architectural style. The building consists of a dominate front gable room plan with a side gable addition. The building is clad in stucco. There is a is a moderate pitch roof and a narrow vertical element clad in stucco and stone with an over-sized cross placed on top that is highly visible along W. MacArthur Boulevard. Along the north elevation there is a tall portico entry porch supported by round columns and two sets of double doors that are the main entry to the church. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:**
HP16: Religious Building

***P4. Resources Present:**
☒ Building □ Structure □ Object □ Site □ District □ Element of District □ Other

P5b. Description of Photo:
North elevation, facing south, 07/29/2019

***P6. Date Constructed/Age and Source:**
☒ Historic □ Prehistoric □ Both
ca. 1965 religious building (City of Oakland)

***P7. Owner and Address:**
Name withheld by owner

***P8. Recorded by:**
Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** □NONE ☒Location Map ☒Continuation Sheet □Building, Structure, and Object Record □Archaeological Record □District Record □Linear Feature Record □Milling Station Record □Rock Art Record □Artifact Record □Photograph Record □ Other (List):

(Continued from Primary, Page 1)

Above the portico are a series of narrow windows, which are also present along the rectangular addition and along the west elevation. There are letters that are positioned along the north elevation exterior wall that state “Good Samaritan Cathedral Church of God”.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 625 W. MacArthur Boulevard, which includes a ca. 1965 religious building**,** was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property that includes the ca. 1965 religious building is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 625 W. MacArthur Boulevard that includes the ca. 1965 religious building, was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1910 commercial building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1965 religious building appears to be designed in the Mid-Century Modern style; however, it was not found to be significant under criterion C for this style.

Therefore, the ca. 1965 religious building does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

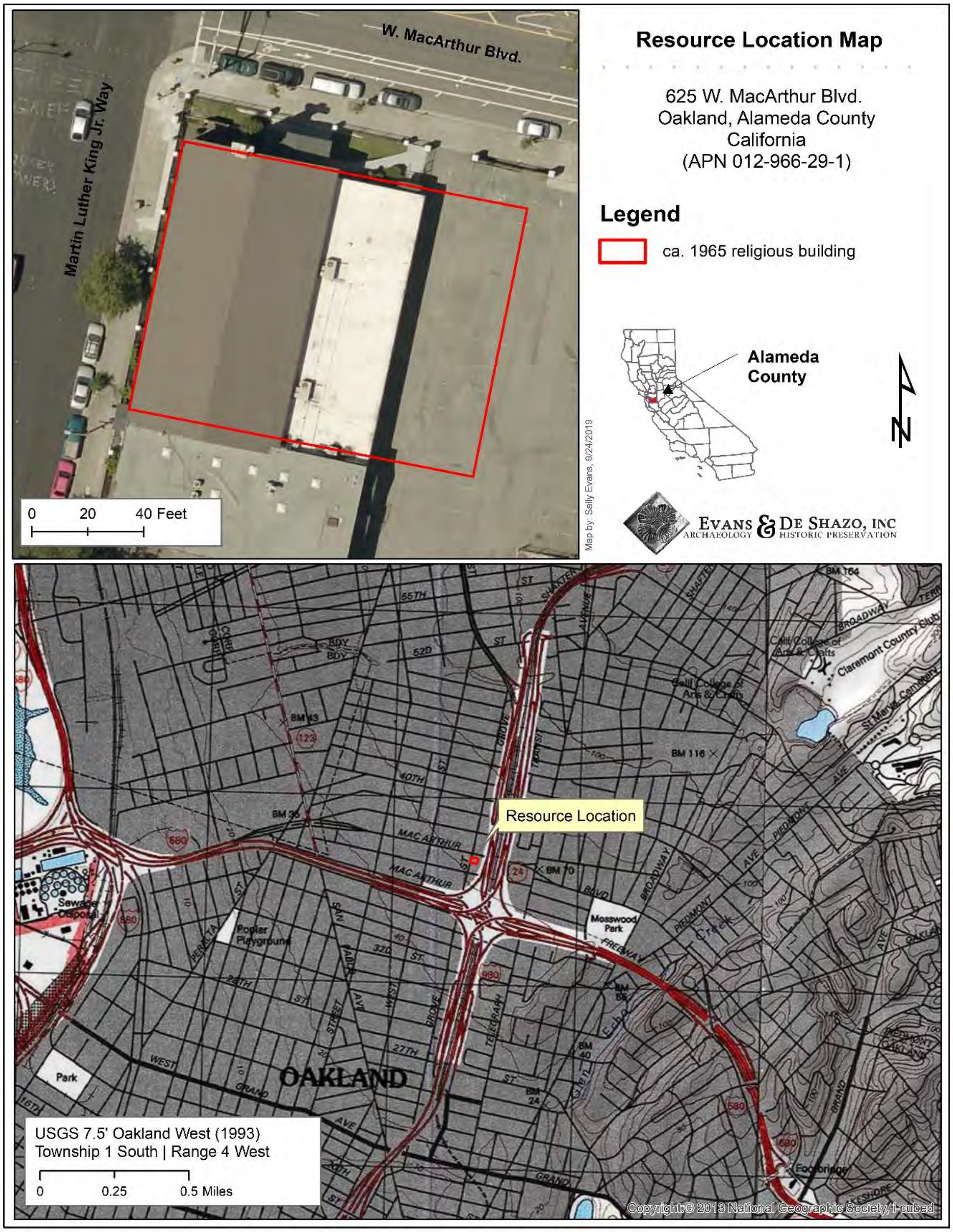
The ca. 1965 religious building does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1965 religious building does not appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 3 **of** 3 ***Resource Name or #** 625 W. MacArthur Boulevard

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code   Reviewer   Date

***Resource Name or #:** 3806 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

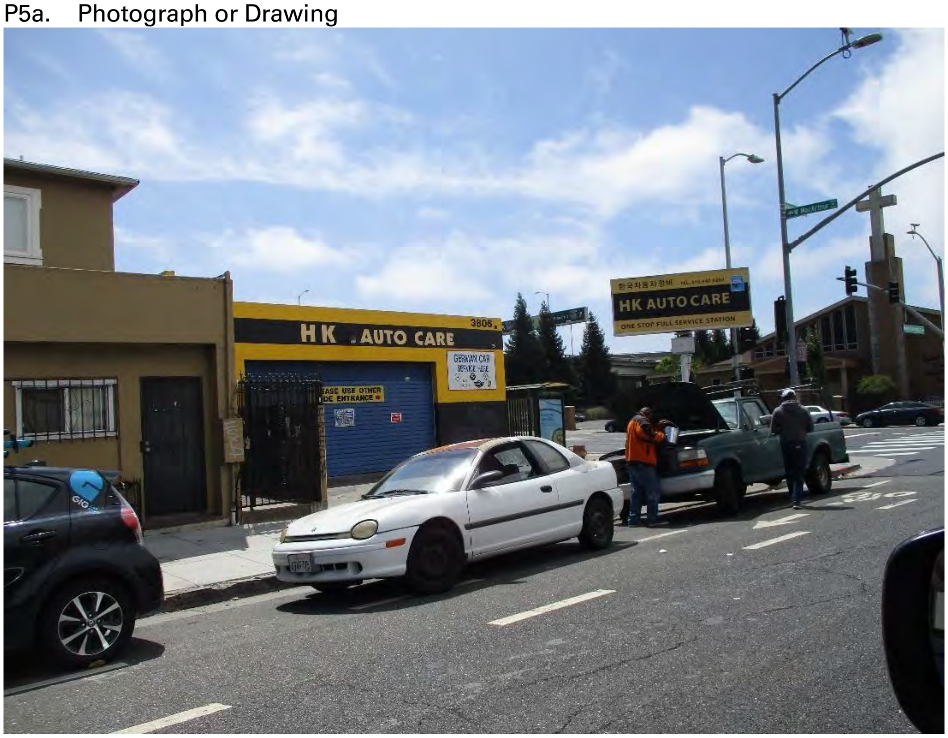
c. Address 3806 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564349 mE/ 4186910 mN

e. Other Locational Data: The resource is located within a 0.02-acre property at 3806 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number 012-967-022. The property is situated northeast of the intersection of MacArthur Boulevard and Martin Luther King Jr. Way in the Longfellow neighborhood of northern Oakland. The parcel lies 180-feet west of State Route 24 and approximately 1,000-feet north of Interstate 580.

***P3a. Description:** The ca. 1970 commercial building does not appear to have a design, but is constructed as a form. The building is rectangular in plan and consists of a flat roof. The building is concrete block construction. The primary entrance to the building is along the west elevation, which includes a small side entry door and a roll-up metal service door. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing



***P3b. Resource Attributes:** HP6; Commercial Building

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: West elevation, facing south/southeast, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1970 commercial building (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation:** Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

There is also a service bay along the east elevation that allows access via a rear entry way parking lot. There is a sign at the northeast corner of W. Mac Arthur Boulevard and Martin Luther King Jr. Way that is on a metal post that states "HK AUTOCARE" and also includes Korean words as well.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 3806 Martin Luther King Jr. Way, which includes the ca. 1970 commercial building**,** was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the ca. 1970 commercial building is not eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 3806 Martin Luther King Jr. Way, which includes the ca. 1970 commercial building, was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1970 commercial building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1970 commercial building is not designed or constructed in any known style or form, as such it was not found to be significant under criterion C.

Therefore, the ca. 1970 commercial building does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1970 commercial building does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1970 commercial building does not appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency Primary #

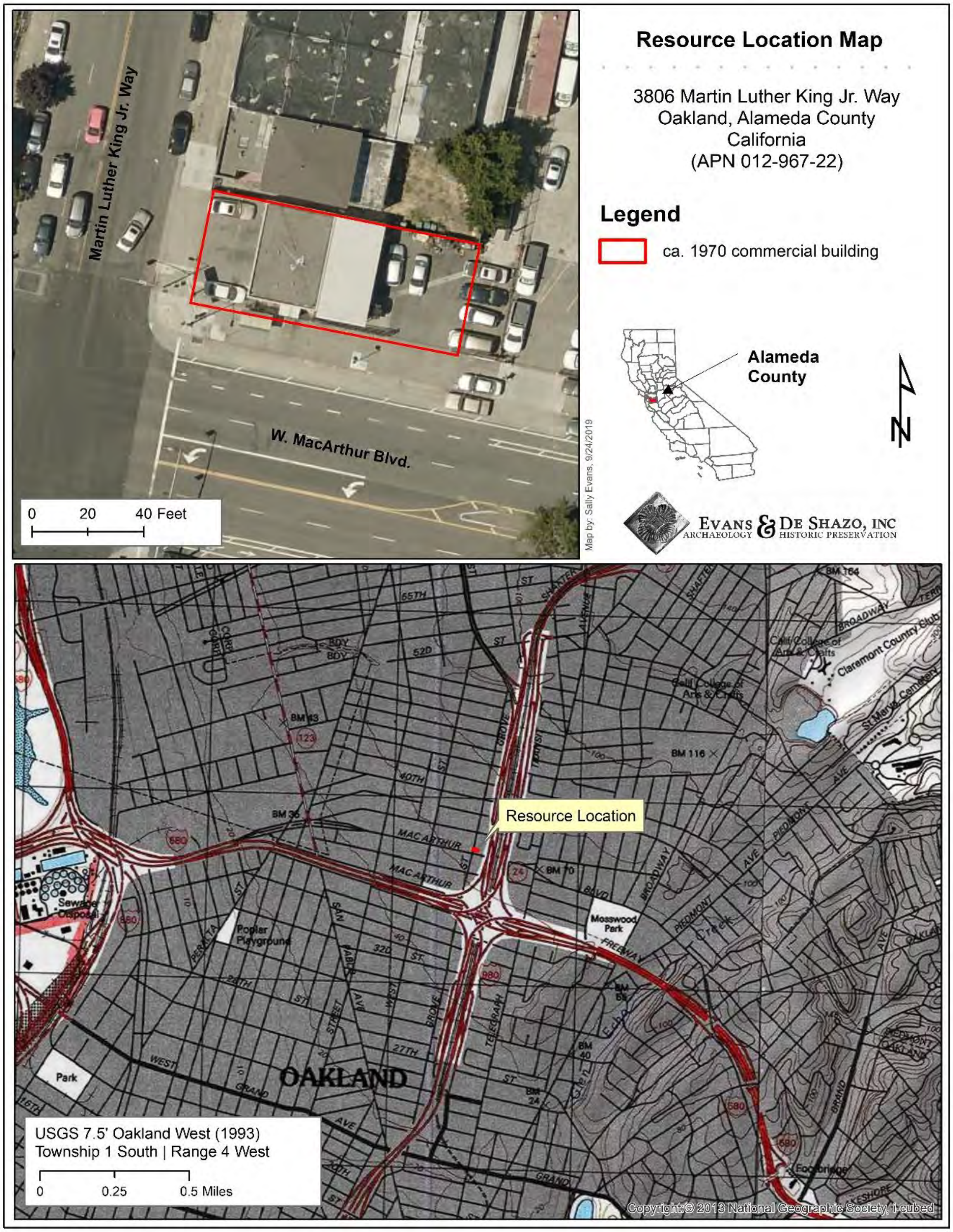
DEPARTMENT OF PARKS AND RECREATION HRI#

LOCATION MAP

Trinomial

Page 3 **of** 3 ***Resource Name or #** 3806 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #______________________
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

***Resource Name or #:** 3810 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

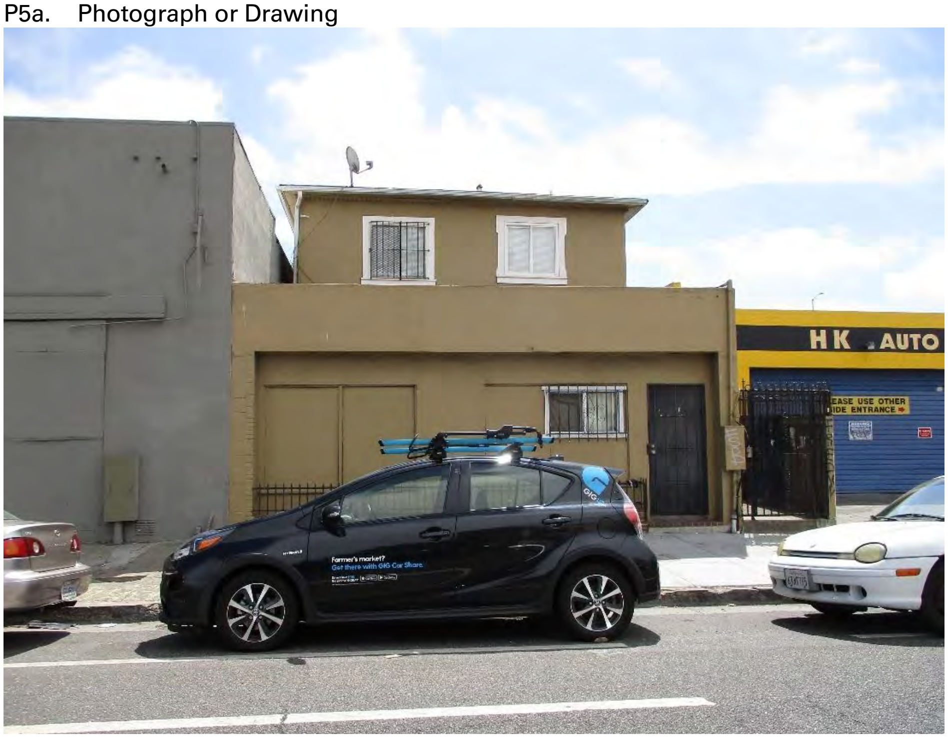
c. Address 3810 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564352 mE/ 4186921 mN

e. Other Locational Data: The resource is located within a 0.04-acre property at 3810 Martin Luther King Jr. Way, Oakalnd, Alameda County, California, within Assessor Parcel Number 012-967-023. The property is situated in the Longfellow neighborhood of northern Oakland, 180-feet west of State Route 24 and approximately 1,000-feet north of Interstate 580.

***P3a. Description:** The building consists of the original ca. 1910 house (rear) and a ca. 1970 commercial addition that is attached to the primary façade (west elevation) of the house. The original two story house has been significantly modified, and it appears that the original features and fenestrations of the house have been removed and replaced with contemporary elements that include a stucco façade and vinyl sliding windows within non-original window openings. The only remaining feature of the original ca. 1910 house is the rectangular plan form and the hipped roof. The ca. 1970 commercial addition along the primary façade is attached to the ca. 1910 house along the original west façade of the house. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing



***P3b. Resource Attributes:** HP2: Single-Family Property; HP6: Commercial Building

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: West elevation, facing east, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1910 house and ca. 1970 commercial addition (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

The one-story commercial addition consists of a side entry door and storefront windows that have been covered over with plywood. One of the original storefronts has a smaller window opening inserted with a vinyl replacement window.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 3810 Martin Luther King Jr. Way that includes the ca. 1910 house with a ca. 1970 commercial addition**,** was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the property does not appear eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 3810 Martin Luther King Jr. Way that includes the ca. 1910 house with a ca. 1970 commercial addition, was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1910 house with the ca. 1970 commercial addition does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Although it is likely that the original ca. 1910 house was associated with a particular architectural style when it was constructed, the ca. 1910 house and the ca. 1970 commercial addition, which has been placed directly in front and attached to the house, are not associated with any known style.

Therefore, the ca. 1910 house with the ca. 1970 commercial addition does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

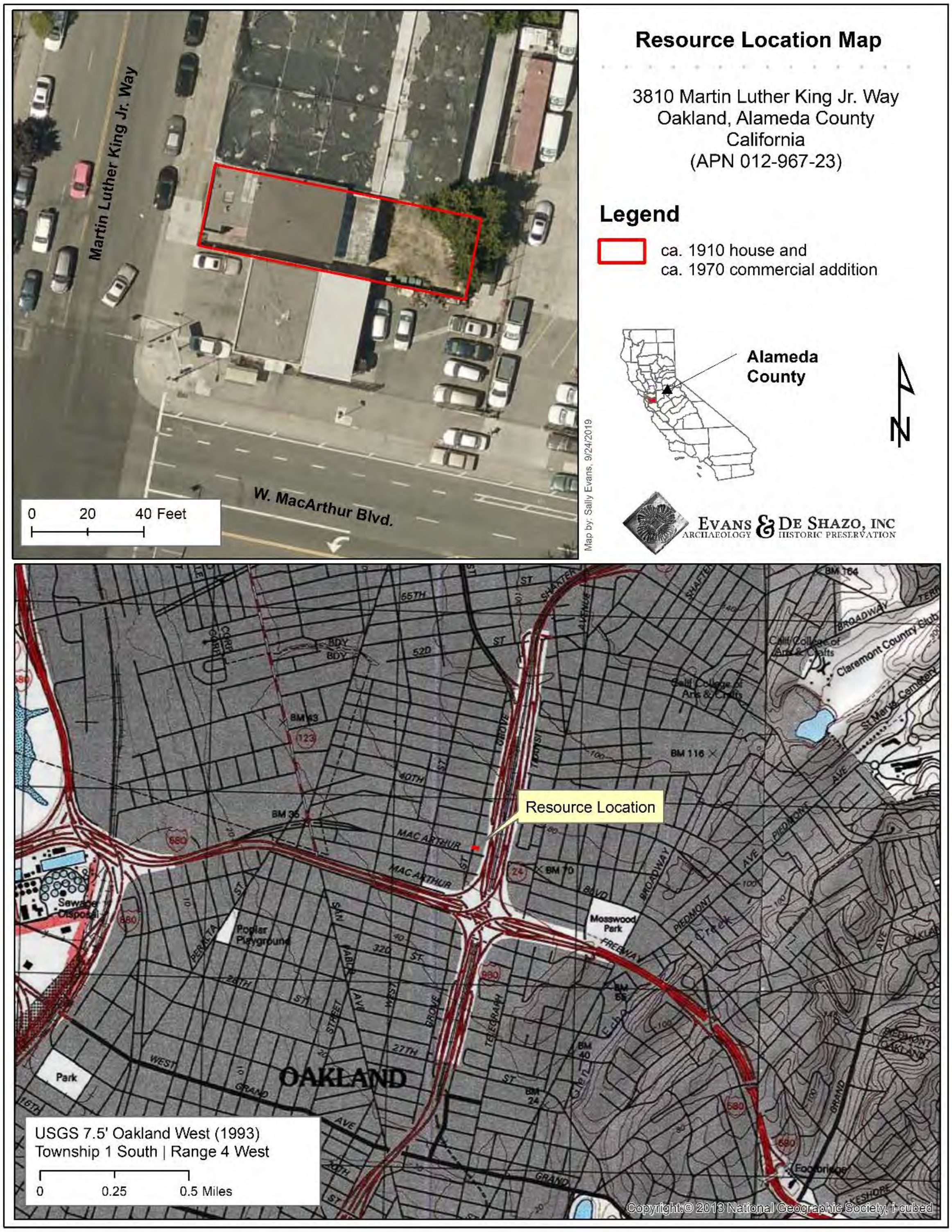
Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development. The ca. 1910 house with the ca. 1970 commercial addition does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1910 house with the ca. 1970 commercial addition does not appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 3 **of** 3 ***Resource Name or #** 3810 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California □ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

***Resource Name or #:** 3820 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** □ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; □ **of** □ **of Sec** ; MD **B.M.**

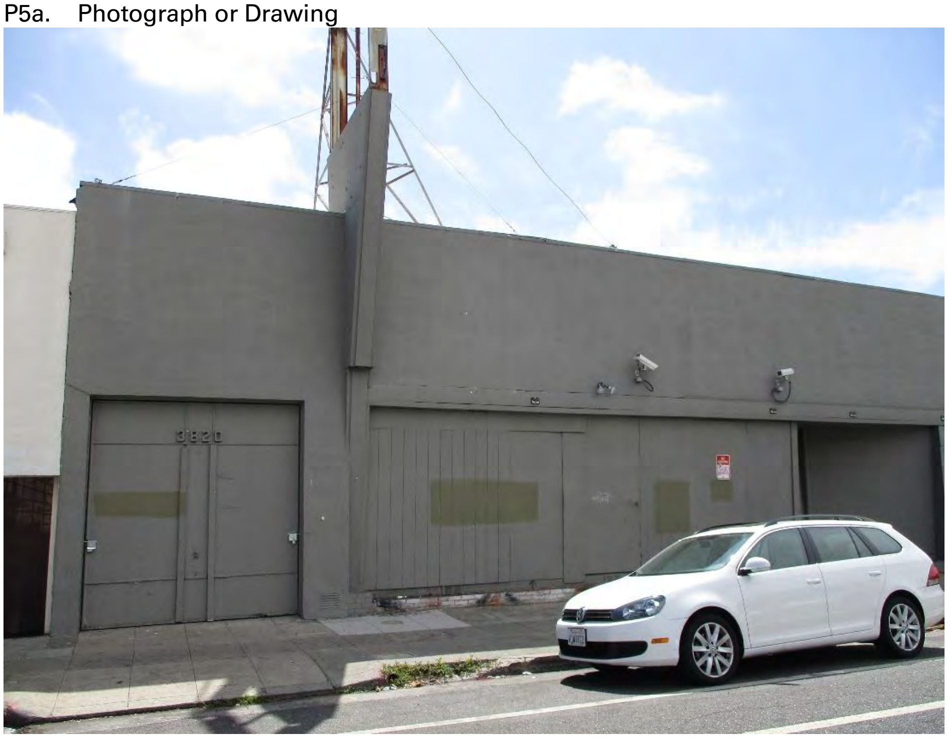
c. Address 3820 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564357 mE/ 4186935 mN

e. Other Locational Data: The resource is located within a 0.13-acre property at 3820 Martin Luther King Jr. Way, Oakland, Alameda County, California within Assessor Parcel Number 012-967-024-001. The property is situated in the Longfellow neighborhood of northern Oakland, 180-feet west of State Route 24 and approximately 1,000-feet north of Interstate 580.

***P3a. Description:** The ca. 1930 commercial building in designed with elements of storefront commercial style. The building is rectangular in plan and consists of a flat roof. The building is clad in stucco and consists of an angled side-entry door and what appears to be boarded up storefront picture windows. There is also a double door along the northwest corner of the building, which likely allowed for deliveries to the former furniture store. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing



***P3b. Resource Attributes:** HP6; Commercial Building

***P4. Resources Present:** ☒ Building □ Structure □ Object □ Site □ District □ Element of District □ Other

P5b. Description of Photo: West elevation, facing east, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic □ Prehistoric □ Both
ca. 1930 commercial building (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation:** Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** □NONE ☒Location Map ☒Continuation Sheet □Building, Structure, and Object Record □Archaeological Record □District Record □Linear Feature Record □Milling Station Record □Rock Art Record □Artifact Record □Photograph Record □ Other (List):

(Continued from Primary, Page 1)

The building also consists of the frame of original signage that has a Mid-Century modern design style and is located along the storefront cornice and roof; however, the original sign details have been removed.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The ca. 1930 commercial building was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the ca. 1930 commercial building does not appear eligible for listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the ca. 1930 commercial building was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1930 commercial building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1930 commercial building is a commercial building with elements of storefront commercial design; however, it was not found to be significant under criterion C for this style.

Therefore, the ca. 1930 commercial building does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1930 commercial building does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1930 commercial building does not appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency | Primary #

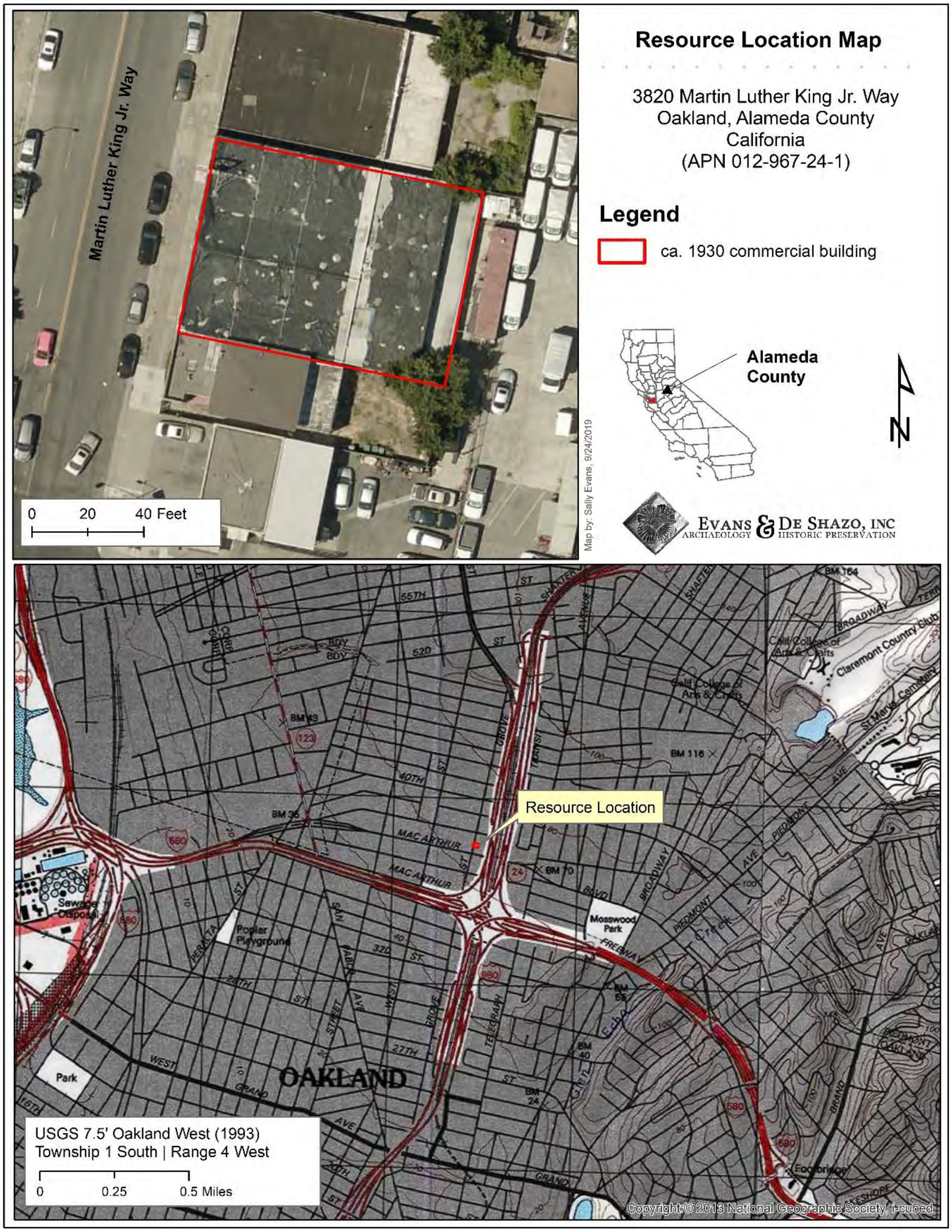
DEPARTMENT OF PARKS AND RECREATION | HRI#

LOCATION MAP

Trinomial

Page 3 of 3 | *Resource Name or # 3820 Martin Luther King Jr. Way

*Map Name: Oakland West, Calif. | *Scale: 1:24,000 | *Date of map: 1993



State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # ____________
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

  ***Resource Name or #:** 3834 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

c. Address 3834 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564358 mE/ 4186955 mN

e. Other Locational Data: The resource is located within a 0.13-acre property at 3834 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number 012-967-026. The property is situated in the Longfellow neighborhood of northern Oakland, approximately 180-feet west of State Route 24 and approximately 1,000-feet north of Interstate 580.

***P3a. Description:** The ca. 1930 commercial building is constructed as a commercial building form. It is rectangular in plan and consists a flat roof. The building is clad in stucco and the primary façade has been modified. There are two recessed bays with narrow horizontal windows. The two bays flank a double-door front entry that serves at the main entrance to the building. Above the doors is a sign that states "Christian Bible Way Church Pastor Dorthy McGhee 9832 Martin Luther King Jr. Way". There is also an angled side entry along the southwest elevation that consists of a modified storefront with aluminum plate framed windows and doors (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP6; Commercial Building

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: West elevation, facing east, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1930 commercial building (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 3834 Martin Luther King Jr. Way that includes the ca. 1930 commercial building**,** was not found to be associated with any event that made a significant contribution to local, state, or National history.

*Therefo*re, the *ca. 1930 commercial building does not appear eligible for* listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 3834 Martin Luther King Jr. Way that includes the ca. 1930 commercial building was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1930 commercial building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1930 commercial building is a commercial building with elements of storefront commercial design; however, it was not found to be significant under criterion C for this style.

Therefore, the ca. 1930 commercial building does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

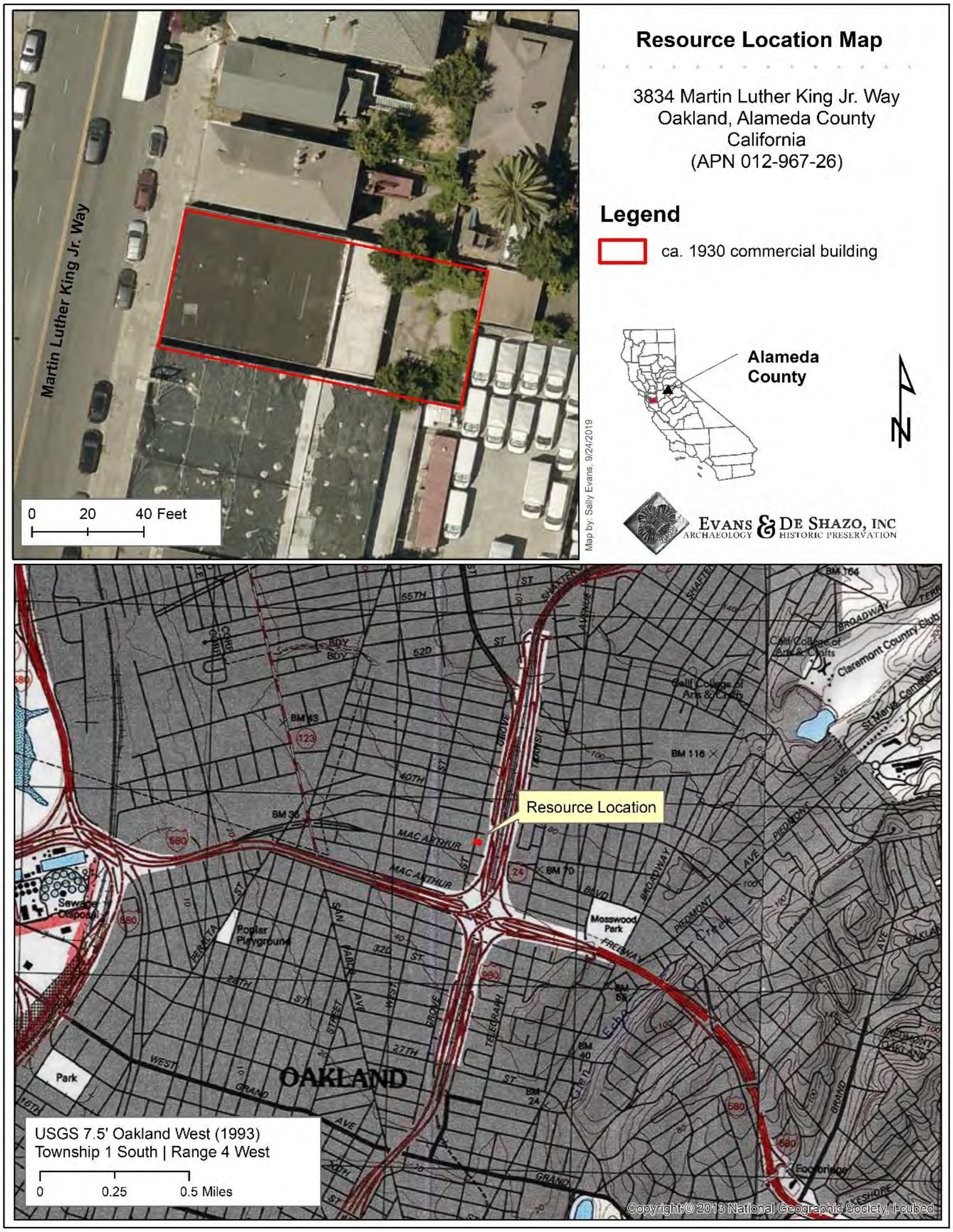
The ca. 1930 commercial building does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1930 commercial building does not appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 3 **of** 3 ***Resource Name or #** 3834 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** 3838 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; **of** **of Sec** ; MD **B.M.**

c. Address 3838 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564359 mE/ 4186967 mN

e. Other Locational Data: The resource is located within a 0.06-acre property at 3838 Martin Luther King Jr. Way (Assessor's Parcel Number 012-967-027). The property is situated approximately 180-feet west of Highway 24 and approximately 1,000-feet north of Interstate 580.

***P3a. Description:** The ca. 1906 two unit flat building is designed in the Italian Renaissance Revival architectural style. The two-story building is rectangular in plan with a symmetrical designed. There is hipped roof clad in asphalt shingles and a centered hipped dormer. The building is clad in narrow clapboard. The ground floor consists of a centered, angled bay window that is flanked by two porch porticos supported with square, tapered columns. There are what appear to be original wood stairs and handrails that lead to identical recessed front entries that consist of what appears to contemporary doors behind metal security screens. Above the bay is decorative trim work that includes dentil and also brackets at the intersection of the ground and second story and along the roof cornice. All the original double-hung wood windows are present along the west elevation (primary façade) and along the north and south facades. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP3: Multiple family property

***P4. Resources Present:** ☒ Building Structure Object Site District Element of District Other

P5b. Description of Photo: West elevation, facing east, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic Prehistoric Both
ca. 1906 two unit flat building (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** NONE ☒Location Map ☒Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List):

(Continued from Primary, Page 1)

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 3838 Martin Luther King Jr. Way that includes a ca. 1906 two unit flat building was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the ca. 1906 two unit flat building does not appear eligible for *listing on the NRHP under Criterion A.*

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 3838 Martin Luther King Jr. Way that includes a ca. 1906 two unit flat building was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1906 two unit flat building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1906 two unit flat building is designed in the Italian Renaissance Revival; however, it was not found to be significant under criterion C for this style.

Therefore, the ca. 1906 two unit flat build does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

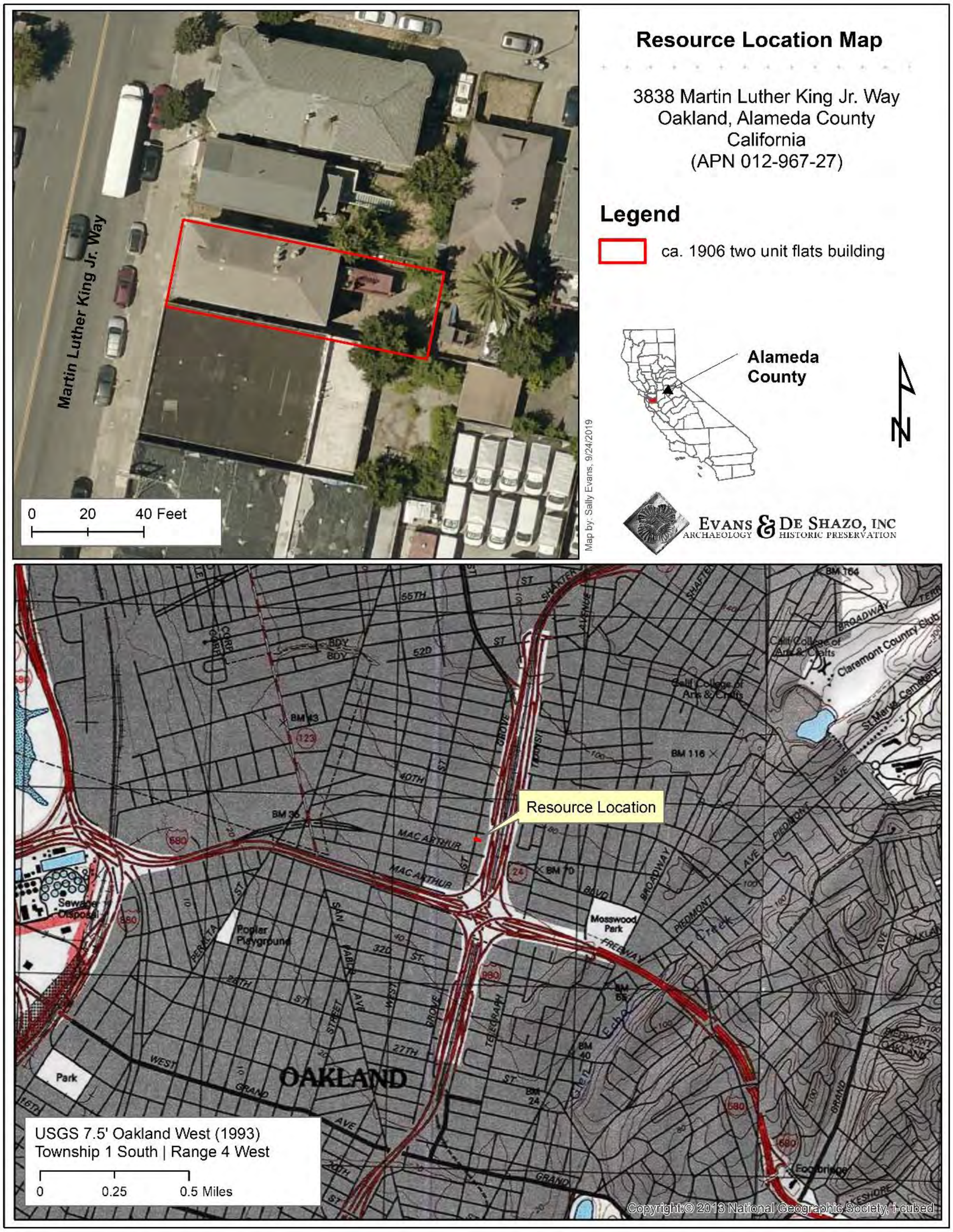
The ca. 1906 two unit flat building does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1906 two unit flat building does not appear eligible for listing on the NRHP under Criterion D.

LOCATION MAP

Page 3 **of** 3 ***Resource Name or #** 3838 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 of 3 ***Resource Name or #:** 3840 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; ☐ **of** ☐ **of Sec** ; MD **B.M.**

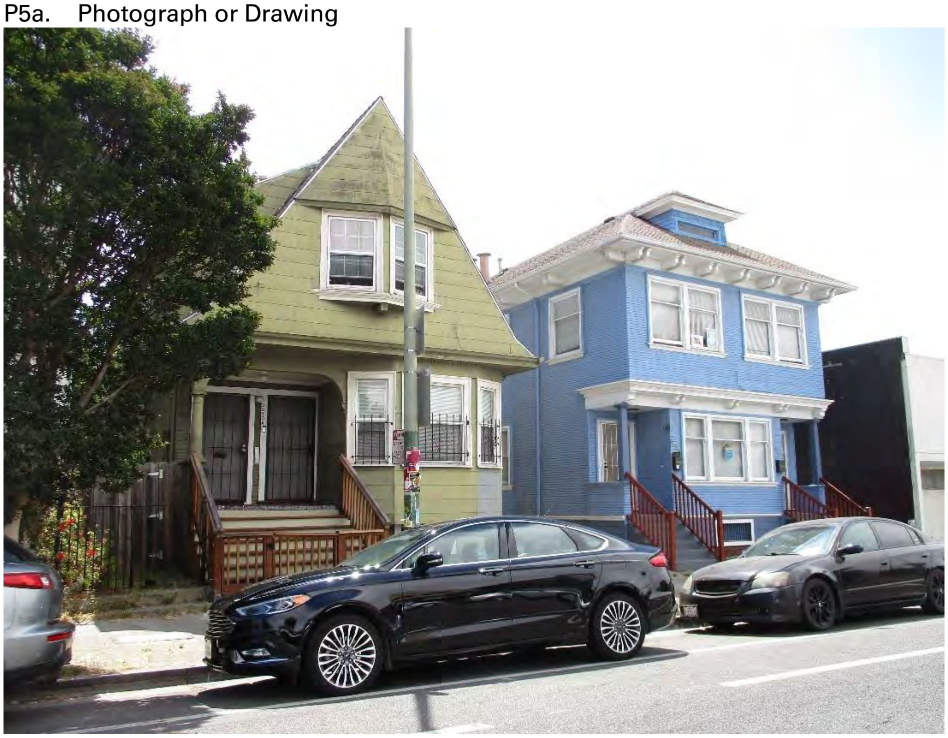
c. Address 3840 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564359 mE/ 4186977 mN

e. Other Locational Data: The resource is located within a 0.06-acre property at 3807 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number 012-967-028. The property is situated in the Longfellow neighborhood of northern Oakland, approximately 180-feet west of State Route 24 and approximately 1,000-feet north of Interstate 580.

***P3a. Description:** The ca. 1906 two-unit building is constructed in the "High-Peaked" Dutch Colonial Revival architectural style. The building has a rectangular mass that is is situated under a single gable roof with laterally projecting shed roof dormers that extend from the roof ridge. The roof is clad in asphalt shingles and the building appears to be clad in either a metal or a plastic cladding material. The west elevation (primary façade) consists of a wide corner portico at the northwest elevation, which is supported by round columns. There are wide stairs that lead to the porch portico, which consists of rounded arch openings. There are two main entry doors to the flats along the porch. The doors are contemporary replacement doors, and both doors are located behind metal security screens. There is an angled bay window along the ground floor that consists of replacement vinyl windows and is clad with metal bars. (See Continuation Sheet, Page 2)\

P5a. Photograph or Drawing



***P3b. Resource Attributes:** HP3: Multiple Family Property

***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other

P5b. Description of Photo: West elevation, facing east,07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both
ca. 1906 two-unit building (City of Oakland)

***P7. Owner and Address:**
Name withheld by owner

***P8. Recorded by:**
Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***P10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

(Continued from Primary, Page 1)

The second story consists of two “prow windows” with two vinyl faux multi-light double-hung windows. There appears to be a basement, as there is a large grate along the lower portion of the west elevation.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 3840 Martin Luther King Jr. Way that includes a ca. 1906 two unit flat building**,** was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the *ca. 1906 two unit flat building does not* appear *eligible for* listing on the NRHP under Criterion A.

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 3840 Martin Luther King Jr. Way that includes the ca. 1906 two unit flat building, was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1906 two unit flat building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1906 two unit flat building is designed in the “High-Peaked” Dutch Colonial Revival; however, it was not found to be significant under criterion C for this style.

Therefore, the ca. 1906 two unit flat building does not appear eligible for individual listing on the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1906 two unit flat building does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, ca. 1906 two unit flat building does not appear eligible for listing on the NRHP under Criterion D.

State of California Natural Resources Agency Primary #

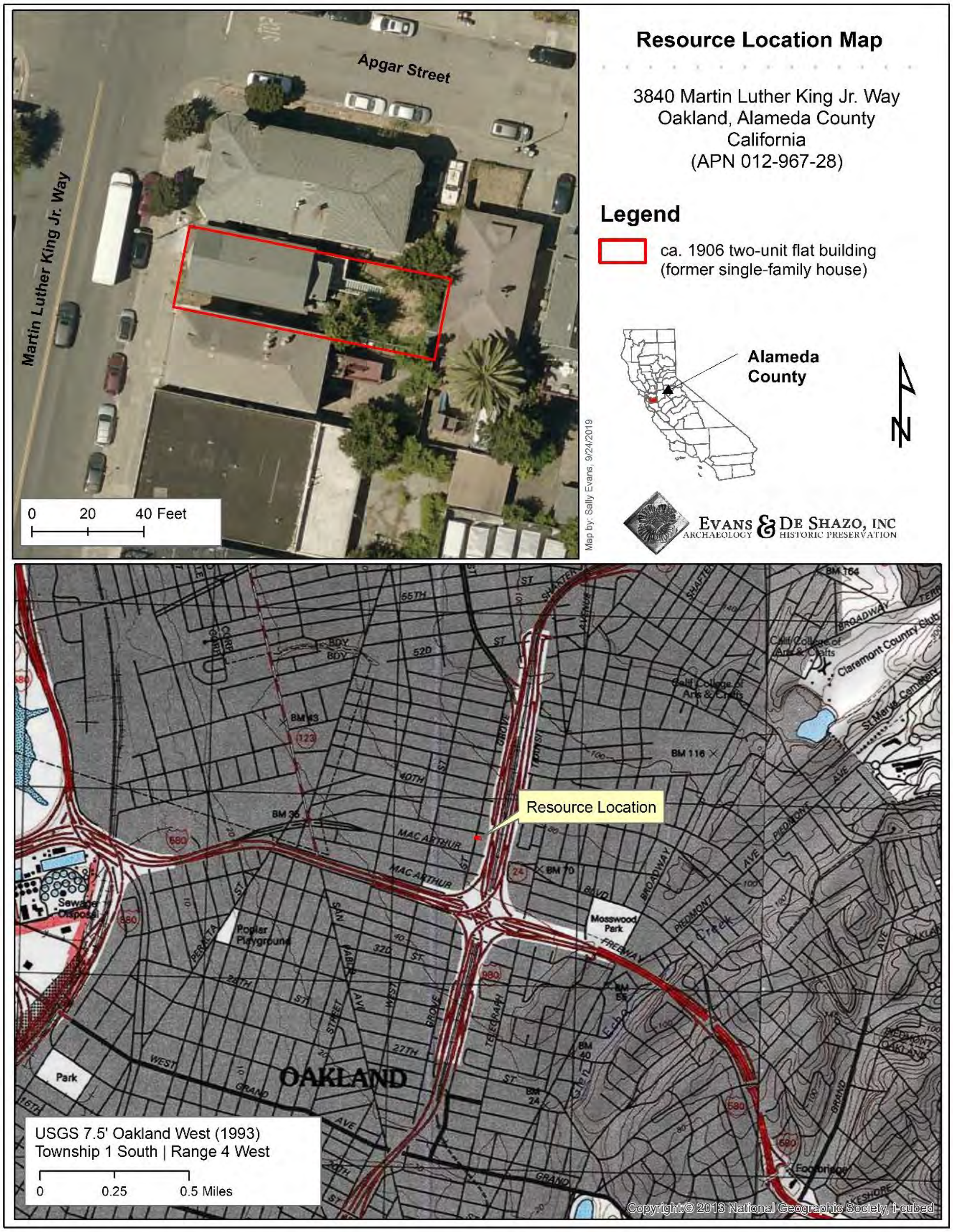
DEPARTMENT OF PARKS AND RECREATION HRI#

LOCATION MAP

Trinomial

Page 3 **of** 3 ***Resource Name or #** 3840 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



State of California □ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code Reviewer Date

***Resource Name or #:** 3848 Martin Luther King Jr. Way

P1. Other Identifier:

***P2. Location:** □ **Not for Publication** ☒ **Unrestricted**

***a. County** Alameda **and**

***b. USGS 7.5' Quad** Oakland West **Date** 1993 **T** 1S ; **R** 4W ; □ **of** □ **of Sec** ; MD **B.M.**

c. Address 3848 Martin Luther King Jr. Way City Oakland Zip 94609

d. UTM: Zone 10S, 564365 mE/ 4186985 mN

e. Other Locational Data: The resource is located within a 0.08-acre property at 3848 Martin Luther King Jr. Way, Oakland, Alameda County, California, within Assessor Parcel Number 012-967-029. The property is situated in the Longfellow neighborhood of northern Oakland, approximately 180-feet west of State Route 24 and approximately 1,100-feet north of Interstate 580.

***P3a. Description:** The ca. 1908 multi-unit apartment building is designed in the Italian Renaissance Revival architectural style. The two-story building consists of a rectangular form and a hipped roof and angled roof corners. There is a centered hipped roof dormer and a brick chimney. There are broadly over-hanging eaves and closed soffits. There is decorative dentil molding along the roof cornice and detailed trim work. The building is clad in narrow wood clapboard. The west elevation consists of an elaborate porch portico supported by six wood columns with capitals set on a decorative stone and wood support with trim work. There are original wood entry stairs that lead to porch with a stone floor and a wood beadboard ceiling. The main entry door was not visible, as it was covered by a metal security gate. The west elevation includes a decorative belt course that divides the ground floor from the second floor. (See Continuation Sheet, Page 2)

P5a. Photograph or Drawing

***P3b. Resource Attributes:** HP3: Multiple Family Property,

***P4. Resources Present:** ☒ Building □ Structure □ Object □ Site □ District □ Element of District □ Other

P5b. Description of Photo: West elevation, facing east, 07/29/2019

***P6. Date Constructed/Age and Source:** ☒ Historic □ Prehistoric □ Both
ca. 1908 multi-unit apartment building (City of Oakland)

***P7. Owner and Address:** Name withheld by owner

***P8. Recorded by:** Stacey De Shazo, M.A., Evans & De Shazo, Inc., 1141 Gravenstein Highway South, Sebastopol, CA 95472

***P9. Date Recorded:** 07/29/2019

***10. Survey Type:** Intensive

***P11. Report Citation**: Stacey De Shazo, M.A. (2019): Historic Resources Evaluation for the Proposed Longfellow Corner Project, 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

***Attachments:** □NONE ☒Location Map ☒Continuation Sheet □Building, Structure, and Object Record □Archaeological Record □District Record □Linear Feature Record □Milling Station Record □Rock Art Record □Artifact Record □Photograph Record □ Other (List):

(Continued from Primary, Page 1)

There are angled bay windows on all four corners of the west elevation of the ground and second floors that consist of original double-hung wood windows with lugs, as well as decorative trim work located under the window sills of each bay window that extends beyond the window casing. The is a smaller centered, double-hung wood window with lugs that is situated above the porch portico that is original. There are metal bars on the lower windows for security. The north elevation consists of four apartment entries along the ground floor that include wood stairs within knee walls, and bracketed framed door cornices and detailed trim work. The roof cornice includes dentil and trim work, and there is a belt course that extends along this elevation as well. In addition, the four corner bays that are present on the west elevation are also present on the north elevation. There are also numerous double-hung wood windows and decorative trim work that extend beyond the window casings. There are also two sets of ground and second floor bays that are set within the center of the north elevation that include a series of double-hung wood windows and two smaller centered double-hung wood windows.

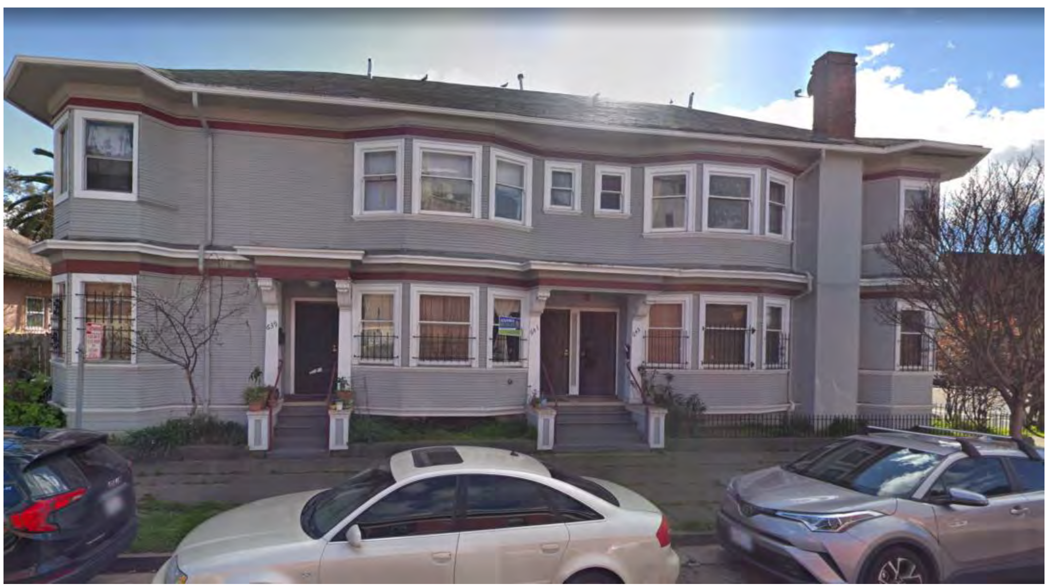


Photo shows the north façade, facing south.

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. Is associated with events that have made a significant contribution to the broad patterns of our history.

The property at 3848 Martin Luther King Jr. Way that includes the ca. 1908 multi-unit apartment building**,** was not found to be associated with any event that made a significant contribution to local, state, or National history.

Therefore, the a. 1908 multi-unit apartment building does not *eligible for listing on the NRHP under Criterion A.*

B. That are associated with the lives of significant persons in our past.

The ownership and occupancy history of the property at 3840 Martin Luther King Jr. Way that includes the ca. 1908 multi-unit apartment building, was thoroughly researched, and it does not appear that the building is associated with any persons that are important to local, California, or national history.

Therefore, the ca. 1908 multi-unit apartment building does not appear eligible for listing on the NRHP under Criterion B.

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The ca. 1908 multi-unit apartment building is an excellent example of the Italian Renaissance Revival style, with several distinctive elements reflecting this architectural trend most prominent in the 1890s up to the 1930s, including a rectangular form, hipped roof, centered hipped roof dormer, broadly over-hanging eaves, closed soffits, decorative dentil molding and detailed trim work, wood clapboard, porch portico supported by round columns, decorative belt course that divides the ground floor from the second floor, angle bay windows, double-hung wood windows with lugs, bracketed framed door cornices, and detailed trim work. As such, ca. 1908 multi-unit apartment building is representative of the Italian Renaissance Revival architecture with a period of significance of ca. 1908, which is the estimated date the building was constructed.

Therefore, the ca. 1908 multi-unit apartment building appears to be eligible for individual listing in the NRHP under Criterion C.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D most commonly applies to resources that contain or are likely to contain information bearing on an important archaeological research question. While most often applied to archaeological sites, Criterion D can also apply to buildings that contain important information. For a building to be eligible under Criterion D, it must the principal source of the important information, such as exhibiting a local variation on a standard design or construction technique can be eligible if a study can yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

The ca. 1908 multi-unit apartment building does not appear to be the principal source of information for construction or design techniques that can yield important information.

Therefore, the ca. 1908 multi-unit apartment building does not appear eligible for listing on the NRHP under Criterion D.

HISTORIC INTEGRITY

Location. The ca. 1908 multi-unit apartment building retains integrity of location because it remains at the original location where it was constructed.

Therefore, the ca. 1908 multi-unit apartment building retains integrity of location.

Design. The ca. 1908 multi-unit apartment building was designed in the Italian Renaissance Revival architectural style, and includes a rectangular form, hipped roof, centered hipped roof dormer, broadly over-hanging eaves, closed soffits, decorative dentil molding and detailed trim work, wood clapboard, porch portico supported by round columns, decorative belt course that divides the ground floor from the second floor, angle bay windows, double-hung wood windows with lugs, bracketed framed door cornices, and detailed trim work.

Therefore, the ca. 1908 multi-unit apartment building retains integrity of design.

Setting. The setting of the ca. 1908 multi-unit apartment building is within a neighborhood in West Oakland known as Longfellow, which developed as an affordable urban neighborhood situated along a key commuter route in Oakland. Although initially the neighborhood consisted of mainly houses, storefront commercial buildings were present by the 1920s and as the population grew additional businesses developed within the neighborhood. In the 1960s' State Route 24 was constructed, which is located west of the subject property; however, the neighborhood maintain its local urban setting and many of the houses that currently surround the ca. 1908 multi-unit apartment building are original to when the subject building was constructed, and help maintain the original setting as an urban neighborhood with a mix of residential and commercial buildings.

Therefore, the ca. 1908 multi-unit apartment building retains integrity of setting.

Materials. The ca. 1908 multi-unit apartment building retains the majority of its original materials, including the wood cladding, decorative wood elements, wood windows, dentil, columns, and trim work.

Therefore, the ca. 1908 multi-unit apartment building retains integrity of materials.

Workmanship. The nature of workmanship is in the details of the design, form, and materials that are clearly reflected in the original design and evidenced on the ca. 1908 multi-unit apartment building that includes elements that require knowledge of tooling, carving, painting, and joinery.

Therefore, the ca. 1908 multi-unit apartment building retains integrity of workmanship.

Feeling. Feeling is the quality that a historic property has in evoking the aesthetic or historic sense of a past period. The ca. 1908 multi-unit apartment building retains the design and materials necessary to convey the feeling of an Italian Renaissance Revival building constructed during the period of 1890 to 1930 when this style was popular in the U.S.

Therefore, the ca. 1908 multi-unit apartment building retains integrity of feeling.

Association. The ca. 1908 multi-unit apartment building remains associated with Italian Renaissance Revival style constructed within the period of significance for this style.

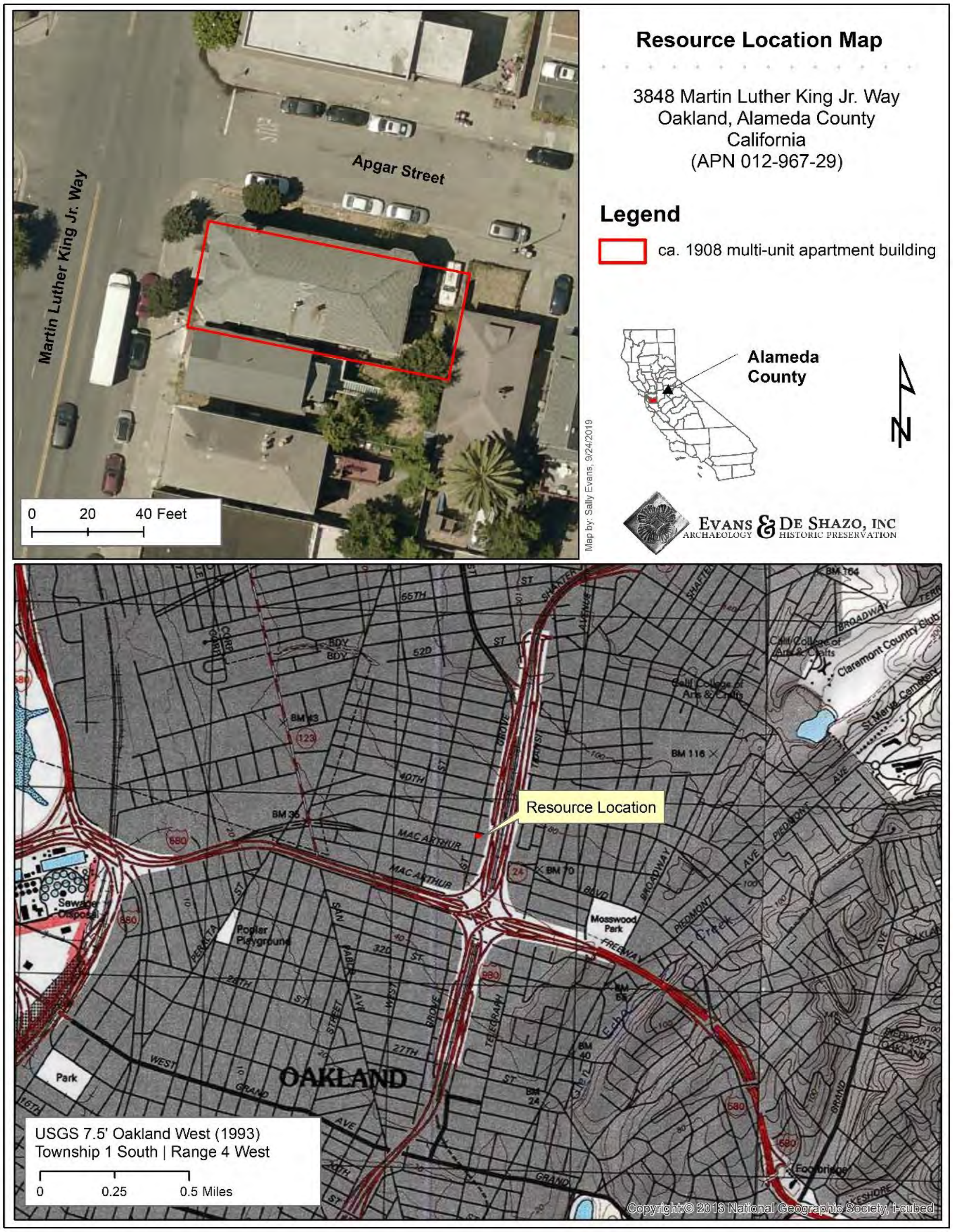
Therefore, the ca. 1908 multi-unit apartment building retains integrity of association.

In summary, the ca. 1908 multi-unit apartment building appears eligible for the NRHP under Criterion C and retains all seven aspects of integrity.

State of California Natural Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI#
LOCATION MAP	Trinomial

Page 5 **of** 5 ***Resource Name or #** 3848 Martin Luther King Jr. Way

***Map Name:** Oakland West, Calif. ***Scale:** 1:24,000 ***Date of map:** 1993



EVANS & DE SHAZO
ARCHAEOLOGY & HISTORIC PRESERVATION

A HISTORIC PROPERTY SURVEY FOR THE PROPOSED LONGFELLOW CORNER PROJECT AT 3801 MARTIN LUTHER KING JR WAY, OAKLAND, ALAMEDA COUNTY, CALIFORNIA

PREPARED FOR:

Cinnamon Crake
AEM Consulting

PREPARED BY:

Sally Evans, M.A., RPA
Principal Archaeologist
sally@evans-deshazo.com

September 24, 2019
(Revised October 8, 2019)

Evans & De Shazo, Inc.
1141 Gravenstein Highway S
Sebastopol, CA 95472
707-812-7400
www.evans-deshazo.com

STATEMENT OF CONFIDENTIALITY

This report identifies the locations of cultural resources within Alameda County that is confidential information because archaeological sites are nonrenewable resources that can be significantly impacted by disturbances that can affect their cultural, scientific, and artistic values. Disclosure of this information to the public may be in violation of both federal and state laws. Applicable U.S. laws include, but may not be limited to, Section 304 of the National Historic Preservation Act (16 USC 470w-3) and the Archaeological Resources Protection Act (16 USC 470hh). California state laws that apply include, but may not be limited to, Government Code Sections 6250 et seq. and 6254 et seq. Furthermore, disclosure of archaeological site location information to individuals other than those meeting the U.S. Secretary of the Interior's professional standards or California State Personnel Board criteria for Associate State Archaeologist or State Historian II violates the California Office of Historic Preservation's records access policy.

ABSTRACT

Evans & De Shazo, Inc. (EDS) completed a Historic Property Survey (HPS) for the proposed Longfellow Corner project located within four adjacent parcels that total 0.49 acres, including a 0.13 acre parcel at 3801-3807 Martin Luther King Jr. Way, a 0.15 acre parcel with no physical address, a 0.14 acre parcel at 3823 Martin Luther King Jr. Way, and a 0.07 acre parcel at 3829 Martin Luther King Jr. Way, in Oakland, Alameda County, California (Project Area). The proposed project entails the demolition of three buildings and the construction of a six-story, 73-unit apartment complex and associated infrastructure (Project). The HPS was completed in compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA) regulations and guidelines due to funds that may be provided by the United States (U.S.) Department of Housing and Urban Development (HUD) for the Project. Two Areas of Potential Effect (APEs) were established for the Project, including a Direct APE that includes the 0.49-acre Project Area, and an Indirect APE that includes twenty-two (22) parcels adjacent and surrounding the Project Area with built-environment resources at least 50 years of age.

The HPS was completed by EDS Principal Archaeologist Sally Evans, M.A., RPA, and Senior Archaeologist Gilbert Browning M.A., RPA who both exceed the Secretary of Interior's qualification standards in archaeology and history. The methods used to complete the HPS included a record search at the Northwest Information Center (NWIC) of the California Historical Information System (CHRIS), a review of background information pertaining to the prehistory, history, and ethno-history of the Oakland area and the Project Area, a Native American Sacred Lands inventory that was conducted by AEM Consulting, and a field survey of the Project Area.

The HPS did not result in the identification of any historic properties or cultural resources having the potential to meet the criteria of a historic property under Section 106 of the NHPA (excluding built-environment resources that are addressed in a separate report[1]). However, it was determined that the Project Area has a moderate to high potential to contain buried archaeological resources, and due to the potential for prehistoric and/or historic-period archaeological resources to be encountered during Project-related earth-disturbing activities, EDS recommends that a Secretary of Interior qualified archaeologist is retained to prepare a Cultural Resources Monitoring Plan (CRMP) and provide archaeological monitoring for initial Project-related earth-disturbing activities within the Project Area in order to identify any buried archaeological resources that may be present.

[1] DeShazo, Stacey (2019): Historic Resource Evaluation for the Proposed Longfellow Corner Project at 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California.

TABLE OF CONTENTS

INTRODUCTION

Evans & De Shazo, Inc. (EDS) was contracted by AEM Consulting to provide an HPS and Historic Resource Evaluation (HRE) for the proposed Longfellow Corner project at 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California that entails the demolition of a ca. 1910 commercial building, a ca. 1890 three-unit flat, and a ca. 1950 shed currently located within the property at 3801-3807 Martin Luther King Jr. Way, and the construction of a six-story, 77-unit apartment complex and associated infrastructure. The HPS and HRE were completed to ensure compliance with NEPA and Section 106 of the NHPA by determining if there are any Historic Properties within the Project APEs that could be impacted by the proposed Project.

The HPS was completed by EDS Principal Archaeologist, Sally Evans, M.A., RPA, and Senior Archaeologist Gilbert Browning M.A., RPA who both exceed the Secretary of Interior's professional qualification standards in archaeology and history. The methods used to complete the HPS included a record search at the NWIC, a literature review, and a field survey of the Project Area. The Native American Sacred Lands inventory and consultation with Federally-recognized Native American Tribes was conducted by AEM Consulting. The HRE was completed by EDS Principal Architectural Historian, Stacey De Shazo, M.A., who exceeds the Secretary of Interior's professional qualification standards in Architectural History. The purpose of the HRE was to evaluate the built-environment resources that are at least 50 years in age located within the Direct and Indirect APEs to determine if any of them meet the definition of a Historic Property under Section 106 of the NRHP guidelines in order to assess potential adverse effects to built-environment historic properties. The methods and results of the HRE are presented in a separate report (De Shazo 2019). The methods and results of the HPS are described herein.

PROJECT DESCRIPTION

The Project includes the demolition of the existing demolition of a ca. 1910 commercial building, a ca. 1890 three-unit flat, and a ca. 1950 shed currently located within the parcel at 3801-3807 Martin Luther King Jr. Way, and the construction of a six-story 77-unit apartment complex and associated infrastructure. The new apartment building will include parking, office, community, laundry and additional support/amenity spaces, including an outdoor gardening area, landscaping, and bicycle parking.

PROJECT LOCATION

The Project Area is located at 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California (Figure 1), and includes four adjacent parcels totaling 0.49 acres, including the 0.13 acre parcel at 3801-3807 Martin Luther King Jr. Way (Assessor Parcel Number (APN) 012-964-7), the 0.15 acre parcel with no physical address (APN 012-964-6), the 0.14 acre parcel at 3823 Martin Luther King Jr. Way (APN 012-964-5), and the 0.07 acre parcel at 3829 Martin Luther King Jr. Way (APN 012-964-4). The Project Area is bounded by single-family houses on the north and west, Martin Luther King Jr. Way on the east and W. MacArthur Boulevard on the south. The USGS 7.5-minute Oakland West, Calif. quadrangle (1993) (Figure 2) shows the Project Area located in Township 1 South, Range 4 West, Mt. Diablo Base and Meridian. The Universal Transverse Mercator (UTM) grid coordinates at the approximate center of the Project Area are: 564302 meters East and 4186944 meters North, Zone 10.

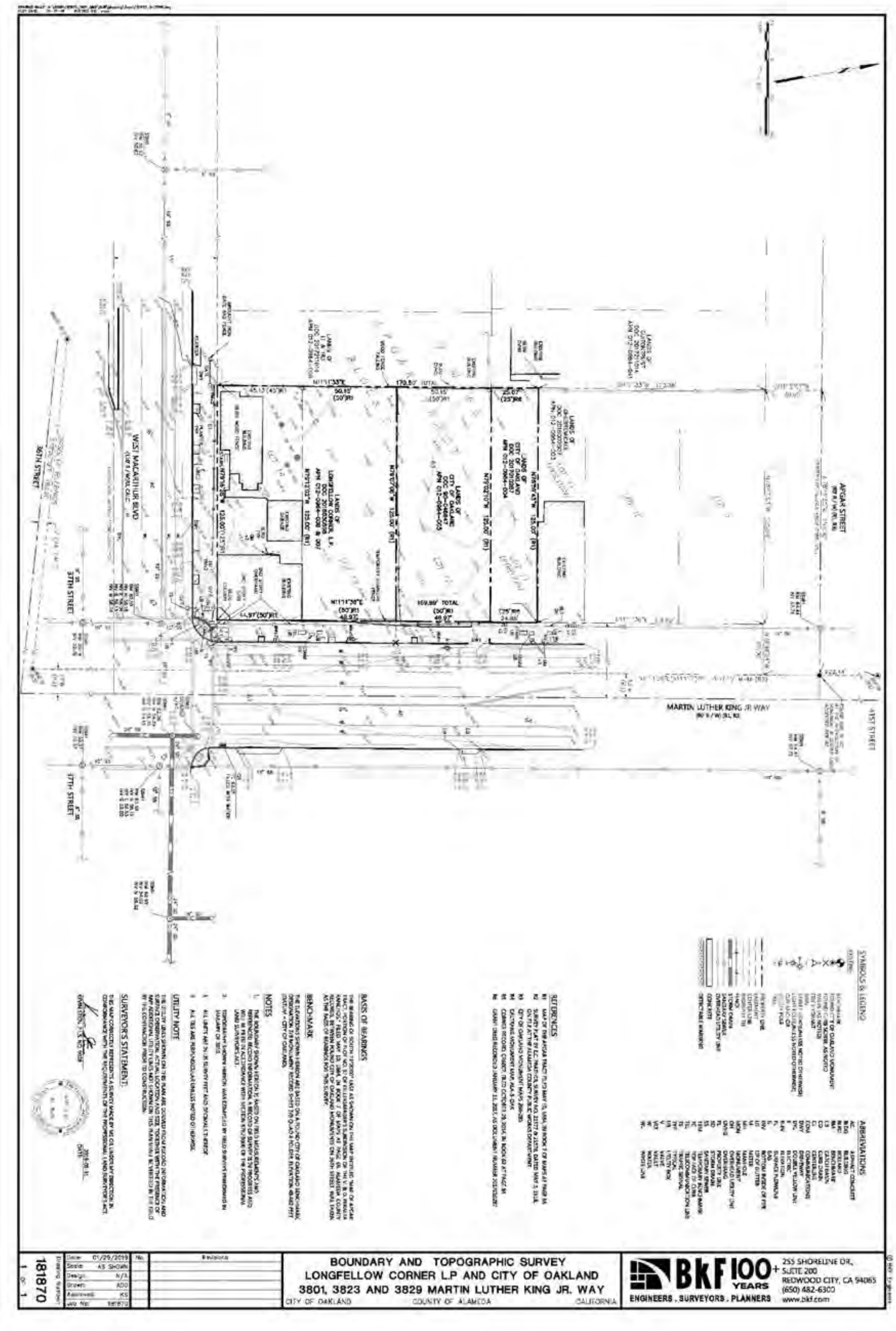


Figure 1: Boundary and topographic survey map (BKF, 1/29/2019).

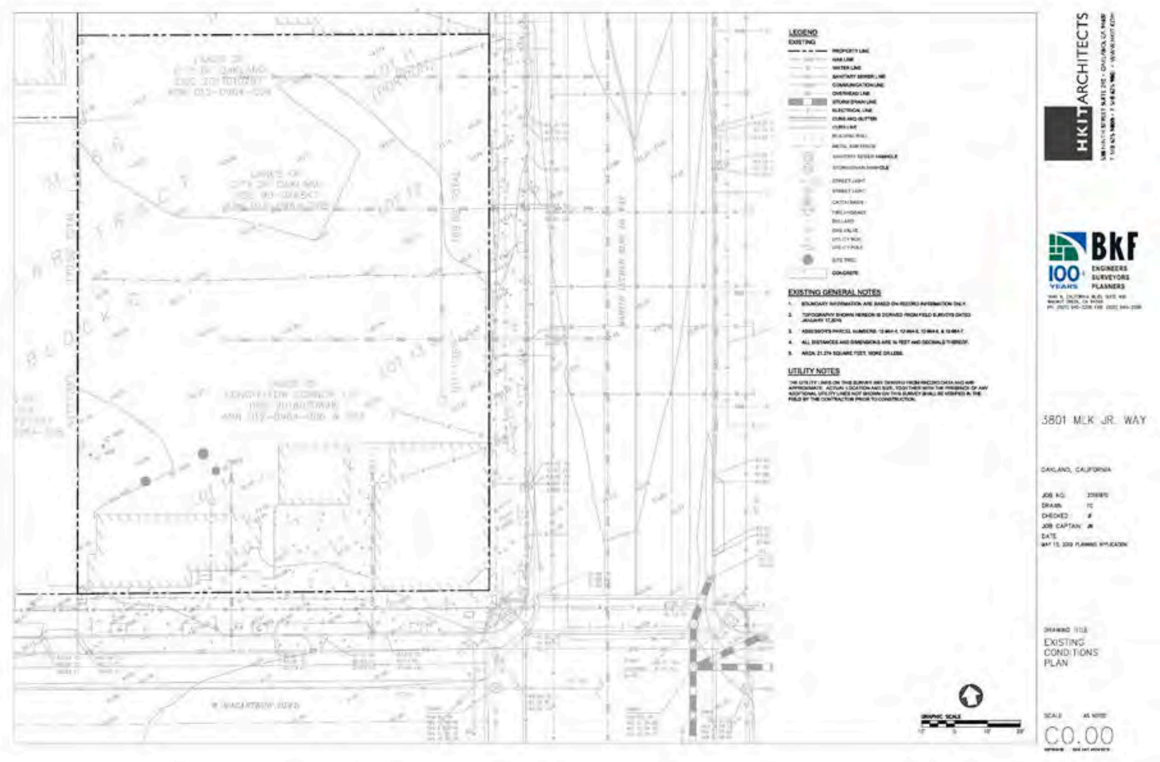


Figure 2: Existing Conditions plan (BKF, 5/13/2019).

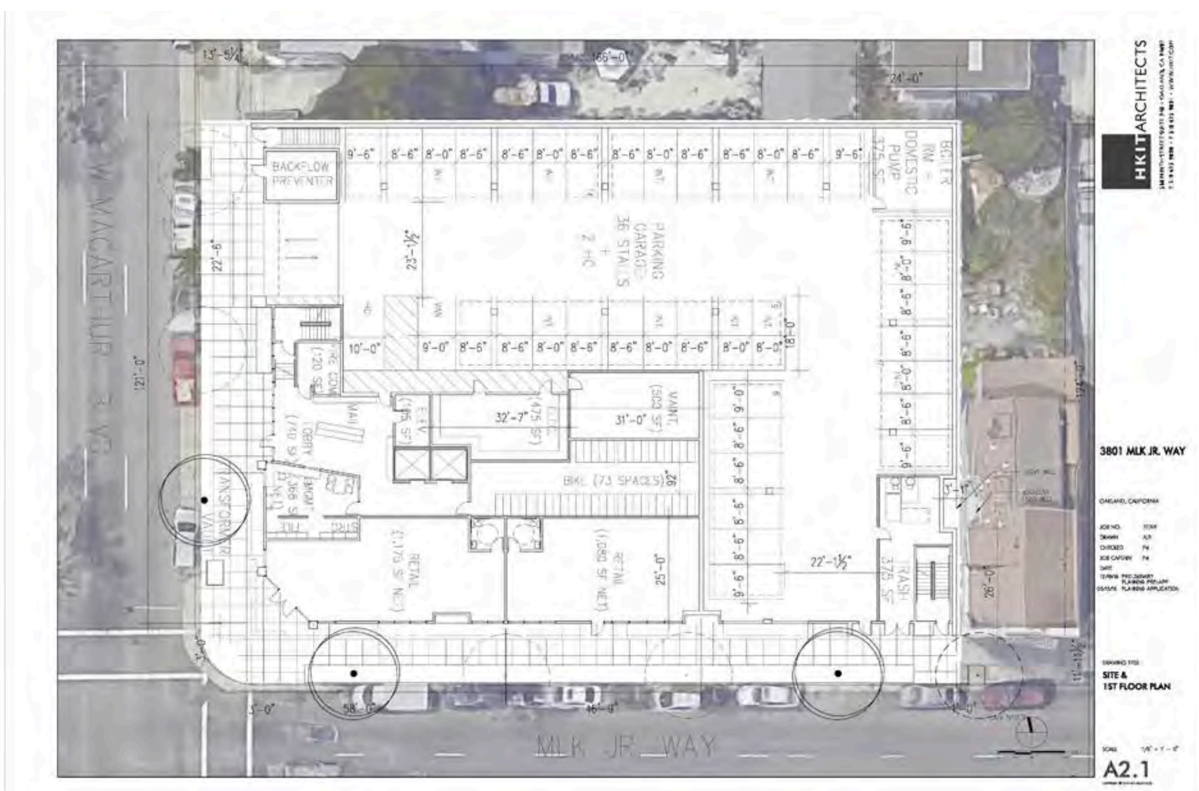


Figure 3: Site and 1st Floor Plan (BKF, 5/13/2019).

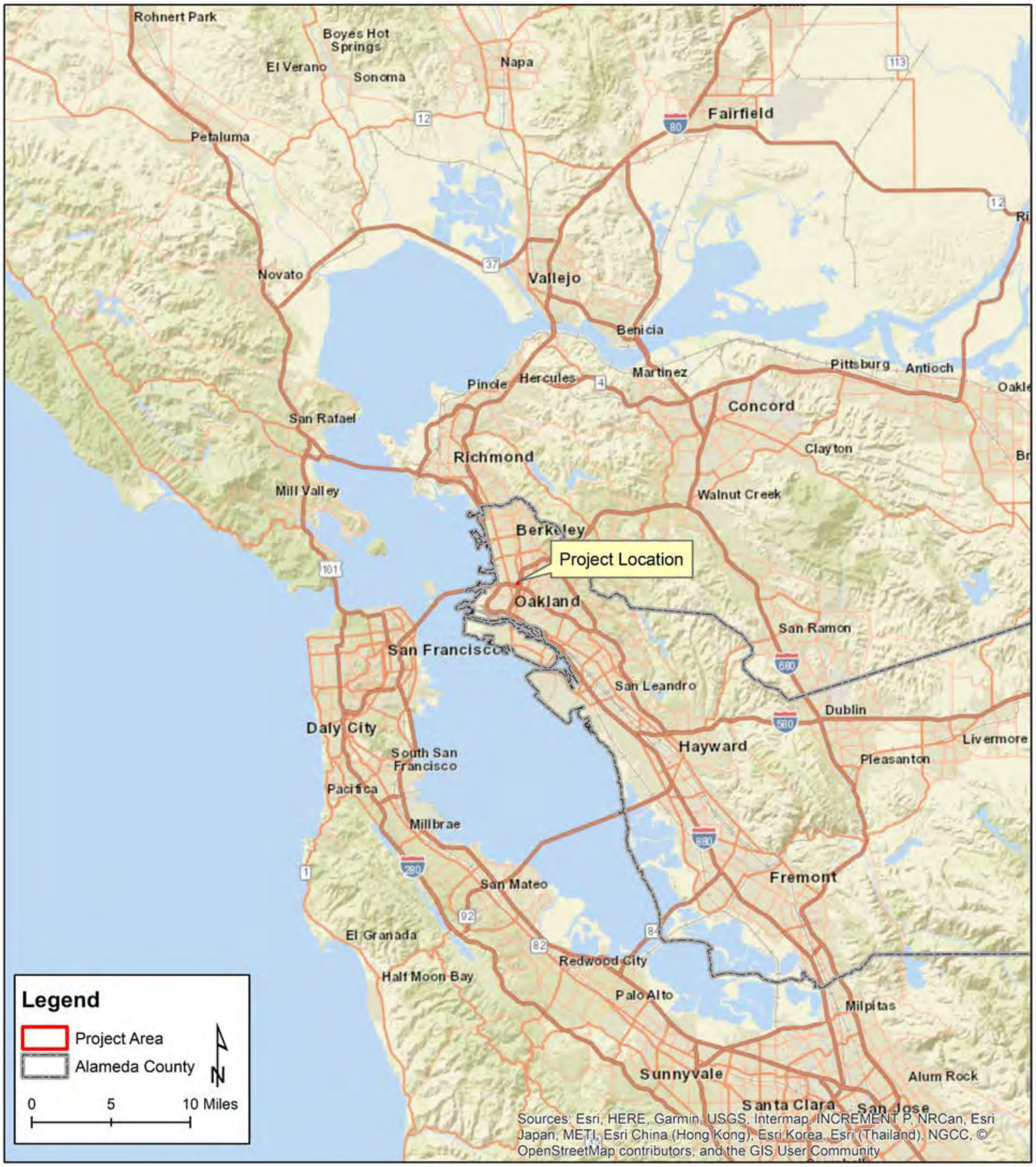


Figure 4: Project vicinity map.

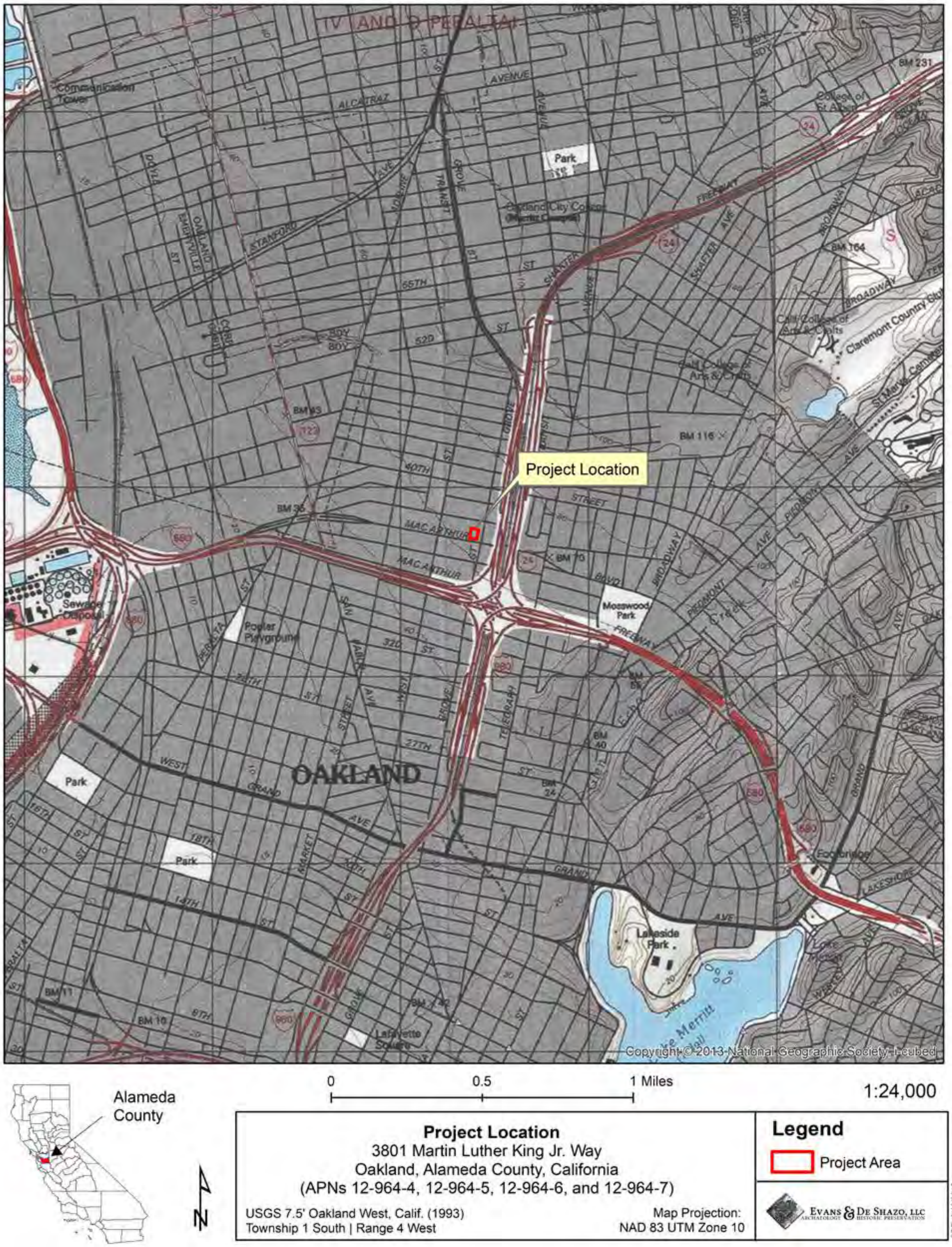


Figure 5: Project Area location as shown on the USGS 7.5' Oakland West quadrangle (1993).

AREA OF POTENTIAL EFFECT

The regulations implementing the Section 106 review process requires that an APE be defined for the Project (36 CFR 800.16(d)). The Section 106 regulations define the APE as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking". Two APEs were established for the proposed Project, including a Direct APE and an Indirect APE.

Direct APE

The Direct APE is defined as the area that will be directly impacted by the proposed Project and includes the following four adjacent properties:

- 1a: 3801-3807 Martin Luther King Jr. Way (APN 012-964-7); a ca. 1910 commercial building, a ca. 1890 three-unit flat, and a ca. 1950 shed
- 1b: No physical address (APN 012-964-6); vacant
- 1c: 3823 Martin Luther King Jr. Way (APN 012-964-5); vacant
- 1d: 3829 Martin Luther King Jr. Way (APN 012-964-4); vacant

Indirect APE

The Indirect APE includes twenty three (23) adjacent and nearby parcels, twenty-two (22) of which contain built-environment resources at least 50 years of age. The Indirect APE includes the following parcels:

- 2:3837 Martin Luther King Jr. Way (APN 012-964-3)
- 3: 3843 Martin Luther King Jr. Way (APN 012-964-2)
- 4: 3849 Martin Luther King Jr. Way (APN 012-964-1)
- 5: 663 Apgar St. (APN 012-694-41)
- 6: 671 Apgar St. (APN 012-964-4)
- 7: 668 W. MacArthur Blvd. (APN 012-964-8)
- 8: 670 W. MacArthur Blvd. (APN 012-964-9)
- 9: 674 W. MacArthur Blvd. (APN 012-964-1)
- 10: 678 W. MacArthur Blvd. (APN 012-964-11)
- 11: 669 W. MacArthur Blvd. (APN 012-965-31)
- 12: 665 W. MacArthur Blvd. (APN 012-965-32)
- 13: 3725 Martin Luther King Jr. Way (APN 012-965-3)
- 14: No physical address (APN 012-965-2)
- 15: 657 W. MacArthur Blvd. (APN 012-965-1)
- 16: 3720 Martin Luther King Jr. Way (APN 012-966-28)
- 17: 625 W. MacArthur Blvd. (APN 012-966-29-1)
- 18: 3806 Martin Luther King Jr. Way (APN 012-967-22)
- 19: 3810 Martin Luther King Jr. Way (APN 012-967-23)

- 20: 3820 Martin Luther King Jr. Way (APN 012-967-24-1)
- 21: 3834 Martin Luther King Jr. Way (APN 012-967-26)
- 22: 3838 Martin Luther King Jr. Way (APN 012-967-27)
- 23: 3840 Martin Luther King Jr Way (APN 012-967-28)
- 24: 3848 Martin Luther King Jr. Way (APN 012-967-29)

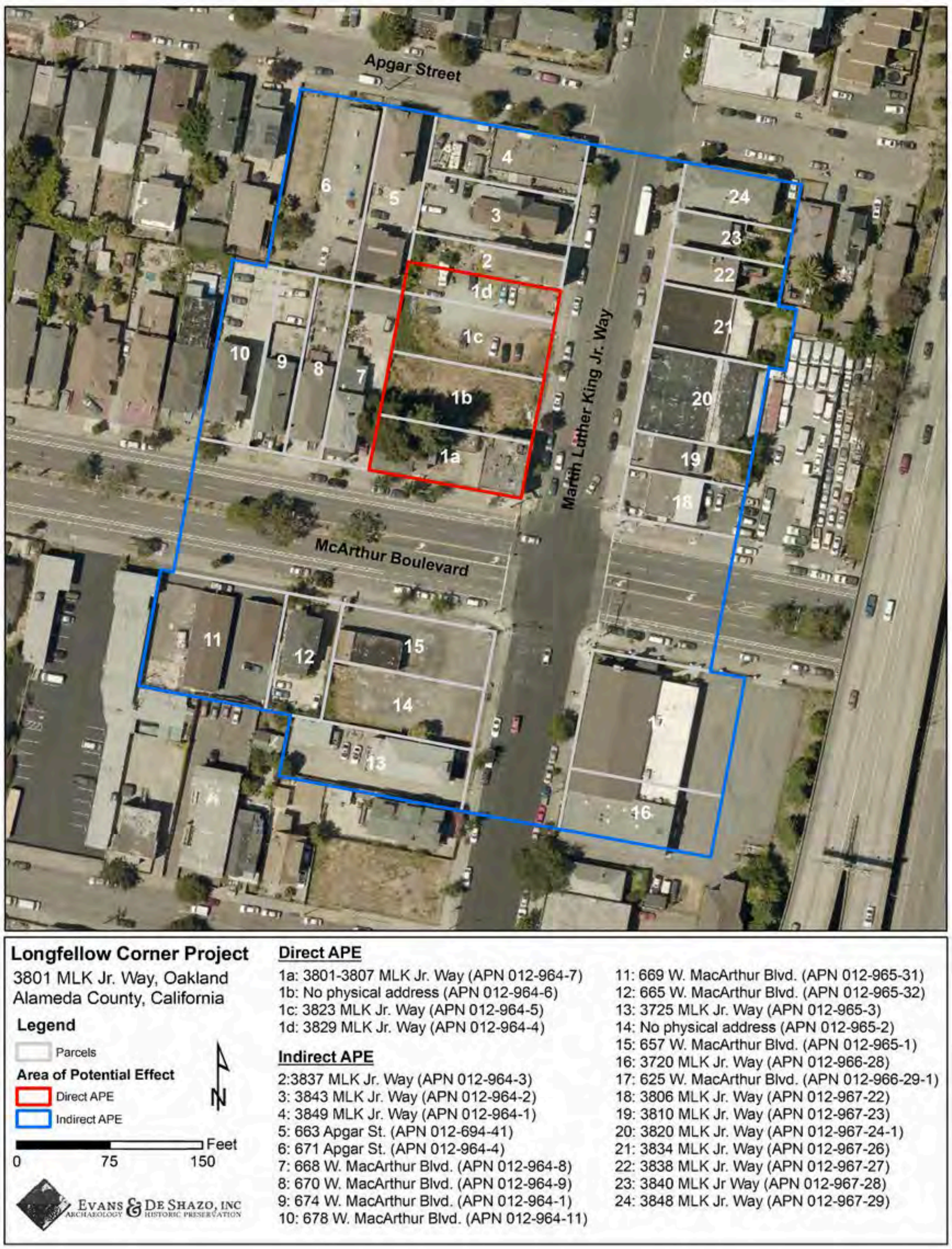


Figure 6: Area of Potential Effect map.

REGULATORY SETTING

The proposed Project is considered an undertaking subject to NEPA and Section 106 of the NHPA review due to financial assistance being provided by HUD for the Project. These regulations, as they pertain to cultural resources, are outlined below.

THE NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

NEPA [42 U.S.C. 4321 et seq.] establishes national environmental policies and goals for the protection, maintenance, and enhancement of the environment and provides a process for implementing these goals within the Federal agencies. The Act also establishes the Council on Environmental Quality (CEQ).

The term "cultural resources" is not defined in NEPA. NEPA addresses the "human" — social and cultural — aspects of the environment. Culturally valued aspects of the environment generally include historic properties (as defined by the NHPA), sacred sites, archaeological sites not eligible for the National Register of Historic Places (NRHP) and archaeological collections. The cultural use of natural resources and such "intangible" socio-cultural attributes as social cohesion, social institutions, life ways, religious practices, and other cultural institutions are typically evaluated under the "social impact" category. This HPS will identify the potential adverse and beneficial effects on historic and cultural resources (i.e. historic properties), sacred sites and archaeological sites not eligible for the NRHP that result from implementation of the Project. Built-environment resources are addressed in the HRE (De Shazo 2019).

NATIONAL HISTORIC PRESERVATION ACT (NHPA) - SECTION 106

Section 106 of the NHPA pertains to Federal “undertakings”. A Federal undertaking is defined as a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency, those carried out with Federal financial assistance, and those requiring a Federal permit, license or approval. The NHPA directs federal agencies to take into account (through identification, recordation and mitigation) the effects of proposed activities on historic properties and give the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. Historic properties are properties that are included in the NRHP or that meet the criteria for the National Register.

National Register of Historic Places (NRHP)

Historic properties are districts, sites, buildings, structures, and objects listed or found eligible for listing in the NRHP. Unlisted properties are evaluated against the National Register criteria to determine eligibility for listing, in consultation with the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) and any Native American Tribe that may attach religious or cultural importance to them.

The five property types are:

- **Building**: A structure created principally to shelter or assist in carrying out any form of human activity. A “building” may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.

- **Structure**: A construction made for a functional purpose rather than creating human shelter. Examples include mines, bridges, and tunnels.
- **Object**: Construction primarily artistic in nature or relatively small in scale and simply constructed. It may be movable by nature or design or made for a specific setting or environment. Objects should be in a setting appropriate to their significant historic use or character. Examples include fountains, monuments, maritime resources, sculptures and boundary markers.
- **Site**: The location of a significant event. A prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by physical remains if it is the location of a prehistoric or historic event and if no buildings, structures, or objects marked it at that time. Examples include trails, designed landscapes, battlefields, habitation sites, Native American ceremonial areas, petroglyphs, and pictographs.
- **District**: Unified geographic entities which contain a concentration of historic buildings, structures, or sites united historically, culturally, or architecturally.

In order to be included or qualify for the National Register, a building, structure, object, site or district must possess significance in American history, architecture, archaeology, engineering or culture, and must be associated with an important historic context and retain historic integrity of those features necessary to convey its significance. The resource should possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet any of the following criteria:

A. Is associated with events that have made a significant contribution to the broad patterns of our history; or
B. Is associated with the lives of persons important in our past; or
C. Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possesses high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or,
D. Has yielded, or may be likely to yield, information important in prehistory or history.

STUDY METHODS

To identify cultural resources within the Project Area that could be considered Historic Properties for the purposes of the Section 106 review, the following methods were utilized: a record search and review that includes research at the NWIC and a review of background information pertaining to the environmental setting, prehistory, history, and ethno-history of the Project Area and vicinity, and a field survey of the Project Area. The methods used to complete each of these tasks are described below. A Native American Sacred Lands inventory and consultation with local Native American tribes was conducted by AEM Consulting.

RECORD SEARCH AND REVIEW

EDS conducted a record search and review of the Project Area to obtain and review information pertaining to the natural environment, prehistory, ethno-history and history of the Project Area and vicinity, and previous cultural resources studies and previously recorded cultural resources located within 0.25-miles of the Project Area.

The record search included a review of information on file at the NWIC of the CHRIS, as well as a review of the California Inventory of Historic Resources (California Department of Parks and Recreation 1976), the Office of Historic Preservation (OHP) *Five Views: An Ethnic Sites Survey for California* (1988), California Historical Landmarks (OHP 2019), and the Directory of Properties in the Historic Property Data (HPD) File for Oakland, Alameda County that includes updated listing of the CRHR, NRHP, California Historical Landmarks, and the California Points of Historical Interest (OHP 2012). The City of Oakland's list of historic resources and landmarks were also reviewed.

The record search also consisted of a review of information about the environment in which the Project Area is located, including the soils and geologic age of the landform on which the Project Area is located, as well as the prehistory, ethno-history and history of the Project Area and vicinity that was used to assess potential for prehistoric or historic-period cultural resources, including archaeological resources, to be present. The history of the Project Area was developed using information obtained as part of the HRE (De Shazo 2019) and a review of the following historic maps and aerial photographs:

Maps:

- 1859 Plat of the Northern Part of the Rancho San Antonio confirmed to Vincente and Domingo Peralta
- 1876 Map of Oakland, Alameda and Vicinity by M. G. King
- 1878 Official Historical Atlas Map of Alameda County by Thompson & West
- 1888 Map of the City of Oakland and Surroundings by J.C. Henkenius
- 1895 USGS 15-minute San Francisco, Calif. topographic map
- 1899 USGS 15-minute San Francisco, Calif. topographic map (revised 1914)
- 1902 Sanborn Fire Insurance Map
- 1911 Map of Oakland and Vicinity showing lines of San Francisco, Oakland and San Jose Consolidated Railway
- 1911-1912 Sanborn Fire Insurance Map
- 1915 USGS 15-minute San Francisco, Calif. topographic map
- 1924 Southern Pacific Map of Western Divisions Electric Lines East Bay Electric Lines
- 1926 Map of the Key System Transit Co.
- 1949 USGS 7.5-minute Oakland West quadrangle
- 1951 Sanborn Fire Insurance Map
- 1959 USGS 7.5-minute Oakland West quadrangle

Aerial Photographs:

- 1946 Aerial photograph
- 1965 Aerial photograph

FIELD SURVEY

An EDS Secretary of Interior-qualified archaeologist conducted a field survey to physically inspect the Project Area for potentially significant cultural resources (other than built-environment resources that are addressed in the HRE). The field survey included an inspection of the Project Area for evidence of prehistoric archaeological sites, including artifacts, such as chipped stone (obsidian, chert and basalt) flakes and tools (e.g. projectile points, knives, scrapers), shellfish remains, ground stone, fire-affected rock, and other indicators of prehistoric archaeological resources. The Project Area was also inspected for evidence of historic-era resources, including archaeological resources, such as surface scatters of farming or domestic type artifacts (i.e. glass, ceramic, metal, etc.), as well as features such as alignments of stone or brick, foundation elements from previous structures, minor earthworks, and historic plantings (i.e. old fruit, nut or other types of trees, and ornamental plants).

NATURAL AND CULTURAL OVERVIEW

The following natural and cultural overview provides an environmental setting of the Project Area, and the prehistory, ethno-history and history of the Project Area and vicinity. The natural and cultural settings serve as a basis for understanding the potential for significant cultural resources to be located within the Project Area and potential effects to historic properties.

ENVIRONMENTAL SETTING

The Project Area is located in the City of Oakland, which is a densely populated urban environment in northwestern Alameda County that encompasses approximately 78 square miles of land and water and has an estimated population of approximately 432,897 residence. Located in the East Bay region of the San Francisco Bay Area, Oakland borders the cities of Berkeley, Emeryville, Alameda, and San Leandro, and is bordered on the west by San Francisco Bay. The regional topography is variable and includes level terrain along the bay shores and steeper slopes along the Berkeley Hills to the east that rise to a peak elevation of 1,761 feet at Round Top, an extinct volcano. The City of Oakland has a mild climate characterized by warm, dry summers, and mild, wet winters. According to the U.S. Weather Bureau, Oakland's average temperatures range from about 74 degrees Fahrenheit (F) in summer to 44 degrees F in winter. Annual rainfall averages about 24 inches per year, with most rainfall occurring between November and March.

The Project Area is situated within a topographically flat area in the Longfellow neighborhood of northern Oakland at approximately 60 feet above mean sea level (amsl), and is bordered on the north by a commercial/residential building, on the south by MacArthur Boulevard, on the west by a residence, and on the east by Martin Luther King Jr. Way (historically known as Grove Street). The Project Area is located approximately 1.5 miles east of San Francisco Bay; however, prior to the reclamation of marshlands and subsequent urban development, the Project Area was situated approximately 1.1 miles east of the historical tidal marsh and bay lands boundary (Figure 7). The nearest waterways include

Temescal Creek located 0.5 miles to the north and Glen Echo Creek located 0.6 miles to the east. Temescal Creek flows from the Berkeley hills west to San Francisco Bay, and Glen Echo Creek flows south from the Berkley hills and empties into Lake Merritt. According to the geologic map of the Oakland Metropolitan Area (Graymer 2000), the Project Area is located on a landform that consists of a Holocene-age (post 11,800 cal BP) alluvial fan and fluvial deposit (geologic unit: Qhaf) containing fine-grained Holocene alluvium. The soil throughout the Project Area is Urban land-Danville complex (USDA 2019). Danville soil is alluvium derived from sedimentary rock and both urban and Danville soils occurs on alluvial fans and fan terraces. In a typical profile, Danville soil consist of clay loam to a depth of 21 inches, followed by sandy clay from 21 inches to 53 inches, and silty clay loam from 53 inches to 80 inches (USDA 2019).

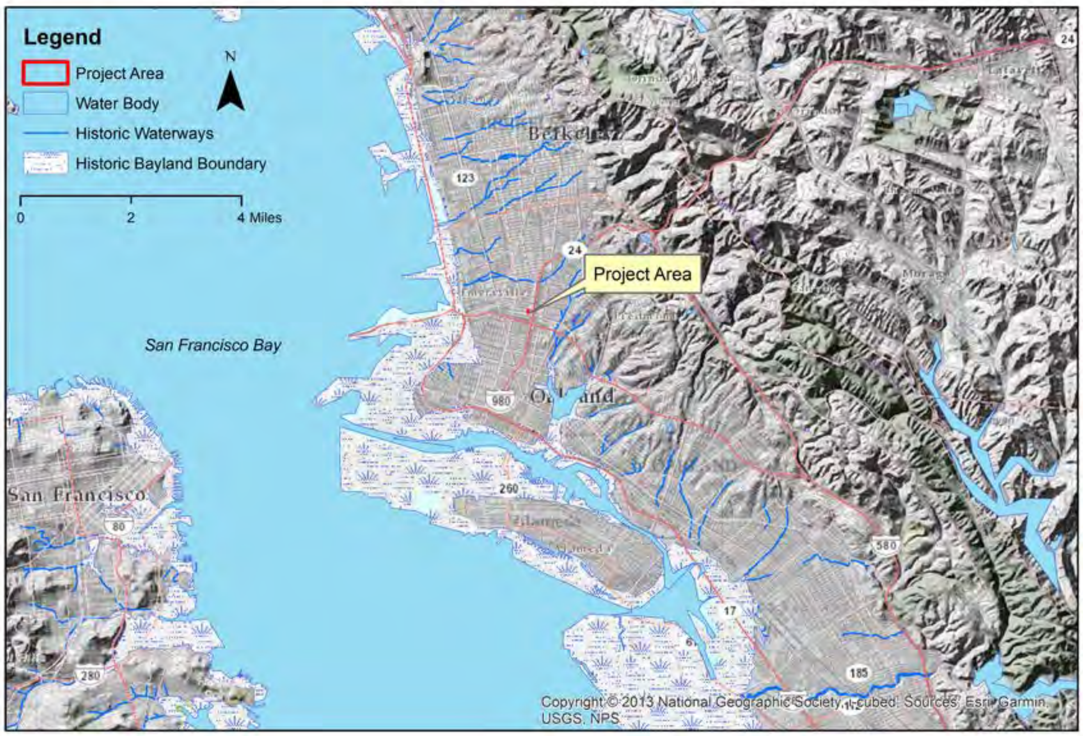


Figure 7: Project Area environmental setting.

Paleo-Environmental Setting

The paleo-environmental setting describes changes that have occurred in California's climate, vegetation and landscapes since the terminal Pleistocene. During the Terminal Pleistocene (13,500 - 11,700 cal BP[2]) there was a dramatic shift in vegetation as the climate became warmer compared to the previous period and temperate taxa such as alder, Douglas fir, oak and tanoak appeared. This was immediately followed by a major cooling trend, known as the Younger Dryas at about ca. 12,800 and 11,500 BP, at which time oak woodland and chaparral began to replace coniferous forest species. Also, during this time many of the large herbivores like mammoth, bison, ground sloth, horse, and camel, as well as many large carnivores became extinct within the region.

[2] Calibrated (cal) years before the present (BP), with "present" being the year 1950.

The San Francisco Bay formed after the onset of the Holocene (post 11,700 cal BP) due to a global warming trend that led to glacial melt and a global rise in sea level (Walker et al. 2009). During the Pleistocene, when it was colder, and more water was locked up in ice, the ocean level was lower than current levels and the California shoreline was located much farther to the west than it is today. At the time, the San Francisco Bay did not exist, and the Sacramento and San Joaquin Rivers converged east of the Diablo range before cutting through the Golden Gate and draining into the Pacific Ocean near the Farallones Islands (Milliman and Emery 1968).

In the Early Holocene (11,700 – 8,200 cal BP) cooler and drier conditions continued, but as temperatures rapidly increased, redwood and chemise chaparral taxa expanded, and pines and other conifers diminished. During this time, the ocean waters reached the Golden Gate and began filling the San Francisco Bay (Figure 8). The rise in the water level was rapid at first, but slowed after about 5,000 BP (Parsons 2003). The rising of the bay caused many of the rivers and streams that empty into the bay to aggrade their valleys by depositing sediment, gradually building up the ground surface and burying former surfaces. This process also buried most evidence of human occupation around the San Francisco Bay shoreline prior to this time (Parsons 2003).

The Middle Holocene (8,200 – 4,200 cal BP) was characterized by lower precipitation and greater temperatures, with warm and dry summers and increased seasonability (Adam and West 1983). As a result, pines, herbs and oak increased while redwood and cedar declined and retreated. Oaks expanded their overall range and moved upslope. The sea level stabilized and rich tidal marshes and extensive mudflats formed around the San Francisco Bay margin (Pestrong 1972).

In the Late Holocene (post 4200 cal BP) climatic conditions were cooler and dryer, but there were frequent shifts from cold to warm and enhanced ENSO[3] cycles that resulted in increased fluvial discharge, lower salinity levels and the formation of new marshes in the San Francisco Bay circa 3,800 – 2,450 BP (Goman et al. 2008; Starratt and Barron 2010). Beginning about 4,000 BP there was a rise in conifer-dominated assemblages and a decrease in oaks, due to an increase in moisture, but this trend reversed between about 1,300 to 700 BP due to an onset of warmer, dryer conditions, which characterized the Medieval Climatic Anomaly (MCA) that lasted from about 1,150 - 600 BP. The MCA was marked by two severe drought periods separated by a period of greater precipitation (Schwitalla 2013), and was followed by the Little Ice Age (ca. 650-150 BP) that featured cool wet conditions (Schwitalla 2013), cooler sea surface temperatures (Hendy 2010), and an influx of sediment into the San Francisco Bay (Malamud-Roam and Ingram 2010). The extensive alluvial deposition that occurred during wet periods also buried archaeological sites that existed along the flood plains of creeks and rivers during this time (Lightfoot and Luby 2002).

In historic times (ca. 250 BP to present) the introduction of non-native plant species, the cessation of Native American land-management practices, including fire management, the onset of crop production and animal husbandry, industrialization, and urban growth and development have all contributed greatly to a changed landscape that no longer reflects the landscape inhabited by human populations that existed prior to European colonization of California.

[3] El Niño-Southern Oscillation (ENSO) is an irregularly periodic variation in winds and sea surface temperatures over the tropical eastern Pacific Ocean. The warming phase of the sea temperature is known as El Niño and the cooling phase as La Niña.

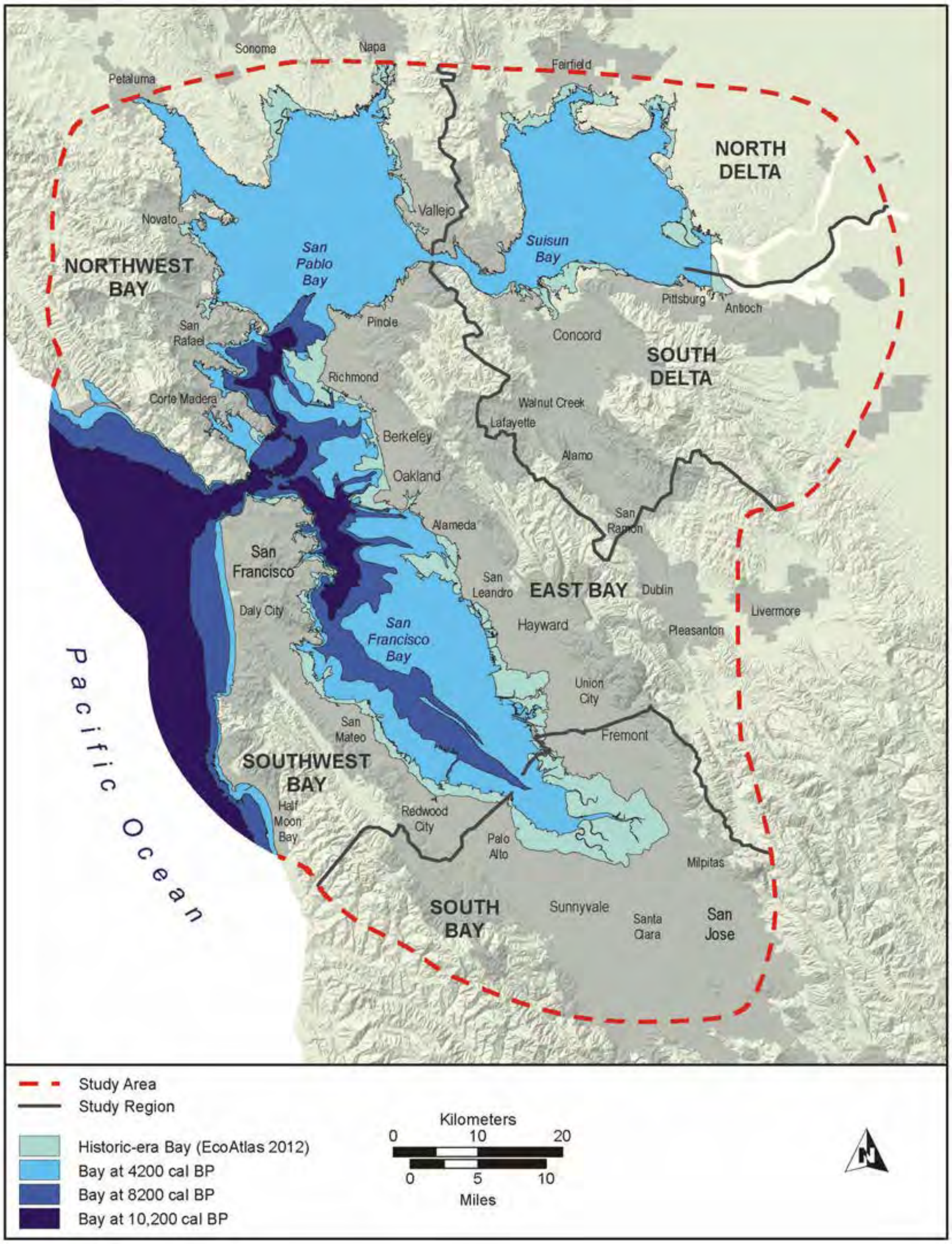


Figure 8: Evolution of the San Francisco Bay (after Meyer et al. 2013) (Byrd et al. 2017).

The formation of the San Francisco Bay in the Middle Holocene allowed for dense populations to settle along the Bay Shore and neighboring areas because the freshwater marshes, salt marshes, mud flats and open waters of the San Francisco Bay became extremely productive in natural resources (Lightfoot and Luby 2002). The marshlands and mudflats supported clams, mussels, oysters, crabs, and several fish species, and the open water supported green and white sturgeon, Chinook and Coho salmon, bat rays, thresher and leopard sharks, surf perch, jack smelt and marine mammals, such as sea otters, harbor seals, and sea lions. There were also numerous migratory water birds and shorebirds present, like ducks, geese, cormorants, loons and grebes (Lightfoot and Luby 2002). The surrounding terrestrial landscape contained extensive grassland and oak woodland that supported a variety of plant and animal resources. From these areas, Native Americans gathered a variety of nuts, seeds, berries, greens and tubers, and hunted large terrestrial animals like deer, elk and pronghorn antelope, as well as smaller fauna like jackrabbit, brush rabbit, squirrel, wood rat and quail (Lightfoot and Luby 2002; Moratto 1984). Historically, the broad alluvial plain where the Project Area is located consisted of grassland-hills and grassland-bay marsh ecotones that would have been favorable for human occupation.

PREHISTORIC/ARCHAEOLOGICAL CONTEXT

This section provides information derived from the archaeological record of the San Francisco Bay-Delta region of California regarding settlement strategies, levels of social organization, subsistence economies, and food procurement strategies of prehistoric Native populations. Cultural patterns that emerged in the San Francisco Bay-Delta region, recognized by specific artifact assemblages that indicate differences in living strategies, are also discussed.

Chronology and Cultural Patterns of the San Francisco Bay-Delta Region

The Central California Taxonomic System (CCTS) is a scheme that chronologically classifies archaeological manifestations observed in central California. The CCTS is a sequence represented by broad spatial and temporal levels. It was initially based on archaeological research conducted in the Delta and Lower Sacramento Valley regions of California (Lillard et al. 1939; Lillard and Purves 1936; Heizer and Fenenga 1939). It was later expanded to include the Bay Area using information from earlier archaeological excavations at the Emeryville Shellmound (CA-ALA-309), Ellis Landing Shellmound (CA-CCO-295), and the Fernandez Site (CA-CCO-295) (Beardsley 1948, 1954). B.A. Gerow and others (Gerow 1954, 1974; Gerow with Force 1968) criticized the CCTS for being too rigid in its chronological sequence and for failing to separate cultural and temporal dimensions. To address this problem, Fredrickson (1973, 1994) proposed a new taxonomic system for the North Coast Ranges, the San Francisco Bay, including some interior Contra Costa sites, and the lower Sacramento Valley. His is a cultural sequence based on Patterns, Phases and Aspects[4]. Within the San Francisco Bay area, three main cultural patterns are recognized: Windmiller, Berkeley (Lower, Upper and Meganos Aspect) and Augustine.

In the past, Archaeologists conducting work in the southern San Francisco Bay Area used the CCTS, but North Bay archaeologists tended to use Fredrickson's Archaic-Emergent temporal sequence. However, a

[4] Patterns are units of culture having similar economic and technical manifestations, mortuary patterns, concepts of wealth, and trade practices. Phases are cultural manifestations within a Pattern bounded by time and region. Aspects are cultural units bounded regionally, but not temporally (Fredrickson 1973, 1974).

hybrid classification has recently emerged for the San Francisco Bay Area that uses the Early-Middle-Late Period sequence of the CCTS and the pattern-aspect-phase cultural sequence developed by Fredrickson, but is anchored in time by two radio-carbon based sequences known as Scheme D and Scheme D2 (Groza 2002; Groza et al. 2011; Milliken et al. 2007). The current Scheme D is based on stylistic temporal variation in well-dated and widely traded shell bead types (Groza et al. 2011).

The following summary is a cultural chronology for the San Francisco Bay-Delta region that is based on this hybrid classification system organized by geologic time segments that include the Terminal Pleistocene (13,500 – 11,700 cal BP), Early Holocene (11,700 – 8200 cal BP), Middle Holocene (8200 – 4200 can BP), and Late Holocene (post 4200 can BP). The Late Holocene is further divided into shorter time periods using the Late Holocene Scheme D chronological sequence for the San Francisco Bay Area (Table 1) that is divided into the following time periods: Early Period (4200–2550 cal BP), Early/Middle Transition Period (2550–2150 cal BP), Middle Period (2150–930 cal BP), Middle/Late Transition Period (930–685 cal BP), and Late Period (685–180 cal BP).

Table 1. Late Holocene Scheme D Chorological Sequence for San Francisco Bay-Delta Area following Groza et al. 2011 (Byrd et al. 2017: 3-20, Table 3).

CAL BP	EXTENT (YEARS)	CALENDAR YEARS	DATING SCHEME D (GROZA ET AL. 2011)		CULTURAL PATTERN[c]
			TEMPORAL PERIODS[a]	ARRAY OF DIAGNOSTIC *OLIVELLA* BEAD TYPES[b]	
180–115	65	AD 1770–1835	Historic/Mission (H)	Needle drilled (H)	na
430–180	250	AD 1520–1770	Late 2 (L2)	Lipped (Class E)	Augustine
685–430	255	AD 1265–1520	Late 1 (L1)	Normal sequin (M1a) Pendant (M2) Callus cupped (K1) End-ground (B2)	
930–685	245	AD 1020–1265	Middle/Late Transition (MLT)	Normal sequin (M1a) Split drilled/oval (C2/3) Split punched (Class D) Split amorphous (C7) Tiny saucer (G1) Wide sequin, occasional (M1d)	
1200–930	270	AD 750–1020	Middle 4 (M4)	Normal narrow saddle (F3a) Rectanguloid/Oval saddle-smooth edges (F4c/d) Full saddle-smooth edges (F4a/b)	
1365–1200	165	AD 585–750	Middle 3 (M3)	Small narrow saddle (F3b) Normal narrow saddle (F3a) Irregular saucer (occasional; G5)	
1530–1365	165	AD 420–585	Middle 2 (M2)[c]	Normal narrow saddle (F3a) Rectanguloid/Oval saddle-chipped edges (F2c/d) Full/Round saddle-chipped edges (F2a/b) Full saddle-smooth edges (F4)	Upper Berkeley
2150–1530	620	200 BC–AD 420	Middle 1 (M1)	Saucer (Class G) Split-drilled/oval (C2/3) Oval saddle (F1)	
2550–2150	400	600–200 BC	Early/Middle Transition (EMT)	Split beveled (?) – no wall beads? (C1)	
+4050–2550	1,500+	+2100–600 BC	Early (E)	Thick rectangle (Class L)	Lower Berkeley

Notes: [a] Periods are based on temporal duration of diagnostic shell bead styles; abbreviations in parentheses; [b] Listed by relative predominance; [c] Fredrickson (1994). Groza et al. (2011:Figure 3) has inconsistent start dates for EMT and Late 2 (but see page 7-15 and Figure 37 for revised start date for EMT)

Terminal Pleistocene (13,500 – 11,700 cal BP)

Solid evidence of human occupation in California during the Terminal Pleistocene (13,500 – 11,700 cal BP) is scarce and poorly understood; however, there have been some discoveries of isolated fluted projectile points California that are thought to be similar in cultural affiliation and age as the fluted points associated with the Clovis tradition dating to around 11,500 cal BP. While fluted points are rare in California, they have been documented at the Borax Lake site (CA-Lak-36) in Lake County (Meighan and Haynes 1970; Moratto 1984:82–85), at Tracey Lake in the Delta (Heizer 1938), at the Wolfsen mound (MER-215) along the middle San Joaquin River in Merced County (Peak and Weber 1978), and in the Mojave Desert and coastal southern California (Byrd et al. 2017). No fluted points or archaeological deposits dating to the Terminal Pleistocene have been documented in the San Francisco Bay Area (Byrd et al. 2017). The paucity of Terminal Pleistocene archaeological remains is, in part, because populations were small and highly mobile, and left scant evidence of their activities on the landscape. Landscape changes, including sea level rise, erosion and localized subsidence along the coast. Widespread landscape evolution and floodplain development in the interior has also reduced evidence of occupation during this period (Byrd et al. 2017).

Early Holocene (11,700 - 8200 cal BP)

During the Early Holocene (11,700 – 8200 cal BP) semi-mobile hunter-gatherers exploited a wide range of plant and animal foods from marine, lacustrine, and terrestrial environments (Erlandson et al. 2007; Jones et al. 2002; Meyer and Rosenthal 1995; Moratto 2002). Populations that emerged in the San Francisco Bay-Delta region, including the interior East Bay during the Early Holocene were mobile foragers, characterized by a “Millingstone culture” that used milling slabs and handstones, crude cores and core tools, and various types of large wide-stemmed and leaf-shaped projectile points (Milliken et al. 2007:114; Wiberg 2010:31). The settlement pattern is thought to be based on high residential mobility and limited exchange (Wiberg 2010:31).

There are only four Early Holocene-age archaeological deposits documented in the San Francisco Bay-Delta region, including two at Los Vaqueros Reservoir (CA-CCO-696 and CA-CCO-637) in the East Bay (Meyer and Rosenthal 1997, 1998), one in Solano County (P-48-000897) (Hildebrandt et al. 2012), and one in Fremont (P-01-011556) (Meyer 2015), all of which found in a buried context. Occupation at the site in the East Bay area (CA-CCO-696) was found to be associated with a culture whose specific economy was focused on harvesting acorns and wild cucumbers (Meyer and Rosenthal 1997; Wohlgemuth 1997).

Middle Holocene (8200 – 4200 cal BP)

There is more direct evidence of occupation in the San Francisco Bay-Delta region during the Middle Holocene than there is in the Early Holocene, as indicated by the 60 plus sites that have been documented in the San Francisco Bay-Delta region dating to this period (Byrd et al. 2017). Artifacts found in sites dating to this period include a variety of ground stone tools (mortars/pestles and metates/manos), side-notched dart points, cobble tools, and a variety of shell beads and ornaments (Fitzgerald 1993; Meyer and Rosenthal 1998). The presence of an extensive trade network by at least 5200 cal BP is indicated by the Type N grooved rectangular *Olivella* shell beads that are found in sites across a large region, and obsidian from sources located the Napa Valley and eastern Sierra Nevada (Casa Diablo and Bodie Hills sources) present within sites located in the San Francisco Bay-Delta region (Byrd et al. 2017). The first evidence for use of the San Francisco Bay's estuarine resources is also indicated during this period by the presence of shell midden deposits in Marin County (CA-MRN-17), Contra Costa County (CA-CCO-474/H), and in San Mateo County (CA-SMA-40) that date between 6300 and 5000 cal BP, and at a site in Alameda County (CA-ALA-307) that dates to 4900 cal BP (Byrd et al. 2017). Faunal remains indicate reliance on seasonal waterfowl and anadromous and freshwater fish. "Archaeobotanical assemblages from Middle Holocene contexts are varied; for example, CCO-18/H features produced a varied assemblage of nutshell, small seeds, and fruit pits, including acorn, gray pine, bay, buckeye, red maids, goosefoot, farewell-to-spring, juniper, and manzanita berry pits (Wohlgemuth 2010). These remains suggest that a wide range of habitats was exploited throughout the year, consistent with either semi-permanent occupation or multi-season visits" (Byrd et al. 2017).

Late Holocene (4200 – 180 cal BP)

Due to the greater number of archaeological sites that have produced stylistic artifacts and radiocarbon dates, the Late Holocene is generally divided into the Early Period (4200–2550 cal BP), Early/Middle Transition Period (2550–2150 cal BP), Middle Period (2150–930 cal BP), Middle/Late Transition Period (930–685 cal BP), and Late Period (685–180 cal BP). "The Late Holocene is very well-documented in the Bay-Delta Area, with more than 240 radiocarbon-dated sites reflecting widespread occupation (Milliken et al. 2007)".

Early Period (4200 – 2550 cal BP)

The Early Period (4200–2550 cal BP) marks a shift from a mobile foraging pattern to a sedentary and semi-sedentary land use pattern along the Bay Shore and interior valleys (Milliken et al. 2007:114-115). This more sedentary way of life seems to have been in response to the availability new resources as the San Francisco Bay estuary matured, and an increased dietary reliance on acorns rather than hard seeds. As a result, populations in the San Francisco Bay region increased and the social organization became more complex, which is evidenced by mortuary practices and an increase in ornamental grave associations, regional symbolic integration and the establishment of trade networks. "Bay margin sites reveal a strong emphasis on marine shellfish, marine fishes, and marine mammals…In contrast, interior sites emphasized freshwater fish and shellfish along with terrestrial mammals. Nuts, berries, and small seeds appear to have been particularly important plant foods" (Byrd et al. 2017). Cultural patterns that emerge in the San Francisco Bay region during this period include Windmiller in the Delta Region and Lower Berkeley along the Bay Shore. Artifacts that typify the Early Period include a corner-notched, concave-based, lanceolate, and side-notched style projectile points, cut marine shell (*Olivella* sp.) beads that are often found in a mortuary context, mortars and pestles and a greater amount of obsidian from Napa Valley sources than Annadel obsidian available in Sonoma County (Milliken et al. 2007). The Early Period was also marked by significant climatic changes during which warmer and drier conditions led to desiccation of lake basins in southern California (Schwitalla 2013).

Middle Period (2150–930 cal BP)

The Middle Period (2150–930 cal BP) is marked by a population increase and a greater level of sedentism (Milliken et al. 2007:115-116). Fixed permanent villages used most of the year became dominant along the Bay Shore. This indicates the establishment of fixed group territories as well (Lightfoot and Luby 2002:276; Wiberg 2010: 31). During this period, population growth led to restricted mobility, which in turn led to resource intensification, increased cooperation and a greater level of social complexity (Milliken et al. 2007:99). In the latter half of the Middle Period and the Middle/Late Period Transition (930–685 cal BP), a dramatic cultural disruption occurred, marked by changes in shell bead types, settlement patterns and food resources (Milliken et al. 2007:116). The Berkeley Pattern, which developed from the preceding Lower Berkeley Pattern, was well established by the Middle Period (Moratto 1984:277). Berkeley Pattern traits typically include tightly flexed burials, with fewer grave offerings and no preference toward orientation. Cremations are occasionally encountered and are associated with more grave goods than flexed burials, a mortuary treatment suggesting differentiation in wealth or status. Burial artifacts typically include *Olivella* saddle and saucer beads and *Haliotis* pendants. Berkeley Pattern sites are also characterized by utilitarian objects that include numerous mortars and pestles, which imply greater reliance on nuts and seeds, as well as a highly-developed bone tool industry. New types of bone tools such as the single-barbed bone fish spear indicate a greater reliance on fish and marine mammals like sea otter, seal and sea lion (Elsasser 1978:39; Hildebrandt and Jones 1992:382). Shellfish collecting was also very important. This is indicated by the deposition of large quantities of shell, mostly mussel, which make up a good portion of shellmound constituents. Hunting is implied by spear and dart-sized projectile points, which were propelled using an atlatl, as well as high frequencies of deer and elk remains (Beardsley 1954; Hildebrandt and Jones 1991:382).

Middle/Late Transition Period (930–685 cal BP)

Starting at the end of the Middle Period and continuing in the Middle/Late Period Transition many of the Bay Shore sites were abandoned as residential places and then later reused as special-purpose sites in the Late Period (685–180 cal BP) (Lightfoot and Luby 2003:277). The reasons postulated for the abandonment of shellmound sites along the Bay include population decline, environmental degradation resulting from drought conditions of the Medieval Climatic Anomaly (MCA) that affected the availability of marine resources, a shift towards greater reliance on acorns rather than shellfish, intrusion of Patwin speaking people into the North Bay, or the return to a semisedentary settlement system whereby year-round occupation of shellmounds gave way to seasonal use of interior localities (Ingram 1998; Lightfoot and Luby 2003:279; Schwitalla 2013). Zooarchaeological data suggest that the abandonment of shellmounds as residential places does not coincide with a population decline, as some sites evince continued resource intensification due to overhunting in the Late Period (Broughton 1994).

Late Period (685–180 cal BP)

Occupation during the Late Period (685–180 cal BP) is well-documented in the San Francisco Bay-Delta region, and is thought to be associated with a new level of sedentism, status ascription, an increase in ceremonialism, and regional trade. It appears that an economic relationship was maintained among the many small autonomous socio-political groups called tribelets, and trade was frequent between coastal groups, valley groups and Bay Shore groups (Hylkema 2002). Sites from this time period are associated with the Augustine Pattern and artifacts typically include large, well-formed mortars, pestles and hopper mortars that indicate a continued reliance on acorns, flanged steatite smoking pipes, toggle harpoons, baked clay figurines, clamshell disk beads, small projectile points such as the Rattlesnake corner-notched and Desert side-notched points that suggest the use of the bow-and-arrow (use of the bow and arrow is first documented in the region circa 700 cal BP) in oppose to the atlatl that was used previously in conjunction with spear points, steatite and magnesite beads and tubes, *Olivella* callus cup beads, and *Haliotis* banjo shaped pendants. The manufacture of clamshell disk beads, which were used as exchange currency with a standardized value, seems to have centered primarily on the Santa Rosa Plain in Sonoma County and within the Napa Valley in Napa County. The burial practice of cremation was also introduced in the North Bay during this time (Milliken et al. 2007). These shifts in technology, artifact types and mortuary practices, which, for the most part, spread throughout the San Francisco Bay Area from north to south, appears to be indicate that another upward cycle of regional integration took place during this period. However, this cycle was stopped short by Spanish colonization and missionization of Native populations.

ETHNO-HISTORIC SETTING

The Project Area is situated within the ethno-historic territory of the Costanoan (also known as Ohlone) who inhabited the eastern shoreline of San Francisco Bay and much of the interior East Bay. The word *Costanoan* is from the Spanish word Costaños, which means “coast people,” and refers to a language family, not a political entity. Costanoan includes a family of eight languages, four of which were spoken by people occupying the San Francisco Bay area. Each language group was subdivided into smaller village communities or tribelets that were independent political entities occupying specific territories, eight to twelve miles across and defined by physiographic features (Milliken 1995). Each tribelet controlled access to the natural resources within its territory, which typically required that there be one or more primary villages and numerous smaller villages used seasonally for resource procurement (Heizer and Elsasser 1980). The largest village in a tribelet area was occupied by a chief (Heizer and Elsasser 1980), which could be either a man or women. *Chochenyo*, or East Bay Costanoan, was spoken among the tribelets occupying the east shore of San Francisco Bay between Richmond and San Jose, including where the Project Area is located, and in the Livermore Valley area (Figure 9) (Levy 1978).

The *Chochenyo*, or East Bay Costanoan, were comprised of tribal groups with lineages named for specific locations within the area they occupied (Levy 1978). People were united by language but broken into tribelets (independent political entities) that occupied defined territories, including the *Jalquin, Carquin, Saclan, Tatcan* and the *Huchiun* who occupied the area where the Project is located (Figure 10). The name of each tribelet came from the location of their village site. Each tribelet controlled access to the natural resources within their own territory, which typically required that there be one or more primary villages and numerous smaller villages used seasonally for resource procurement.

Figure 9: Ethno-historic tribal communities in the vicinity of the Project Area.

Figure 10: Tribal groups in the San Francisco Bay-Delta Area at the time of Spanish settlement in 1776 (based on map produced by Beverly Ortiz, East Bay Regional Park District).

The Costanoan were successful hunter/gatherers who utilized a wide range of resources in a very favorable environment. They practiced specialized horticultural techniques, including the use of fire, that increased the numbers and health of the numerous plants and animals on which they relied. A variety of plant foods were gathered on a seasonal basis. Important plant foods included the nuts of coast live oak, valley oak, California black oak, tanbark oak, buckeye, California laurel and hazelnuts. The acorns from oaks were the most important plant food, and were collected in large quantities and stored. They were processed by removing the hard-exterior shells, pulverizing the inner nut in a mortar bowl (basketry, wood, and stone mortars of various types were used), then leaching with water to remove the tannins. Buckeyes were made edible in much the same way. Seeds that were roasted before consumption included dock, tarweed, chia, and gray pine. Hazelnuts and California laurel nuts were also eaten, as well as seeds from a number of other plants. Many types of berries, including blackberries, elderberries, strawberries, Manzanita berries, gooseberries, madrone berries, grapes and toyon berries were also collected and eaten, as well as a number of tubers and roots such as wild onions, cattail roots, amole, hog fennel and wild and tubers (Levy 1978). In the hills and valleys some mammals that were hunted included deer, elk, antelope, bear, rabbit, squirrel, woodrat, mouse and mole.

The bow-and-arrow constituted a part of the hunting technology. Both unbacked and sinew backed bows ranging from 3 to 4½ feet long were used to launch arrows fitted with lithic or bone points. Bowstrings were manufactured from animal sinew or vegetal fibers. The typical arrow was a compound arrow consisting of a cane shaft fletched with three feathers and a hardwood foreshaft to which a projectile point was usually, but not necessarily, attached. Hunting arrows seem to have been rather long in comparison to war arrows. Asphaltum was used as the adhesive for fletching (Levy 1978).

Basketry was a well-developed craft and were used for the collection, preparation and storage of food, and for a variety of other reasons. Other kinds of baskets included mush bowls, cooking baskets, parching trays, storage baskets, sifters, fish traps, trinket containers, canteens, and possibly cradles (Levy 1978). The Costanoan also constructed “balsa” boats using about twenty bundles of tule reeds, also called bulrushes, tied together with cordage made from milkweed, Indian hemp or nettle, that were stabilized with Willow poles. They were propelled using double-bladed wooded paddles and anchored with stones tied to a rope (Font 1930; Levy 1978). Boats were used to navigate the Bay and major river systems, and during hunting and gathering forays. The presence of archaeological sites on islands in San Francisco Bay suggest the use of balsa boats as early as 3,400 BP (Morgan and Dexter 2008)

The first known instance of European contact with Native American populations in the San Francisco Bay Area occurred in late 1769 (Milliken 1995). With the arrival of the Spanish came the establishment of missions and a concerted effort to convert the Native population to Catholicism, which quickly led to the demise of Bay Area native cultures (Milliken 1995). Much of the ethnographic information presented above comes from the diaries of early Spanish explorers describing their incursions into the San Francisco Bay region between the years 1769 and 1776, and from ethnographers who later located Native informants to obtain information about language, territory, material cultural, political and social organization and subsistence practices of Native tribes (Heizer 1978).

HISTORIC PERIOD SETTING

The following historic setting is intended to provide an overview of the broader historic themes, as well as specific historic contexts potentially associated with any historic-period cultural resources that could be located within the Project Area.

The Spanish Period (1769 - 1822)

Due to the determination of King Carlos III of Spain to occupy and colonize "Alta California" [5] several Spanish expeditions through the San Francisco Bay region occurred between 1769 and 1776, including those led by Fages, Fages and Crespi, Portola, Anza, Ayala, and Rivera and Moraga. The expedition led by Pedro Fagas in 1772 that included Father Juan Crespi, six soldiers, and a Native American guide traveled from Monterey through present-day Milpitas, San Lorenzo, Oakland, and Berkeley, reaching the area near present-day Pinole on March 28, 1772 (Cook 1957:131). From there, the expedition traveled through Rodeo and Crocket to Martinez on their way towards the Delta region before stopping to camp near present-day Pittsburg in Contra Costa County. On March 31st, they began their journey back to Monterey via Walnut Creek and Danville, and on April 1st they passed through the area of San Ramon, Dublin and Pleasanton (Cook 1957). It was during this trip that the expedition first made contact with *Huchiun* people living in a village along Wildcat Creek. The Fagas expedition was soon followed in 1776 by a party led by Captain Juan Bautista de Anza accompanied by Father Pedro Font (Anza-Font expedition) who generally took the same route as the Fagas expedition (Beck and Haase 1974:17). Then in 1775, Captain Ayala's expedition explored the San Francisco Bay by boat, as well as the lower reaches of the Sacramento and San Joaquin rivers in search of a suitable place to build a mission. These expeditions resulted in establishment of the Presidio of San Francisco and Mission San Francisco de Asís (1776) in present-day San Francisco, Mission Santa Clara de Asís (1777) in present-day Santa Clara, and the Mission San Jose de Guadalupe (1797) in present-day San Jose.

The indigenous Native American tribes of the San Francisco Bay-Delta region were significantly impacted when the Spanish began to colonize the area and convert the Native population to Catholicism. The colonizers introduced new diseases for which the Natives had no immunity and sought to incorporate indigenous people into the Spanish colonial empire to further the Spanish goals of political, economic, and religious expansion in the Americas (Milliken 1995). Spanish mission records indicate that local Native Americans from settlements throughout the San Francisco Bay Area were taken to Mission San Francisco de Asís between 1795 and 1806 (Milliken 1995). The *Huchiun,* who were *Chochenyo*, or East Bay Costanoan, and the neighboring group to the south – the *Jalquin* Bay Miwok - went to Mission San Francisco de Asís (aka Mission Delores) between 1801 and 1803, while the *Yrgins*, who are thought to have been part of the same group of *Jalquin* Bay Miwok, went to Mission San Jose during this same period (Milliken 1995:244-245).

During this time, the Project Area was located within the former 44,800-acre land grant known as *Rancho San Antonio* that was granted in 1820 by Governor Pablo Vincente de Sola (the last Spanish Governor of California) to Don Luis Maria Peralta. Peralta was seventeen years old when he joined his

[5] *Alta California* was a polity of New Spain founded in 1769 and became a territory of Mexico after the end of the Mexican War of Independence on 1821.

father, Corporal Gabriel Peralta, on the Font-Anza Expedition into the San Francisco Bay area in 1775-1776. In 1776, Don Luis, along with his father, mother and two siblings settled in El Pueblo de San Jose de Guadalupe that was the first pueblo-town established in upper Alta California that was not associated with a mission or a military presidio. The Peralta's were one of the first 15 families to move to the new town. Following his father's footsteps, Don Luis enlisted in the Spanish military at the age of 21, and by 1807 he had become the Comisionado (Military Governor) of El Pueblo de San Jose de Guadalupe (Friends of Peralta Hacienda Historical Park 2019). In 1784, Don Luis married Maria Loreto Alviso at Mission Santa Clara and they had seventeen children, of which nine survived to adulthood (4 sons and 5 daughters). In 1820, after forty years of service in the Spanish military, Don Luis was granted *Rancho San Antonio*, which was one of the largest land grants given during the Spanish period. The rancho included the present-day cities of Oakland, Berkeley, Alameda, Emeryville, Piedmont, and part of San Leandro. Don Luis never lived on the rancho, but to establish his ownership, he sent his third son Antonio Marie Peralta (1801-1879) to build the first adobe within the rancho in 1821.

The Mexican Period (1821 - 1846)

In 1821, Mexico won its independence from Spain with the signing of the Treaty of Córdoba and took possession of California, marking the end of the Spanish period and the beginning of the Mexican period in Alta California. Many changes occurred throughout Alta California under Mexican rule due to the lack of strong oversight and military rule imposed by the Spanish. Under Mexican rule, missions were secularized, which resulted in Mission land and property being dissolved, and new opportunities arose for trade because foreign ships that had previously been held off by Spanish guarded military ports could dock and provide a variety of provisions to local settlers throughout California. Thus, tea, coffee, sugars, spices, spirits of all kinds, as well as a variety of manufactured goods made their way into the region; and the taxes on these imported goods became the main source of revenue for the Mexican government in California. Likewise, products produced in Alta California were exported, which bolstered the hide and tallow trade that became the primary business activity in California during this time. The Mexican colonial authorities also permitted and encouraged foreigners to relocate and settle in Alta California and as a result the population of Euro-Americans increased.

As the population grew, and the hide and tallow trade became a main source of revenue, several additional ranchos were established that included large tracts of land given to politically prominent Mexican citizens and military leaders. As a result, the 20 or so ranchos that had existed during the Spanish period, including *Rancho San Antonio,* increased to roughly 800 that varied between 10,000 and 20,000 acres in size. The income of the rancho was dependent on the amount of hide and tallow produced; therefore, a family's wealth was often determined by the size of their rancho, number of cattle they owned, and the availability of a labor force, which consisted mostly of Indians and poor Mexicans who depended on the rancho owners for their basic needs during this time (Silliman 2004).

The new Mexican government in Alta California confirmed Don Luis Maria Peralta's claim to the *Rancho San Antonio* following Mexican Independence in 1822. Don Luis never lived on the Rancho, and when he died in 1842 at the age of 83, he bequeathed it to his four sons, Ignacio, Domingo, Antonio and Vincente. Upon his death his estate was valued at $1,383,500.00 ($30 million today's value).

According to the Hacienda Peralta Historical Park, *"Sometime around 1828, Antonio brought his first wife, Maria Dolores Galindo to live on the rancho and the other three sons of Luís María Peralta soon followed. Eventually, Vicente, Domingo and Ignacio Peralta all built their own homes in various parts of the rancho in order to better manage the large grant. José Domingo Peralta (1795-1865), who had his own rancho in present-day Santa Clara-San Mateo counties, was convinced to move to Rancho San Antonio in the 1830s and eventually built an adobe in 1841 in the northernmost part of the rancho in what is now the city of Berkeley. The oldest son, Hermenegildo Ignacio (1791-1874), after retiring as alcalde in San José, came to the rancho in 1835 and established a residence in the southernmost area in present-day northern San Leandro. The youngest son, José Vicente (1812-1871), lived with his brother Antonio until he married and built his own adobe in 1836 in what is now the northern Temescal district of Oakland.*

*In 1842, apparently believing it was time to settle his estate, eighty-three-year-old Luís María Peralta journeyed to the rancho in order to divide the rancho land among his four sons. Luís had already given cattle to his three married daughters and planned to leave his San José adobe and land to his two unmarried daughters, who lived with him. Antonio received 16,067 acres of land from 68th Avenue to present-day Lake Merritt and up the eastern side of Lake Merritt to Indian Gulch, now known as Trestle Glen. Antonio's portion also included the peninsula of Alameda. Ignacio received approximately 9,416 acres from southeastern San Leandro Creek to approximately 68th Avenue in Oakland. Vicente received the acreage that included the entire original town of Oakland, from Lake Merritt to the present Temescal district. Domingo received all of what is present-day Albany and Berkeley and a small portion of northern Oakland. The acreage of each portion is only known because of the patents later received by the brothers from the US government. Both Ignacio and Antonio received separate patents for their portions, but Vicente and Domingo applied for a joint patent that totaled 19,143 acres." (*Hacienda Peralta Historical Park 2017).

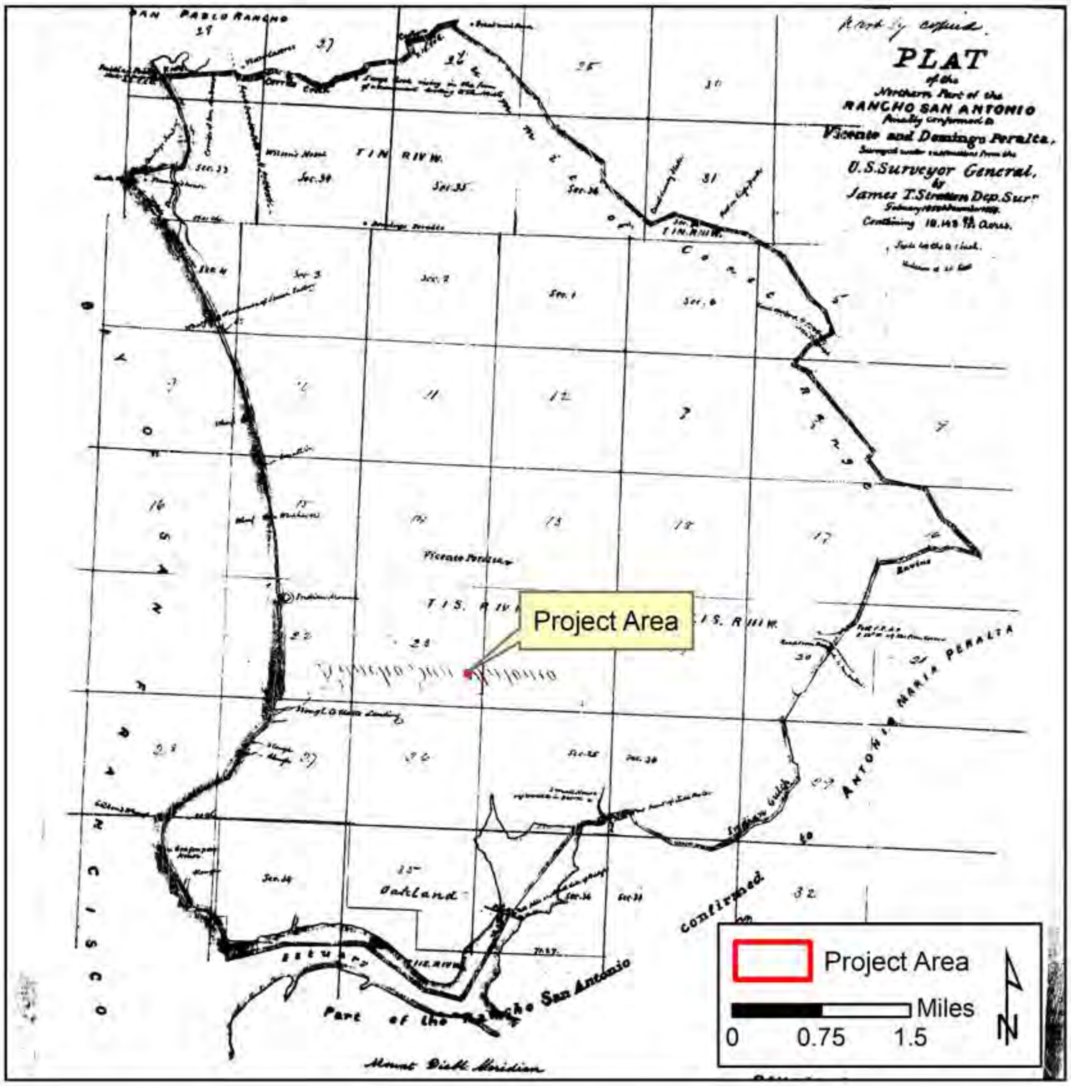


Figure 11: Plat Map of the Northern Part of the Rancho San Antonio confirmed to Vincente and Domingo Peralta (1859).

Early American Period (1848 - 1880)

The beginning of the American Period in California is marked by the end of the Mexican-American War in 1848 when the U.S. signed the Treaty of Guadalupe Hidalgo and took possession of the territories that included present-day California, Arizona, Colorado, Nevada, Utah, Wyoming, and New Mexico. The Treaty of Guadalupe Hidalgo provided the resident Californios[6] their American citizenship and guaranteed title to land granted during the Mexican period. However, within weeks of the treaty signing, gold was discovered by James Marshall along the American River in California, and as a result a rush of people from all over the U.S., as well as Scotland, Ireland, England, Germany, and France European and American came to California in search of gold and wealth.

6 Spanish-speaking residents of Alta California during the Spanish and Mexican era (1769-1848).

For the first few years of the California Gold Rush (1848-1850), *Rancho San Antonio* remained prosperous, as the Peralta's made a significant amount of money supplying beef and flour to the miners. However, the Gold Rush also brought an influx of new settlers that were drawn to the fertile and undeveloped lands of the ranchos, and this gave rise to land disputes as settlers (aka "squatters") began to move onto vacant rancho land that they perceived to be available for settlement.

When the U.S. took possession of California and other Mexican lands in 1848, it was bound by the Treaty of Guadalupe Hidalgo to honor the legitimate land claims of Mexican citizens residing in the captured territories. In order to investigate and confirm titles in California, officials acquired the provincial records of the Spanish and Mexican governments in Monterey, and they were transferred to the U. S. Surveyor General's Office in San Francisco, including land deeds, sketch maps (*disenos*), and various other documents. In 1851, the U.S. passed the California Land Act that established a three-member Public Land Commission to review these records and determine the validity of the land grants, and charged the Surveyor General with surveying confirmed land grants. Of the 813 grants ultimately claimed, the land commission approved only 553; however, some of the confirmed grants were reduced in original size and the cost of litigation forced many of the Californios[7] to sell their land and cattle (California Secretary of State 2019; Olmsted 1986).

As required by the California Land Act of 1851, the Peralta brothers filed a claim for *Rancho San Antonio* with the Public Lands Commission in 1852. However, over the next few decades, they began selling large portions of the rancho land. Antonio remained in possession of the largest tract of land within the Rancho, and in 1870, he built an Italianate house adjacent to his adobe house (still extant), which is now a part of the Peralta Hacienda Historical Park in the Fruitvale District of East Oakland. However, it was not until June 17, 1874 that the U.S. issued a patent to Antonio for his 16,067-acre portion of the original *Rancho San Antonio* that his father Luís had deeded him in 1842. By 1879, when Antonio Peralta (Don Luis' youngest son) died, only 23-acres of the original 44,800-acres remained (Friends of Peralta Hacienda Historical Park 2019).

Early Development of Oakland

Early development of the City of Oakland was largely shaped by its topography and accessibility. The original town site was located near Lake Merritt, which allowed for several access options that included a tidal slough, the San Antonio Estuary, and its marshy shores, the Bay west of Pine and Cedar Streets, and a wedge shaped northern marsh that extended from about 16th Street north to 28th Street and beyond, and at its widest came inland as far as Adeline Street (ESA 2007). In 1850, within the town of Oakland, a group of squatters hired a surveyor and laid out the town plat near Lake Merritt and present-day Broadway Street (ESA 2007). The original street grid ran west as far as Market Street and north to 14th Street. In 1852, the town was incorporated, and was extended west from Lake Merritt to the San Francisco Bay and north to approximately 22nd Street.

In 1861, the Transcontinental Railway opened its western terminus in Oakland, on Third Street near Broadway. The Oakland "local" line was operated by the San Francisco and Oakland Railroad Company, which also operated the rail-ferry to the Oakland wharf. "To meet competition of a rival ferry line on the

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[7] Californios were elite families that received large land grants from Spain and Mexico.

Oakland Estuary "creek route," the railroad built a bridge (later filled in) across San Antonio Creek and extended its service to the town of San Antonio (now East Oakland) on September 28,1864” (Baker 1914). This event marked the beginning of the move of the City’s central district away from the waterfront, and northward along Broadway. The prosperity brought by the railway began a cycle of growth in Oakland that resulted in the commercial hub of the City being firmly established at Ninth Street and Broadway by 1877.

Longfellow Neighborhood

The Longfellow neighborhood is located in north Oakland and encompasses the area north of Highway 580, east of Adeline Street, south of 51st Street, and west of State Route (SR) 24. Originally considered to be part of the Temescal neighborhood, which is north of Longfellow, the Longfellow neighborhood developed slowly during the late 1800s, and by 1870s the neighborhood consisted of Victorian style houses; however, there were also still areas within Longfellow that were either undeveloped or utilized as farmland. According to a notation on an 1877 Map of Oakland and Alameda, the land adjacent and east of the Project Area was occupied by “Chinese Vegetable and Berrie Garden, 1880s”. By the 1890s, the land within the Longfellow neighborhood had been sold to investors who subdivided the land into smaller parcels for housing Tract developments including the Alden Tract, the Evoy Tract, the Sheridan Tract, the Major Given Tract, and the Apgar Tract, where the Project Area is located (Figure 12). The Apgar Tract was owned by Richard M. (aka R.M.) Apgar, who was a longtime resident of Oakland and started a real estate investment firm in 1884. In the early 1900s, the area began to develop and was known as “Little Italy”, which also included the Temescal neighborhood north of Longfellow (often referred to collectively as North Oakland).

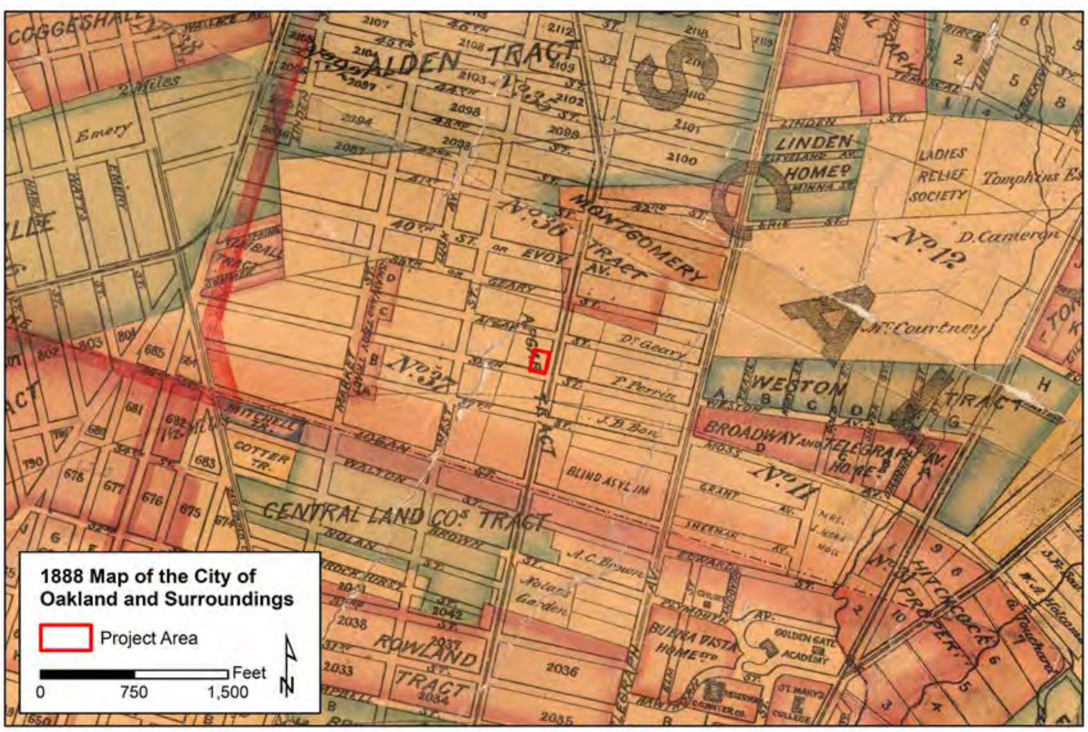


Figure 12: 1888 Map of the City of Oakland by J.C. Henkenius showing Project Area within Apgar Tract.

During the early 1900s, the Longfellow neighborhood was composed of mostly Italian immigrant communities. The Sacred Heart Parish church (founded in 1876) on the corner of Martin Luther King Jr. Way (formerly Grove Street) and 40th Street was the heart of the larger Italian neighborhoods of Longfellow and Temescal.

In the early 1900s, Grove Street was home to the Grove Street #5, a streetcar connecting the North Oakland community to the greater Key System (Key Route) in Oakland (Figure 13). The Key System's F line connected Berkeley to the Bay Bridge and ran down Linden Street in the Longfellow neighborhood. The Key System was a privately owned transit company that serviced Oakland from 1903 to the early 1960s. The Key System's F line connected Berkeley to the Bay Bridge and ran down Linden Street in the Longfellow neighborhood.

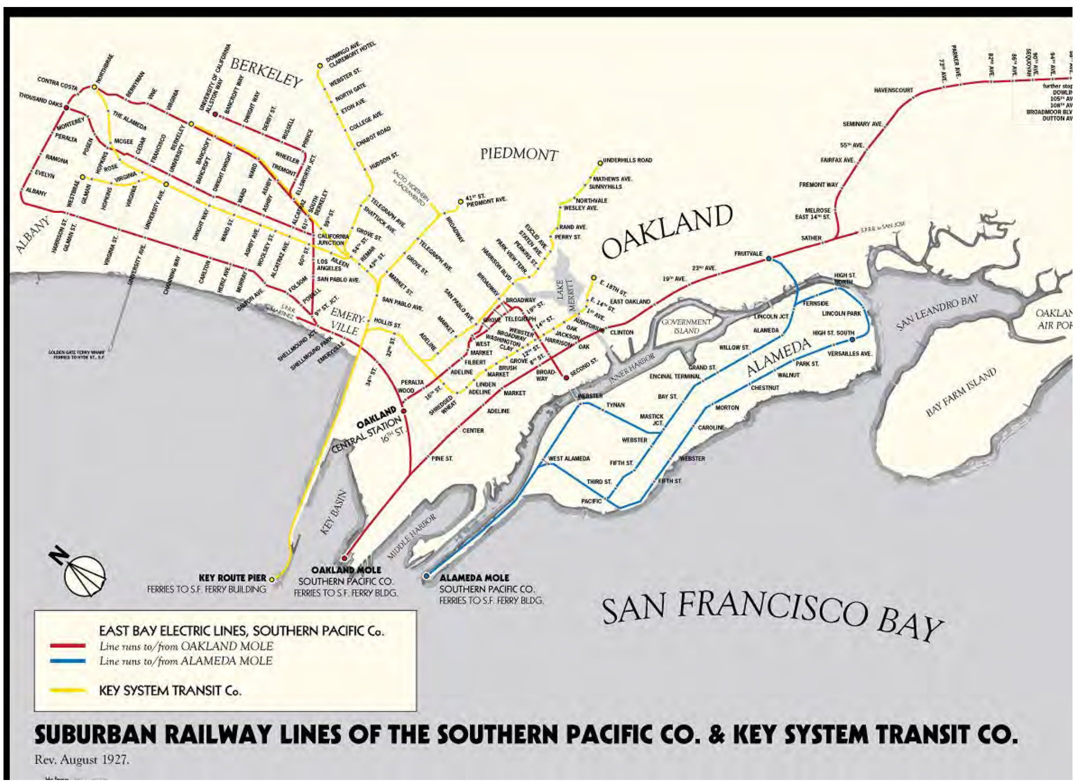


Figure 13: 1926 map of the Suburban Railway lines.

By the late 1930s, the Grove Shafter Freeway (now known as SR 24) was constructed and destroyed a large portion of the Longfellow and Temescal neighborhoods, and also divided neighborhoods from the commercial district along Grove Street. As a result, the Sacred Heart Parish suffered as the area fell into decline.

In the 1940s and 1950s, the Longfellow neighborhood transitioned from an Italian immigrant community to an African American community (Molteni 2019). This was in large part due to redlining practices by the City of Oakland. As Oakland's African-American population grew during World War II, discriminatory practices like redlining made it near-impossible for people of color to buy homes east of Telegraph Avenue. Redlining was used throughout the U.S. during this time, and excluded African-Americans, as well as Chinese, from securing mortgages for homes in "higher-grade" areas. In 1937, in a document filed by the City of Oakland's building inspector, the Longfellow neighborhood was listed as a "Grade D" or red, which was the least desirable; and as such, mortgages were hard to obtain in these areas. This inequality, combined with years of social injustices, gave rise to several African American organizations within Oakland's Longfellow community during the 1960s, including the African American Museum and Library (AAMLO)[8] and the Black Panther Party, which began in part in the Longfellow neighborhood (Norman 2006; Seale 1978). During this time, the Black Panther Party Office #2 was located at 4419 Martin Luther King Jr. Way, within the Longfellow neighborhood. Also, in the 1960s, Highway 580 was constructed and divided the Longfellow neighborhood up even further, and this resulted in a decline of the once vibrant commercial district that had developed along Grove Street, then in 1984 Grove Street was remade by the City of Oakland to Martin Luther King Jr. Boulevard.

History of the Project Area

The history of the Project Area was developed through a review of the historic maps and aerial photographs dating from 1859 to 1965, as well as information obtained online at Ancestry.com and Newspapers.com.

The 1859 plat of the northern part of Rancho San Antonio (previous Figure 11) shows the Project Area within a portion of the land grant that was claimed by Vincent Peralta, as well as sloughs, wharfs and one "Indian Mound" (Emeryville Shellmound CA-ALA-309) to the west along the San Francisco Bay shoreline, Lake Merritt to the southeast, and the original location of where Oakland was first established near Lake Merritt. A few houses are also depicted on the 1859 plat of the northern part of Rancho San Antonio, none of which were located near the Project Area.

According to the 1878 Map of Alameda County by Thompson and West, the City of Oakland had expanded significantly by this time, and the Project Area is shown within a portion of plot No. 37 that appears to have been owned by J. Evoy (John Evoy); however, according to a notice in the San Francisco Examiner from 1879, it was his wife, Mary J. Evoy, who purchased the 16.81-acre property that included Plot 37 within Tract B from W. T. Norris for $16,000. On the 1878 map, plot No. 37 included approximately twelve city blocks and streets laid out in a grid pattern, and while there appears to have been some development occurring within the lot during this time, no development is shown within the block where the Project Area is situated (Figure 14).

John and Mary were both born in Ireland and they had five children, William, Edward, Virginia, James and Charlotte. According to the 1870 U.S. Census they were all living in Oakland with John's occupation being listed as a farmer, and at the time they owned $100,000 worth of real estate and $20,000 of personal estate value (Ancestry.com 2009, 2012). John died in 1873 at the age of 47 (Ancestry.com 2017), and while the 1878 map lists J. Evoy as the owner of the property, it appears that Mary purchased it after John's death (Figure 15). During this time, Mary lived with her daughter Charlotte (i.e. Lottie E.) at 1024 Chester Street in Oakland, but continued to sell lots within plot No. 37 until her death in 1894 at the age of 67 (Ancestry.com 2017; Husted 1890). After her death, her will was filed for probate with Judge F.W. Henshaw named as executor (Figure 16). It appears that F. W. Henshaw continued to sell property within plot No. 37 on behalf of her estate (Figure 17). By 1895, several lots

[8] AAMLO's predecessor was the East Bay Negro Historical Society.

within plot No. 37 had been sold and several buildings had been constructed, including within the Project Area (Figure 18).

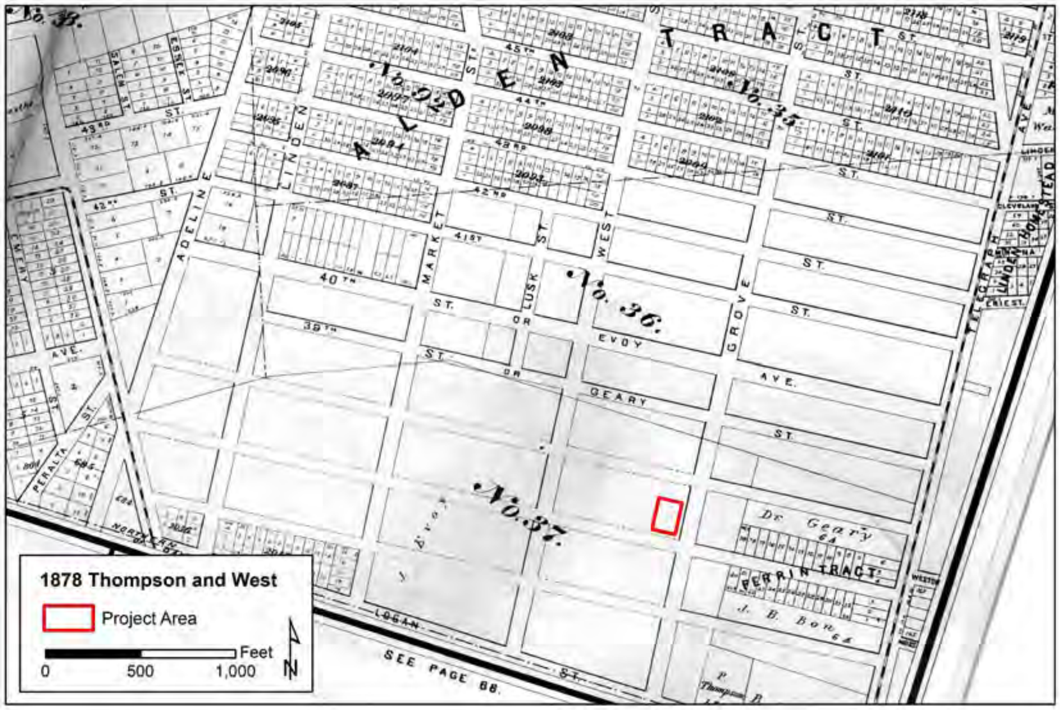
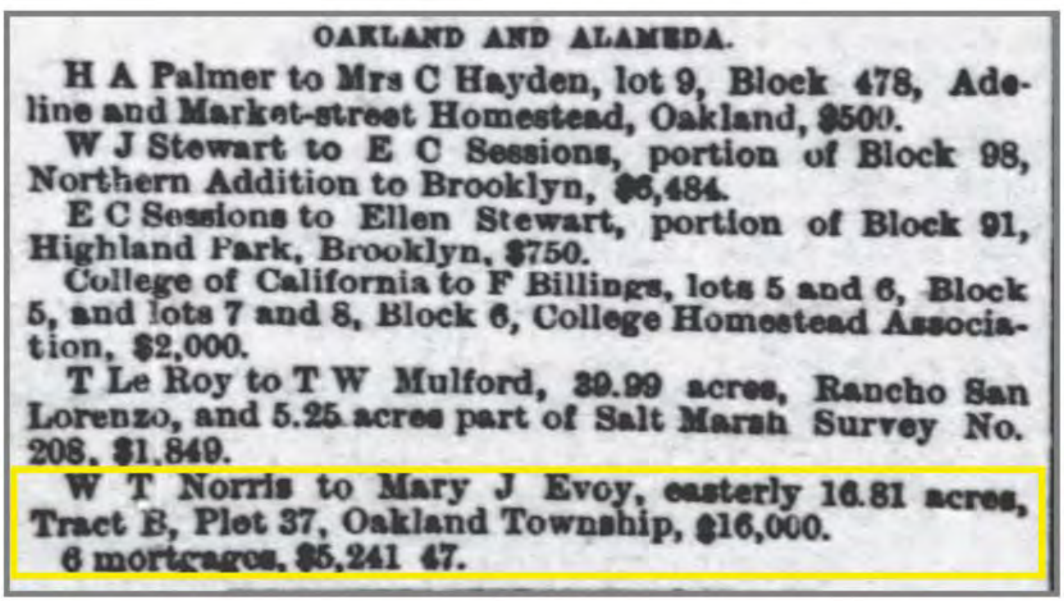


Figure 14: 1878 Thompson and West map of Alameda County showing Project Area within plot No. 37 that was owned by Mary Jane (Johnson) Evoy at the time.



OAKLAND AND ALAMEDA.

H A Palmer to Mrs C Hayden, lot 9, Block 478, Adeline and Market-street Homestead, Oakland, $500.

W J Stewart to E C Sessions, portion of Block 98, Northern Addition to Brooklyn, $6,484.

E C Sessions to Ellen Stewart, portion of Block 91, Highland Park, Brooklyn, $750.

College of California to F Billings, lots 5 and 6, Block 5, and lots 7 and 8, Block 6, College Homestead Association, $2,000.

T Le Roy to T W Mulford, 39.99 acres, Rancho San Lorenzo, and 5.25 acres part of Salt Marsh Survey No. 208, $1,849.

W T Norris to Mary J Evoy, easterly 16.81 acres, Tract B, Plot 37, Oakland Township, $16,000.

6 mortgages, $5,241 47.

Figure 15: Notice in the San Francisco Examiner of Mary J. Evoy's purchase of Plot 37 from W. T. Norris, 29 Sept 1879.

Mrs. Evoy's Will.

The will of the late Mrs. Mary J. Evoy was filed for probate in the Superior Court yesterday by Judge F. W. Henshaw, who is named to act as executor. The estate is valued at $108,000 and consists of real estate, money and securities. The estate will be tied up for a number of years with trusts which are created under the will. It is stated that some of the heirs are not fully satisfied with the testament.

Figure 16: Notice in the San Francisco Chronicle, dated 31 October 1894, regarding Mary J. Evoy's will.

F. W. Henshaw (executor estate of Mary J. Evoy) to George Sterling, all interest in the following: Lot on W line of Telegraph avenue, 50 S of Fortieth street, S 50 by W 100, being lot 2, block 2080, map of estate of John Evoy, in plat 36, rancho of V. and D. Peralta; also lot on SW corner of Market and Fortieth streets, W 103.70 by S 150, being lots 3, 4 and 5 on above map, Oakland; $1300.

Figure 17: Notice in the San Francisco Call, dated 15 June 1899, of the continued sale of land by executor, F.W. Henshaw after Mary's death in 1894.

Figure 18: 1895 USGS 15' San Francisco map showing development within and near the Project Area.

According to the 1902 Sanborn Fire Insurance map, by this time the Project Area had been subdivided into four parcels that follow the current parcel division, and there were multiple buildings present, including a house within APN 012-964-4 that had the address of 3813 Grove Street (no longer extant), two houses (one at 3809 and one at 3809½ Grove Street), as well as a 20-foot tall windmill and water tank house, and outbuildings within APN 012-964-5, and a house and outbuilding within APN 012-964-7 that had the address of 3801 Grove Street at the time (Figure 19). The property that includes APN 012-964-6 was vacant at this time.

The Sanborn Fire Insurance map from 1911-1912 does not show that any changes occurred within APN 012-964-4 or APN 012-964-5 between 1902 and 1911-12, as the same buildings that are depicted within these properties on the 1902 Sanborn Fire Insurance map are still present on the 1911-12 Sanborn Fire Insurance map, with only minor changes to the house at 3809 Grove (APN 012-964-5) being converted into two flats. During this time, it appears that the house (current ca. 1890 three-unit flat) at 3801 Grove Street (within APN 012-964-7) was relocated to the rear of the property and converted into two flats, and the ca. 1910 commercial building was constructed. In addition, by 1911-1912, 2 two-story storefront commercial buildings were constructed within the previously vacant property (APN 012-964-6), both of which fronted Grove Street (now called Martin Luther King Jr. Way) (Figure 20).

The Sanborn Fire Insurance map from 1951, indicates that the house located within APN 012-964-4 had been demolished and replaced by a building containing two stores with additions on the back that may have incorporated part of the previous house. Within APN 012-964-5, the house that is shown as containing two flats in 1911-1912 is now shown as a single house, and one of the outbuildings at the rear of the property appears to have been enlarged and converted into a garage. The other outbuilding is no longer present, and while the outline of the water tank is still present, it is no longer labeled as a water tank. No changes appear to have occurred within APN 012-964-6, as the 1951 map continues to show both adjacent two-story store buildings. Within APN 012-964-7, a shed was added to the property, which may be the ca. 1950 shed that is currently located within the property, and the ca. 1910 commercial building at the northwest corner of Grove Street and MacArthur Boulevard is now labeled as a drug store (Figure 21). These buildings are vaguely depicted on the 1946 aerial photograph as well (Figure 22), and are clearly indicated on the 1965 aerial photograph of the Project Area (Figure 23).

The buildings formerly located within APN 012-964-4, APN 012-964-5 and APN 012-954-6 appear to have been demolished in the 1970s, or later, as those parcels are currently vacant; however, the three buildings within APN 012-954-7, including the ca. 1910 commercial building, ca. 1890 three-unit flat and ca. 1950 shed are still present within the Project Area.

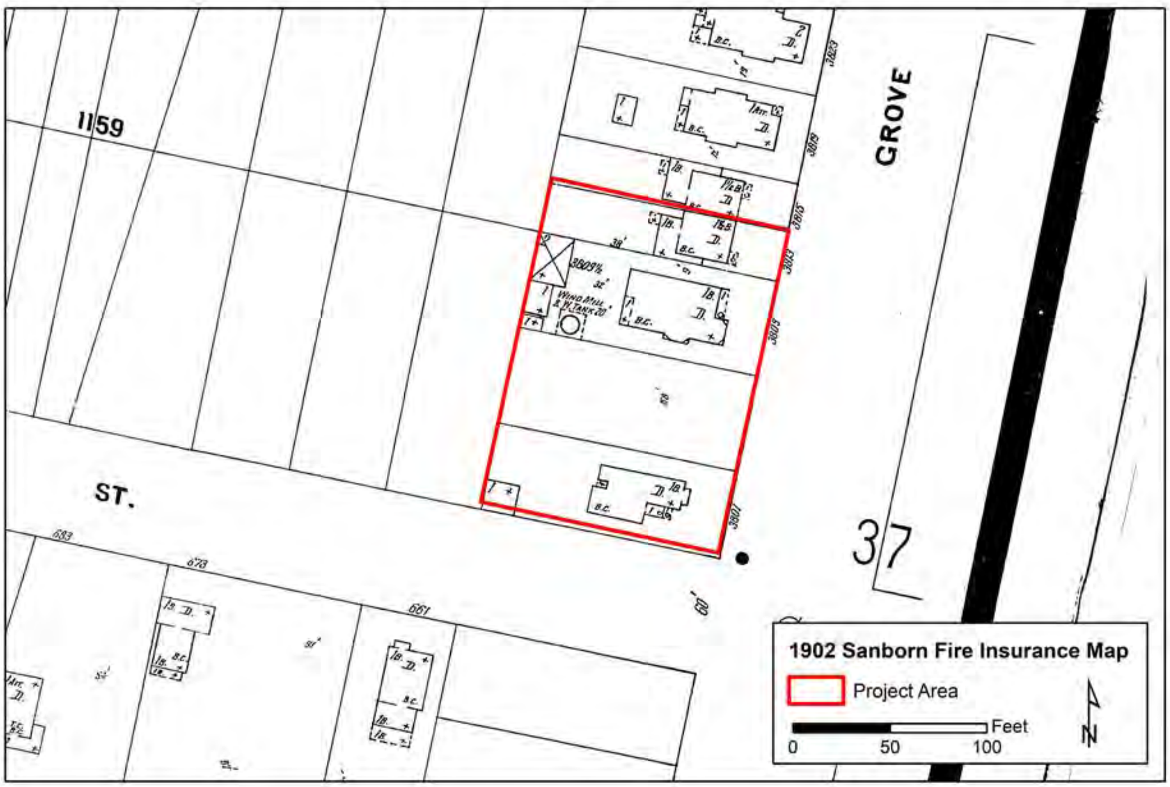


Figure 19: 1902 Sanborn Fire Insurance map showing buildings within the Project Area.

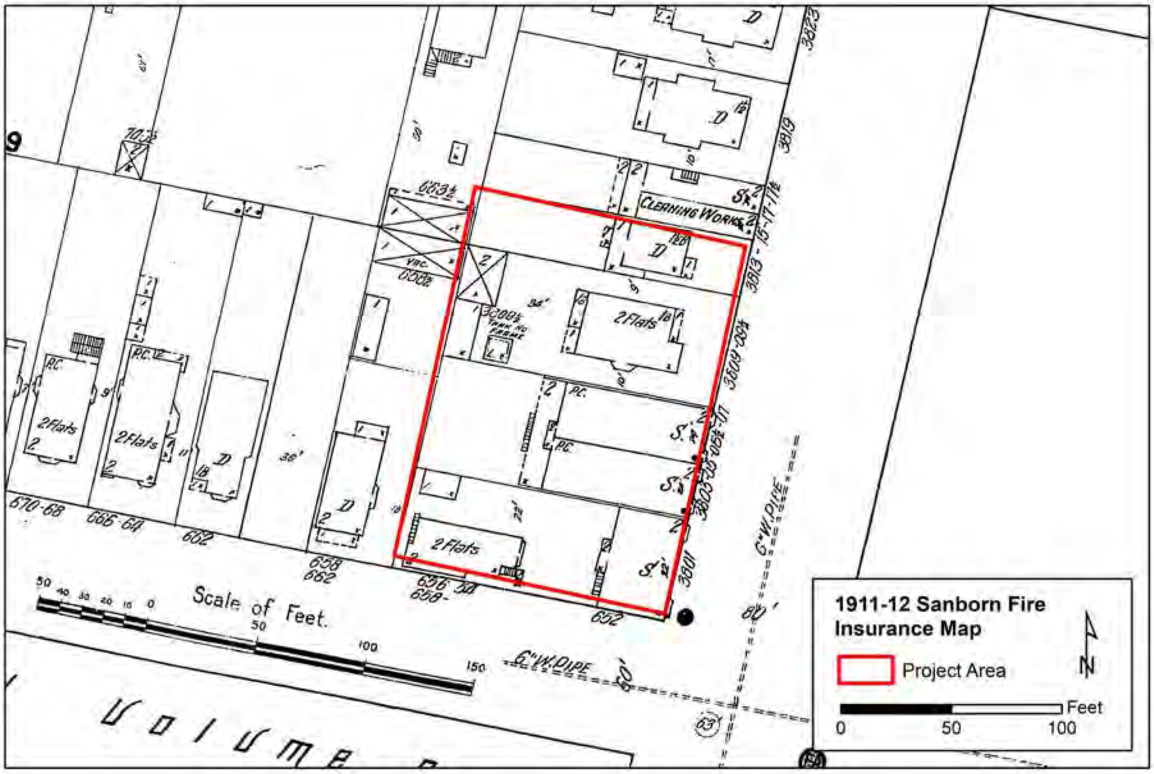


Figure 20: 1911-1912 Sanborn Fire Insurance map showing buildings within the Project Area.

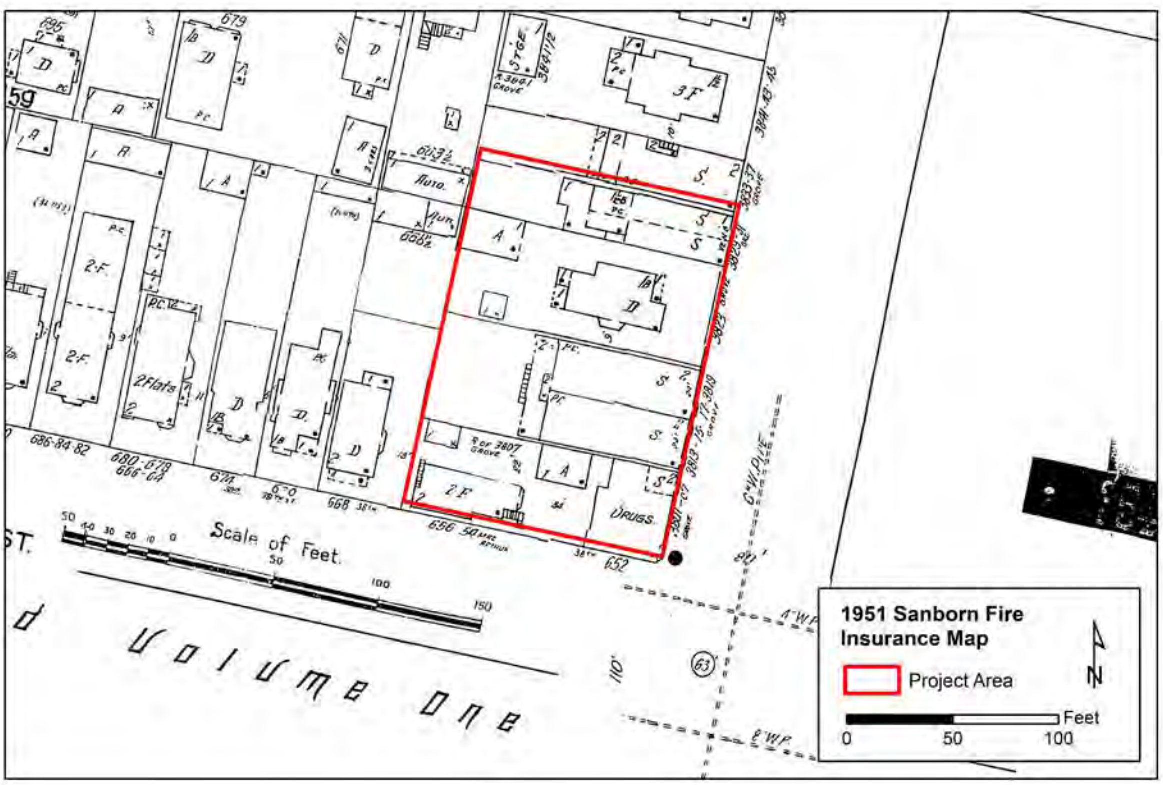


Figure 21: 1951 Sanborn Fire Insurance map showing buildings within the Project Area.

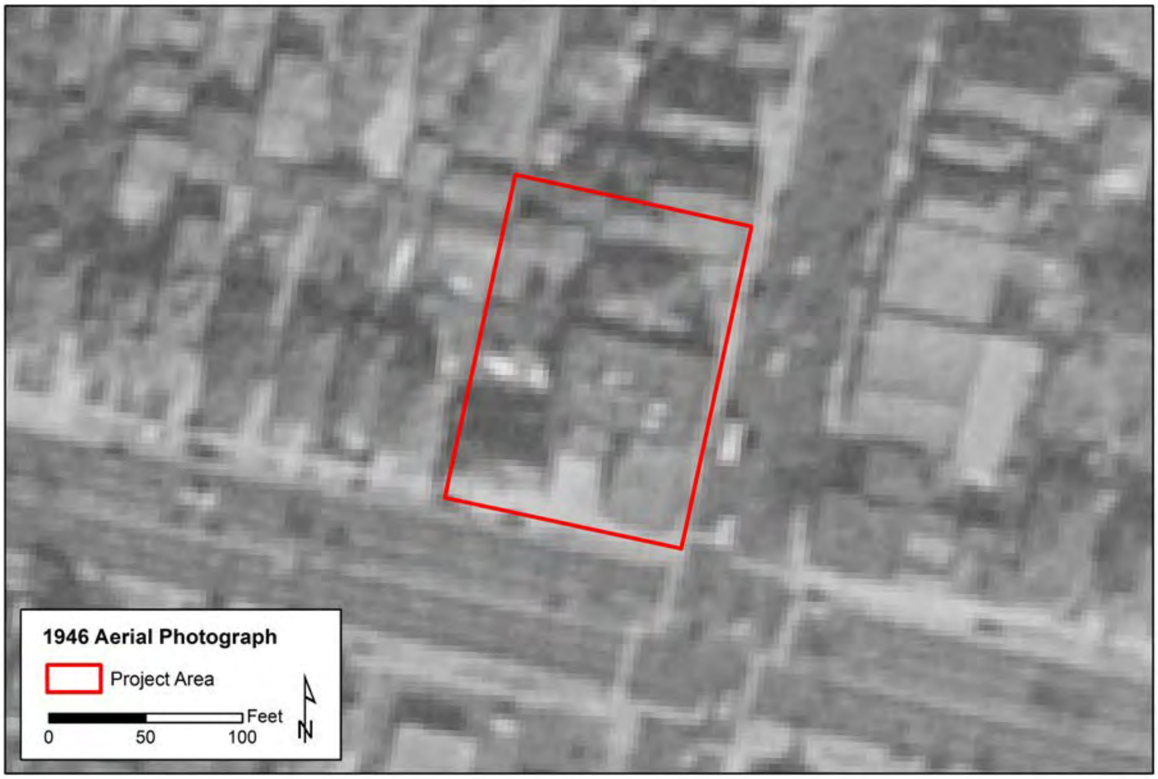


Figure 22: 1946 aerial photograph showing Project Area (U.C. Santa Barbara 2019).

Figure 23: 1965 aerial photograph showing Project Area (U.C. Santa Barbara 2019).

RESULTS OF RECORD SEARCH

NWIC

A record search was conducted by EDS Principal Archaeologist, Sally Evans, M.A., RPA at the NWIC on July 3, 2019 (NWIC File #19-0030). According to information on file at the NWIC, the Project Area has not been subject to a previous cultural resource study and there are currently no cultural resources recorded within the Project Area. There have been a total of five (5) cultural resource studies previously conducted within 0.25-miles of the Project Area that are listed below in Table 2.

Table 2: Previous cultural resource studies conducted within 0.25-Miles of the Project Area.

Report	Year	Title	Author(s)/Affiliation
31997	2005	Historic Property Survey Report: Bart Seismic Retrofit Project Berkeley Hills Tunnel to Montgomery Street Station: CALTRANS District 4 Alameda and San Francisco Counties, California	California Department of Transportation
33504	2007	Historic Property Survey Report, Historical Resources Evaluation Report and Archaeological Survey Report for the Seismic Retrofit of BART Aerial Structures and Stations along the Concord, Richmond, Daly City and Fremont Lines, Alameda, Contra Costa, and San Mateo Counties. STPLZ-6000 (25).	Heather Price, William Self Associates, Inc.
34672	2007	A Cultural and Paleontological Resources Study for the MacArthur Transit Village Project, Oakland, Alameda County, California	Timothy Jones and Michael Hibma, LSA Associates, Inc.
38249	2010	Historic Property Survey Report, The Alameda County Transit District's East Bay Bus Rapid Transit Project in Berkeley, Oakland, and San Leandro.	Susanne Baker, Archaeological/Historical Consultants
47078	2014	Historic Property Survey Report: City of Oakland Streetscape improvements to Martin Luther King Jr. Way	Suzanne Baker, California Department of Transportation

Previously Documented Cultural Resources

According to information on file at the NWIC, there are three (3) cultural resources recorded on Department and Recreation (DPR) 523 forms within 0.25-miles of the Project Area. These resources are listed below in Table 3.

Table 3: Resources located within 0.25-miles of the Project Area.

Primary Number	Resource Type	Resource Name & Address	Description	NR Status	Distance from Project Area
P-01-001005	Building	Pioneer Memorial Methodist Episcopal Church at 3705 Telegraph Avenue	Ca. 1916 Arts Church Building	7N1[9]	0.2 miles east/southeast
P-01-001006	Building	Robins (Percy) Store Building at 3723 Telegraph Avenue	Ca. 1925 Decorative Brick Building	6Z [10]	0.21 miles east/southeast
P-01-010864	Building	California Highway Patrol: Oakland Office Firing Range at 3601 Telegraph Avenue.	1923 Firing Range	6Z	0.21 miles southeast

A check of the OHP's Directory of Properties in the Historic Property Data (HPD) File for Oakland, Alameda County, California (dated 4/5/2012) was also conducted. The HPD File lists three resources in close proximity to the Project Area, including:

- ca. 1908 building at 627 Apgar Street that is listed with a National Register status code of 6Y, meaning it was determined ineligible for the National Register by consensus through Section 106 process – not evaluated for California Register or a local listing.

- ca. 1906 building at 680 Apgar Street that is listed with a National Register status code of 6Y, meaning it was determined ineligible for the National Register by consensus through Section 106 process – not evaluated for California Register or a local listing.

- ca. 1908 building at 709 MacArthur Boulevard that is listed with a National Register status code of 6Y, meaning it was determined ineligible for the National Register by consensus through Section 106 process – not evaluated for California Register or a local listing.

There are no resources listed in the California Inventory of Historic Resources (California Department of Parks and Recreation 1976), the Office of Historic Preservation's (OHP) *Five Views: An Ethnic Sites Survey for California* (1988), California Points of Historical Interest or California Historical Landmarks (OHP 2019), located in the immediate vicinity of the Project Area.

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[9] Needs to be reevaluated (formerly NR SC4) – may become eligible for NR with restoration or when meets other specific conditions (OHP 2012).

[10] Found ineligible for NR, CR or Local designation through survey evaluation (OHP 2012).

CITY OF OAKLAND HISTORICAL AND ARCHITECTURAL HERITAGE SURVEY

In addition to the information provided by the NWIC, a review was conducted of the Oakland (Citywide) Historical and Architectural Heritage Survey and the City's Planning and Zoning map that provides information about historical resources in the City (http://oakgis.maps.arcgis.com/apps/webappviewer). The Historical and Architectural Heritage survey was completed in 1986 and again in in 1997 and consisted of the identification of all buildings located within the City constructed prior to 1946. The report provides a preliminary rating (based on architectural, aesthetic, historical and other cultural value) for individual properties listed, and identifies areas of "Primary" and "Secondary" importance[11], based on the number of contributing properties within a given area. The document also provides a preliminary individual property rating based on its architectural, historical and cultural value. The current rating system, adopted in the Historic Preservation Element of the City of Oakland General Plan, uses letters A to E to rate individual properties and numbers 1 to 3 for district status. In general, A and B ratings indicate landmark-quality buildings.

According to the City's Planning and Zoning map (http://oakgis.maps.arcgis.com/apps/webappviewer), the Project Area formerly contained one Potential Designated Historic Property within APN 012-964-4; however, this building is no longer present. The map does not list any additional historic resources within the Project Area. However, additional documentation provided by the City of Oakland Historic Preservation Planner, Betty Marvin, on October 4, 2019, revealed that the ca. 1890 three-unit flat and the ca. 1910 commercial building within the Project Area was previously identified in 1993 during a "Preliminary Survey" completed by the City of Oakland and documented on "Identification Sheets". Although not indicated on the City's Planning and Zoning map, the ca. 1890 three-unit flat building has a rating of C3, which means the building is of "secondary importance", but "may warrant some sort of preservation effort by the City".

RESULTS OF FIELD SURVEY

A field survey of the Project Area was conducted by EDS Senior Archaeologist, Gilbert Browning, M.A., RPA on July 16, 2019. The Project Area consists of four adjacent parcels (APN 012-964-4, APN 012-964-5, APN 012-964-6, APN 012-964-7) totaling 0.49-acres. The southern-most parcel (APN 012-964-7) at 3801-3807 Martin Luther King Jr. Way currently contains a ca. 1910 commercial building, a ca. 1890 three-unit flat and a ca. 1950 shed. The portion of the Project Area that includes APN 012-964-4 and 012-964-4 consists of a gravel and dirt parking area, and the remaining portion of the Project Area (APN 012-964-6) is currently vacant.

The methods used to complete the field survey of the Project Area included walking a series of linear transects oriented north/south and spaced approximately one meter apart. The soil visibility within the Project Area was poor (approximately 10 to 20 percent visibility) due to the presence of high grasses and modern refuse that concealed much of the ground surface; however, to aid in the identification of

[11] Areas of Primary and Secondary Importance are those that "consist of historically and visually cohesive areas that contain a high proportion of individual properties with an overall rating of "C" or higher (Oakland Preliminary Historical and Architectural Inventory 1986).

archaeological resources the surveyor used a hand trowel to expose soil along each transect. The soil observed within the Project Area included light brown colored (Munsell 7.5YR 6/3) loam.

No prehistoric or historic-era artifacts, or other indications of an archaeological deposit were identified during the field survey of the Project Area. The Project Area contains built-environment cultural resources that are at least 50 years of age, which are being documented and evaluated as part of the HRE (De Shazo 2019).

Figure 24: Project Area overview, looking toward ca. 1910 two-story commercial building in southeast corner of Project Area, facing southeast.

Figure 25: Overview of central portion of the Project Area, facing west.

Figure 26: Overview of northeastern portion of Project Area, facing north.

FINDINGS AND CONCLUSIONS

In accordance with Section 106 of the NHPA regulations and guidelines, EDS completed an HPS to determine if there are any historic properties or cultural resources meeting the definition of a historic property present that could be impacted by the proposed Project. The study included a record search and review, and a field survey of the Project Area. The Native American Sacred Sites inventory and consultation with Native American tribes was completed by AEM Consulting, The HPS was completed by EDS Principal Archaeologist, Sally Evans, M.A., RPA, and EDS Senior Archaeologist, Gilbert Browning, M.A., RPA, who both exceed the Secretary of Interior's qualification standards in archaeology and history. The built-environment resources that are at least 50 years of age located within and in the immediate vicinity of the Project Area (see previous Figure 6) were evaluated by EDS Principal Architectural Historian, Stacey De Shazo, M.A., and the results of that evaluation are presented in a separate report (De Shazo 2019).

The HPS did not result in the identification of any historic properties or cultural resources having the potential to meet the criteria of a historic property under Section 106 of the NHPA (excluding built-environment resources that are addressed in a separate report). However, based on a review of the environmental setting of the Project Area and a review of historic maps and aerial photographs, the Project Area appears to have the potential for buried prehistoric and historic archaeological resources.

PREHISTORIC ARCHAEOLOGICAL SITE SENSITIVITY

The potential for the Project Area to contain buried prehistoric archaeological resources was assessed because the northern San Francisco Bay Area has undergone dramatic changes in the landscape over the past 13,000 years due to rising sea levels and increased sedimentation, and these changes resulted in many late Pleistocene and early Holocene land surface being covered by thick deposits of alluvial soils that are generally less than 5,000 years old and that have established an interface with an older land surface represented by a paleosol[12] (Meyer and Rosenthal 2007). Holocene age (Post 11,800 cal BP) surface landforms commonly contain multiple Holocene-age paleosols that would have been available for human occupation prior to alluvial deposition; therefore, most Holocene-age landforms have the potential for buried sites (Meyer and Rosenthal 2007). Additionally, certain landforms such as alluvial fans, floodplains, and areas along rivers and streams, are more likely to contain buried prehistoric archaeological sites than other types of landforms.

The Project Area is situated on a Holocene-age alluvial fan, which is a depositional landform that has the potential for buried sites, and is located approximately 1.1 miles east of the historical tidal marsh and bay lands boundary and within 0.5 miles of Temescal Creek and 0.6 miles of Glen Echo Creek. Due to these factors, the Project Area appears to have a moderate potential to contain buried prehistoric archaeological resources.

12 A paleosol is a layer of buried, ancient soil formed from weathering at or near the ground surface during a period of landform stability.

HISTORIC-PERIOD ARCHAEOLOGICAL SITE SENSITIVITY

A series of historic maps and aerial photographs dating from 1859 to 1965 were reviewed to assess the potential for the Project Area to contain buried historic-period archaeological resources. As shown on the 1895 USGS 15’ San Francisco topographic map, there appears to have been at least one building present within the Project Area by this time; however, the number of buildings and their position within the Project Area is not clear. The 1902 Sanborn Fire Insurance map shows that several buildings had been constructed within the Project Area by this time, including a house within APN 012-964-4, two houses, a windmill and water tank house, and two outbuildings within APN 012-964-5, and a house and outbuilding within APN 012-964-7; and by 1911-1912, APN 012-964-6 contained two commercial buildings. Due to the presence of buildings within the Project Area by 1902, including three residential buildings, the Project Area appears to have a moderate to high potential to contain buried historic archaeological resources.

RECOMMENDATIONS

Although no archaeological resources were identified within the Poject Area, due to the potential for prehistoric and/or historic-period archaeological resources to be present, it is recommended that a Secretary of Interior qualified archaeologist is retained to prepare a Cultural Resources Monitoring Plan (CRMP) and provide archaeological monitoring for initial Project-related earth-disturbing activities within the Project Area in order to identify any buried archaeological resources that may be present.

The CRMP should provide details regarding the types of resources that could potentially be found within the Project Area during construction, procedures to follow should any archaeological material be encountered during initial project-related, earth-disturbing activities, and procedures and guidelines for in-field assessment of the significance of any archaeological deposits identified during archaeological monitoring. Archaeological monitoring should continue until, in the archaeologist’s judgment, cultural resources are no longer likely to be encountered. A report shall also be prepared to document negative findings after construction is completed if no archaeological resources are discovered during construction.

If an archaeological deposit is encountered during Project activities, all work within 25 feet of the discovery shall be redirected until the archaeologist assesses the find, consults with agencies as appropriate, and makes recommendations for the treatment of the discovery. If avoidance of the archaeological deposit is not feasible, the archaeological deposit shall be evaluated for its eligibility for listing in the National Register of Historic Places. If the deposit is not eligible, mitigation is not necessary. If the deposit is eligible, adverse effects shall be mitigated. Mitigation may include excavation of the archaeological deposit in accordance with the Secretary of Interior’s Standards and Guidelines for Archaeological Documentation that may include data recovery using standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; preparation of a report detailing the methods, findings, and significance of the archaeological site and associated materials; and accessioning of archaeological materials and a technical data recovery report at a curation facility. Upon completion of the assessment, the archaeologist shall prepare a report to document the methods and results of the assessment. The report shall be submitted to the Project applicant, City of Oakland and the NWIC upon completion of the resource assessment. It is anticipated that the implementation of this recommendation will reduce or eliminate adverse impacts to historic properties if discovered during construction.

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EVANS & DE SHAZO
ARCHAEOLOGY HISTORIC PRESERVATION

A CULTURAL RESOURCE MONITORING PLAN FOR THE PROPOSED LONGFELLOW CORNER PROJECT AT 3801 MARTIN LUTHER KING JR WAY, OAKLAND, ALAMEDA COUNTY, CALIFORNIA

PREPARED FOR:

Cinnamon Crake
AEM Consulting

PREPARED BY:

Sally Evans, M.A., RPA
Principal Archaeologist
sally@evans-deshazo.com

September 18, 2019

Evans & De Shazo, Inc.
1141 Gravenstein Highway South
Sebastopol, CA 95472
707-812-7400
www.evans-deshazo.com

MANAGEMENT SUMMARY

Evans & De Shazo Inc. (EDS) developed a Cultural Resources Monitoring Plan (CRMP) for the proposed Longfellow Corner project located within four adjacent parcels that total 0.49 acres, including a 0.13 acre parcel at 3807 Martin Luther King Jr. Way, a 0.15 acre parcel with no physical address, a 0.14 acre parcel at 3823 Martin Luther King Jr. Way, and a 0.07 acre parcel at 3829 Martin Luther King Jr. Way, in Oakland, Alameda County, California (Project Area). The scope of the CRMP outlines procedures that allow for the identification, evaluation, treatment, and protection of archaeological resources that may be encountered by ground disturbing activities associated with development of the Project. The CRMP serves as an agreement document that will govern the actions to be taken if historic properties are discovered during the implementation of the Project.

The CRMP includes the following:

- A description of the Project and its location;
- A regulatory setting;
- A brief summary of known archaeological resources in the area and the archaeological sensitivity of the Project Area;
- A research design; and
- A monitoring plan to be followed during all ground disturbing activities, including routine monitoring protocols, discovery plans including treatment plans for discovery of any human remains in accordance with the state law, and curation and reporting requirements.

A natural and cultural overview of the Project Area is provided in the Historic Property Survey (HPS) report prepared by EDS in September 2019 (Evans 2019).

TABLE OF CONTENTS

1.0 INTRODUCTION

EDS has prepared this CRMP for the Longfellow Corner project located within four adjacent parcels that total 0.49 acres, including a 0.13 acre parcel at 3807 Martin Luther King Jr. Way, a 0.15 acre parcel with no physical address, a 0.14 acre parcel at 3823 Martin Luther King Jr. Way, and a 0.07 acre parcel at 3829 Martin Luther King Jr. Way, in Oakland, Alameda County, California (Project Area). The purpose of the CRMP is to allow for the identification, evaluation, treatment and protection of significant archaeological resources that may be unearthed during project-related earth-disturbing activities. The proposed project entails the demolition of three buildings and the construction of a six-story, 73-unit apartment complex and associated infrastructure (Project).

In September 2019, EDS completed an Historic Property Survey (HPS) (Evans 2019) to determine if the Project Area contained any historic properties that could be affected by the proposed Project. The methods used to complete the HPS included a record search at the Northwest Information Center (NWIC) of the California Historical Information System (CHRIS), a review of background information pertaining to the prehistory, history, and ethno-history of the Oakland area and the Project Area, and a field survey of the Project Area. The HPS did not result in the identification of any historic properties within the Project Area; however, due to the moderate to high potential for the Project Area to contain buried historic or prehistoric archaeological deposits, EDS recommended that a Secretary of Interior qualified archaeologist prepare a Cultural Resource Monitoring Plan (CRMP) and provide archaeological monitoring during Project-related earth-disturbing activities. The CRMP provided herein outlines the mitigation measures that will be followed to ensure that adverse effects to archaeological resources resulting from Project-related earth-disturbing activities within the Project Area are identified following the Secretary of Interior's Standards for Archaeological Documentation.

1.1 PROJECT DESCRIPTION

The proposed Project includes the demolition of the existing demolition of a ca. 1910 commercial building, a ca. 1910 house, and a ca. 1950 shed currently located within the parcel at 3807 Martin Luther King Jr. Way, and the construction of a six-story 72-unit apartment complex and associated infrastructure. The new apartment building will include parking, office, community, laundry and additional support/amenity spaces, including an outdoor gardening area, landscaping, and bicycle parking.

1.2 PROJECT LOCATION AND SETTING

The Project Area is located at 3801 Martin Luther King Jr. Way, Oakland, Alameda County, California (Figure 1), and includes four adjacent parcels totaling 0.49 acres, including:

- 0.13 acre parcel at 3807 Martin Luther King Jr. Way; Assessor Parcel Number (APN) 012-964-7
- 0.15 acre parcel with no physical address; APN 012-964-6

- 0.14 acre parcel at 3823 Martin Luther King Jr. Way; APN 012-964-5
- 0.07 acre parcel at 3829 Martin Luther King Jr. Way (APN 012-964-4).

The Project Area is bounded by single-family houses on the north and west, Martin Luther King Jr. Way on the east and W. MacArthur Boulevard on the south. The USGS 7.5-minute Oakland West, Calif. quadrangle (1993) (Figure 1) shows the Project Area located in Township 1 South, Range 4 West, Mt. Diablo Base and Meridian. The Universal Transverse Mercator (UTM) grid coordinates at the approximate center of the Project Area are: 564302 meters East and 4186944 meters North, Zone 10.

1.2.1 Area of Potential Effect

The regulations implementing the Section 106 review process requires that an APE be defined for the Project (36 CFR 800.16(d)). The Section 106 regulations define the APE as “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking”. Two APEs were established for the proposed Project, including a Direct APE and an Indirect APE (Figure 2).

Direct APE

The Direct APE is defined as the area that will be directly impacted by the proposed Project and includes the following four adjacent properties:

- 1a: 3807 Martin Luther King Jr. Way (APN 012-964-7); a ca. 1910 commercial building, a ca. 1910 house, and a ca. 1950 shed
- 1b: No physical address (APN 012-964-6); vacant
- 1c: 3823 Martin Luther King Jr. Way (APN 012-964-5); vacant
- 1d: 3829 Martin Luther King Jr. Way (APN 012-964-4); vacant

Indirect APE

The Indirect APE includes twenty three (23) adjacent and nearby parcels, twenty-two (22) of which contain built-environment resources at least 50 years of age. The Indirect APE includes the following parcels:

- 2:3837 Martin Luther King Jr. Way (APN 012-964-3)
- 3: 3843 Martin Luther King Jr. Way (APN 012-964-2)
- 4: 3849 Martin Luther King Jr. Way (APN 012-964-1)
- 5: 663 Apgar St. (APN 012-694-41)
- 6: 671 Apgar St. (APN 012-964-4)
- 7: 668 W. MacArthur Blvd. (APN 012-964-8)
- 8: 670 W. MacArthur Blvd. (APN 012-964-9)
- 9: 674 W. MacArthur Blvd. (APN 012-964-1)

- 10: 678 W. MacArthur Blvd. (APN 012-964-11)
- 11: 669 W. MacArthur Blvd. (APN 012-965-31)
- 12: 665 W. MacArthur Blvd. (APN 012-965-32)
- 13: 3725 Martin Luther King Jr. Way (APN 012-965-3)
- 14: No physical address (APN 012-965-2)
- 15: 657 W. MacArthur Blvd. (APN 012-965-1)
- 16: 3720 Martin Luther King Jr. Way (APN 012-966-28)
- 17: 625 W. MacArthur Blvd. (APN 012-966-29-1)
- 18: 3806 Martin Luther King Jr. Way (APN 012-967-22)
- 19: 3810 Martin Luther King Jr. Way (APN 012-967-23)

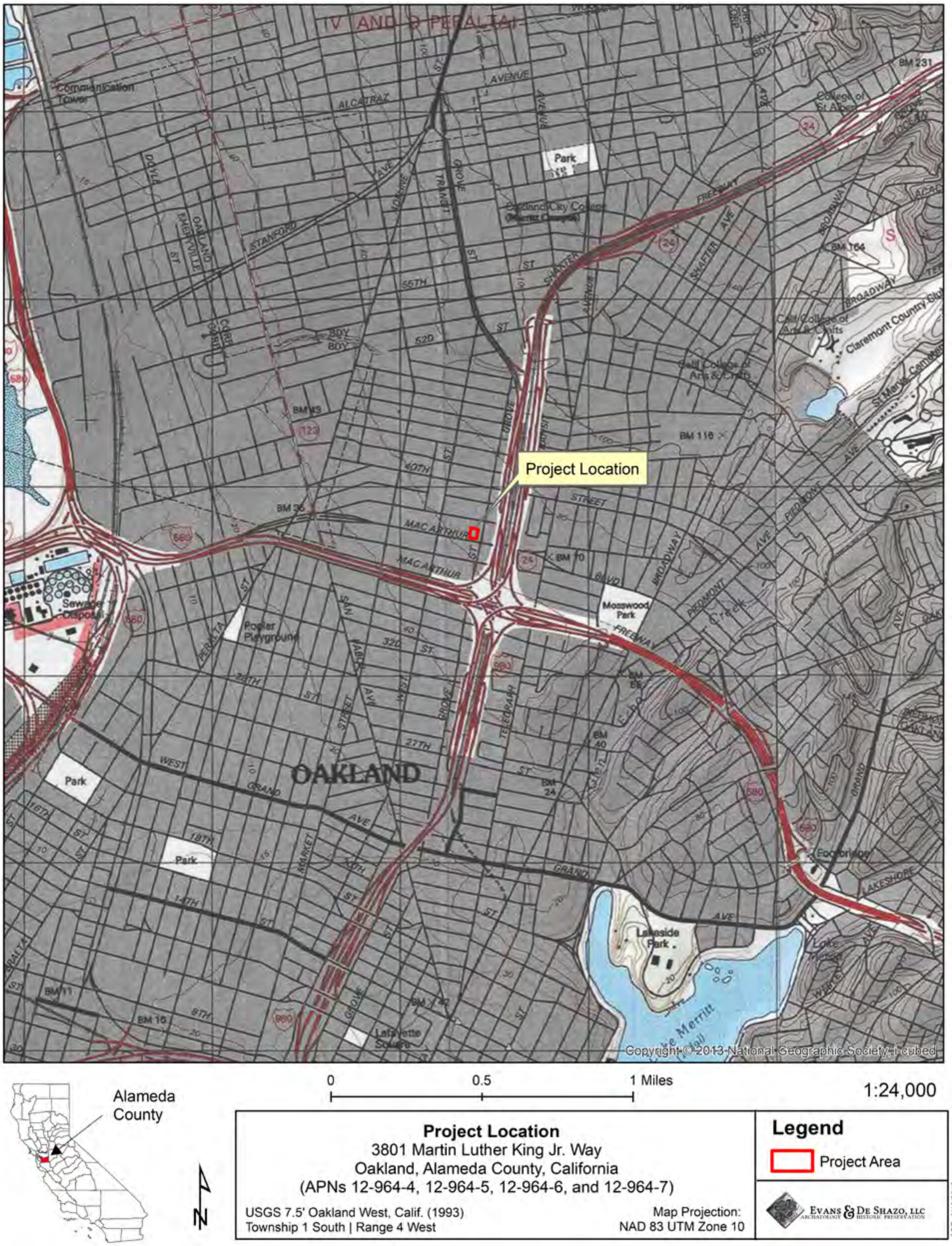

Figure 1: Project Area shown on USGS 7.5' Oakland West, Calif. (1993) quadrangle map.

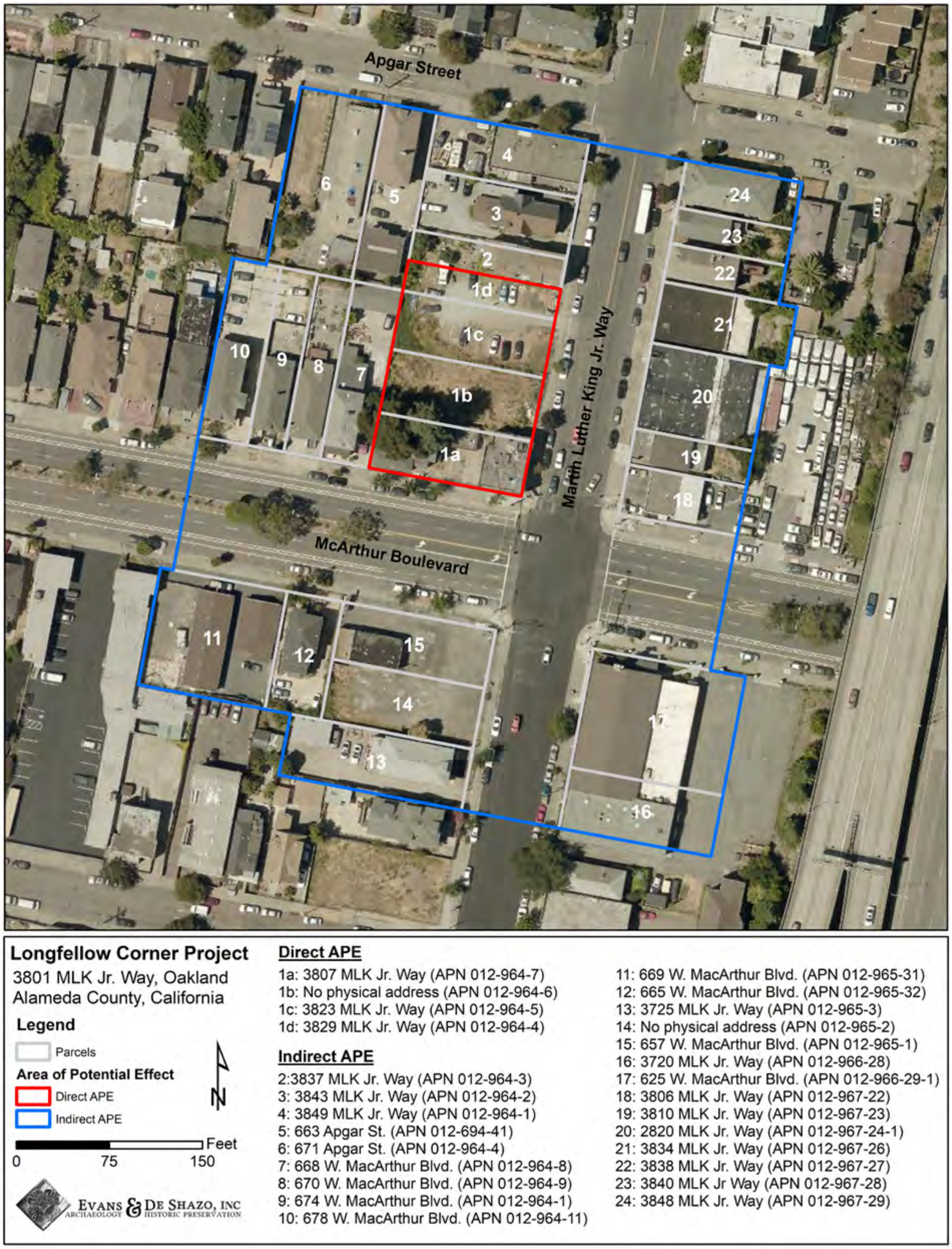

Figure 2: Area of Potential Effect (APE) map showing Direct and Indirect APEs.

2.0 REGULATORY SETTING

The United States (U.S.) Department of Housing and Urban Development (HUD) is providing federal assistance for development of the Project; therefore, the Project is subject to review under the National Environmental Protection Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA) to determine if the proposed Project will impact any archaeological resources that are eligible for listing or listed on the National Register of Historic Places (NRHP) (i.e. Historic Properties).

2.1 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

NEPA (42 U.S.C. 4321 et seq.) establishes national environmental policies and goals for the protection, maintenance, and enhancement of the environment and provides a process for implementing these goals within the Federal agencies. The Act also establishes the Council on Environmental Quality (CEQ).

The term "cultural resources" is not defined in NEPA. NEPA address the "human" — social and cultural — aspects of the environment. Culturally valued aspects of the environment generally include historic properties (as defined by the NHPA), sacred sites, archaeological sites not eligible for the NRHP and archaeological collections. The cultural use of natural resources and such "intangible" socio-cultural attributes as social cohesion, social institutions, life ways, religious practices, and other cultural institutions are typically evaluated under the "social impact" category.

2.2 NATIONAL HISTORIC PRESERVATION ACT (NHPA) - SECTION 106

Section 106 of the NHPA pertains to Federal “undertakings”. A Federal undertaking is defined as a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency, those carried out with Federal financial assistance, and those requiring a Federal permit, license or approval. The NHPA directs federal agencies to take into account (through identification, recordation and mitigation) the effects of proposed activities on historic properties and give the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. Historic properties are properties that are included in the NRHP or that meet the criteria for the National Register.

2.2.1 Resource Definitions

Historic properties are districts, sites, buildings, structures, and objects listed or found eligible for listing in the NRHP. Unlisted properties are evaluated against the National Register criteria to determine eligibility for listing, in consultation with the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) and any Native American Tribe that may attach religious or cultural importance to them.

The five property types are:

- **Building**: A structure created principally to shelter or assist in carrying out any form of human activity. A "building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.
- **Structure**: A construction made for a functional purpose rather than creating human shelter. Examples include mines, bridges, and tunnels.
- **Object**: Construction primarily artistic in nature or relatively small in scale and simply constructed. It may be movable by nature or design or made for a specific setting or environment. Objects should be in a setting appropriate to their significant historic use or character. Examples include fountains, monuments, maritime resources, sculptures and boundary markers.
- **Site**: The location of a significant event. A prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by physical remains if it is the location of a prehistoric or historic event and if no buildings, structures, or objects marked it at that time. Examples include trails, designed landscapes, battlefields, habitation sites, Native American ceremonial areas, petroglyphs, and pictographs.
- **District**: Unified geographic entities which contain a concentration of historic buildings, structures, or sites united historically, culturally, or architecturally.
- The Archaeological Study described herein only pertains to archaeological resources that are listed or have the potential to be listed in the NRHP.

2.2.2 National Register of Historic Places (NRHP)

In order to be included or qualify for the National Register, a building, structure, object, site or district must possess significance in American history, architecture, archaeology, engineering or culture, and must be associated with an important historic context and retain historic integrity of those features necessary to convey its significance. The resource should possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet any of the following criteria:

A. Is associated with events that have made a significant contribution to the broad patterns of our history; or

B. Is associated with the lives of persons important in our past; or

C. Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possesses high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or,

D. Has yielded, or may be likely to yield, information important in prehistory or history.

3.0 RECORDS SEARCH AND ARCHAEOLOGICAL SITE SENTIVITY

A record search and review of the Project Area was conducted as part of the HPS prepared by EDS in September 2019 (Evans 2019). The record search included a review of information on file at the Northwest Information Center (NWIC) of the California Historical Resources Information Systems (CHRIS) (NWIC File #19-0030) to obtain and review previous cultural resource studies and resource records pertaining to properties located within 0.25-miles of the Project Area. The purpose of the NWIC record search was to determine if the Project Area had been previously evaluated for cultural resources, and to review previous cultural resource studies and resource records pertaining to properties located within 0.25-miles of the Project Area. Historic maps, soils reports, geoarchaeological studies, and geologic maps were reviewed to assess the potential for buried archaeological resources to be present within the Project Area. The following lists and references were also reviewed:

- Office of Historic Preservation (OHP) Directory of Properties in the Historic Property Data (HPD) File for Oakland, Alameda County, CA. (dated 4/5/2012)
- National Register of Historic Places
- California Register of Historical Resources
- California Inventory of Historic Resources
- California Historical Landmarks
- California Points of Historical Interest
- Five Views: Ethnic Sites Survey for California

The record search also included a review of historic maps and aerial photographs dating from 1857 to 1965, including Sanborn Fire Insurance maps of Elmhurst dating to from 1859 to 1965, as well as information obtained online at Ancestry.com and Newspapers.com, to determine the potential for historic-period archaeological resources to be present within the Project Area. In addition to a review of historic maps, information about the geologic age of the landform and associated soils within the Project Area, as well as its environmental setting was also reviewed to identify the potential for buried prehistoric archaeological resources to be present.

3.1 PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

EDS Principal Archaeologist, Sally Evans, M.A., RPA conducted a record search at the NWIC on July 3, 2019 (NWIC File #19-0030). According to information on file at the NWIC, the Project Area had not been previously surveyed for archaeological resources prior to the HPS completed by EDS in September 2019 (Evans 2019), and there are no previously documented archaeological resources recorded within the Project Area. There has been a total of five (5) cultural resource studies pertaining to properties located within 0.25-mile of the Project Area (S-31997, S-33504, S-34672, S-38249, and S-47078) and there are three (3) cultural resources recorded within 0.25-miles of the Project Area that all consist of built-environment resources (P-01-001005, P-01-001006, and P-01-010864).

A list of the previous cultural resource studies and a description of the three built-environment resources recorded within 0.25-miles of the Project Area is provided in the HPS (Evans 2019).

3.2 KNOWN ARCHAEOLOGICAL RESOURCES IN THE VICINITY

There are no previously documented archaeological resources located within 0.25-miles of the Project Area. This may be due to early development of the area that has prevented evidence of archaeological resources from being identified and the minimal amount of cultural resource surveys conducted in the area.

3.3 HISTORIC MAP REVIEW

A series of historic maps and aerial photographs dating from 1859 to 1965 were reviewed to determine past land use activities within or near to the Project Area that could indicate the potential for buried historic-period archaeological resources to be discovered within the Project Area. The following maps and aerial photographs were reviewed:

Maps:

- 1859 Plat of the Northern Part of the Rancho San Antonio confirmed to Vincente and Domingo Peralta
- 1876 Map of Oakland, Alameda and Vicinity by M. G. King
- 1878 Official Historical Atlas Map of Alameda County by Thompson & West
- 1888 Map of the City of Oakland and Surroundings by J.C. Henkenius
- 1895 USGS 15-minute San Francisco, Calif. topographic map
- 1899 USGS 15-minute San Francisco, Calif. topographic map (revised 1914)
- 1902 Sanborn Fire Insurance Map
- 1911 Map of Oakland and Vicinity showing lines of San Francisco, Oakland and San Jose Consolidated Railway
- 1911-1912 Sanborn Fire Insurance Map
- 1915 USGS 15-minute San Francisco, Calif. topographic map
- 1924 Southern Pacific Map of Western Divisions Electric Lines East Bay Electric Lines
- 1926 Map of the Key System Transit Co.
- 1949 USGS 7.5-minute Oakland West quadrangle
- 1951 Sanborn Fire Insurance Map
- 1959 USGS 7.5-minute Oakland West quadrangle

Aerial Photographs:

- 1946 Aerial photograph
- 1965 Aerial photograph

Based on the review of historic maps and aerial photographs ranging in date from 1859 to 1965 (Figure 3 to Figure 9), it appears that there was at least one building present within the Project Area by 1895; however, the number of buildings and their position within the Project Area is not clear. The 1902 Sanborn Fire Insurance map shows that several buildings had been constructed within the Project Area by this time, including a house within APN 012-964-4, two houses, a windmill and water tank house, and two outbuildings within APN 012-964-5, and a house and outbuilding within APN 012-964-7; and by 1911-1912, APN 012-964-6 contained two commercial buildings.

Due to the presence of buildings within the Project Area by 1902, including three residential buildings, the Project Area appears to have a moderate to high potential to contain buried historic archaeological resources.

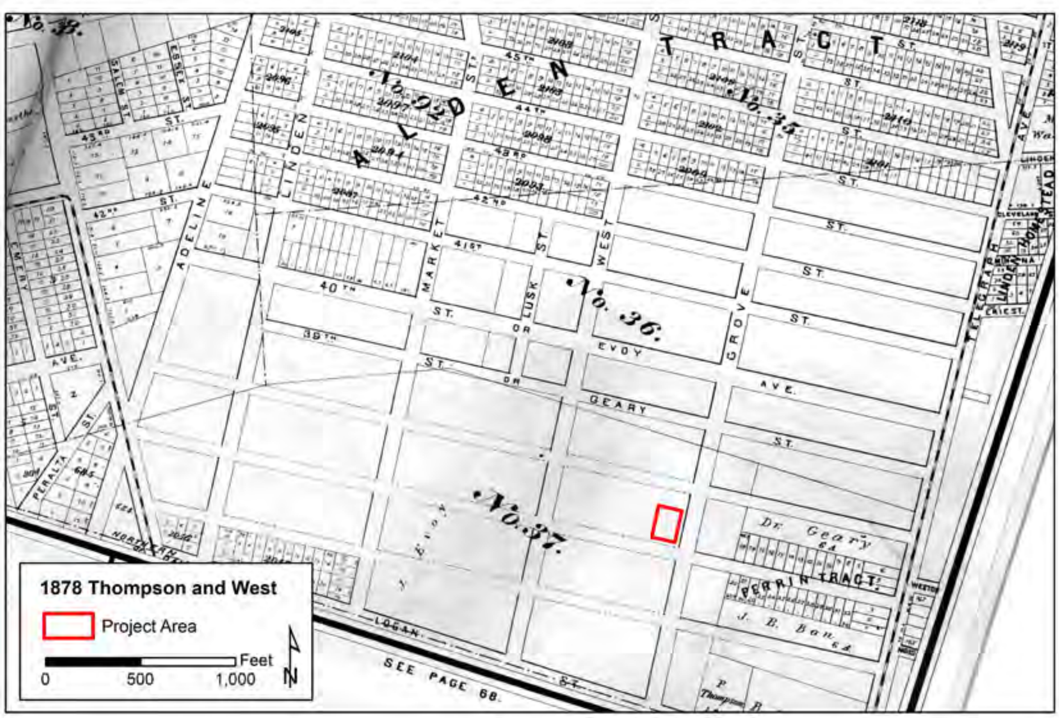

Figure 3: 1878 Thompson and West map of Alameda County showing Project Area within plot No. 37 that was owned by Mary Jane (Johnson) Evoy at the time.

Figure 4: 1895 USGS 15' San Francisco map showing development within and near the Project Area.

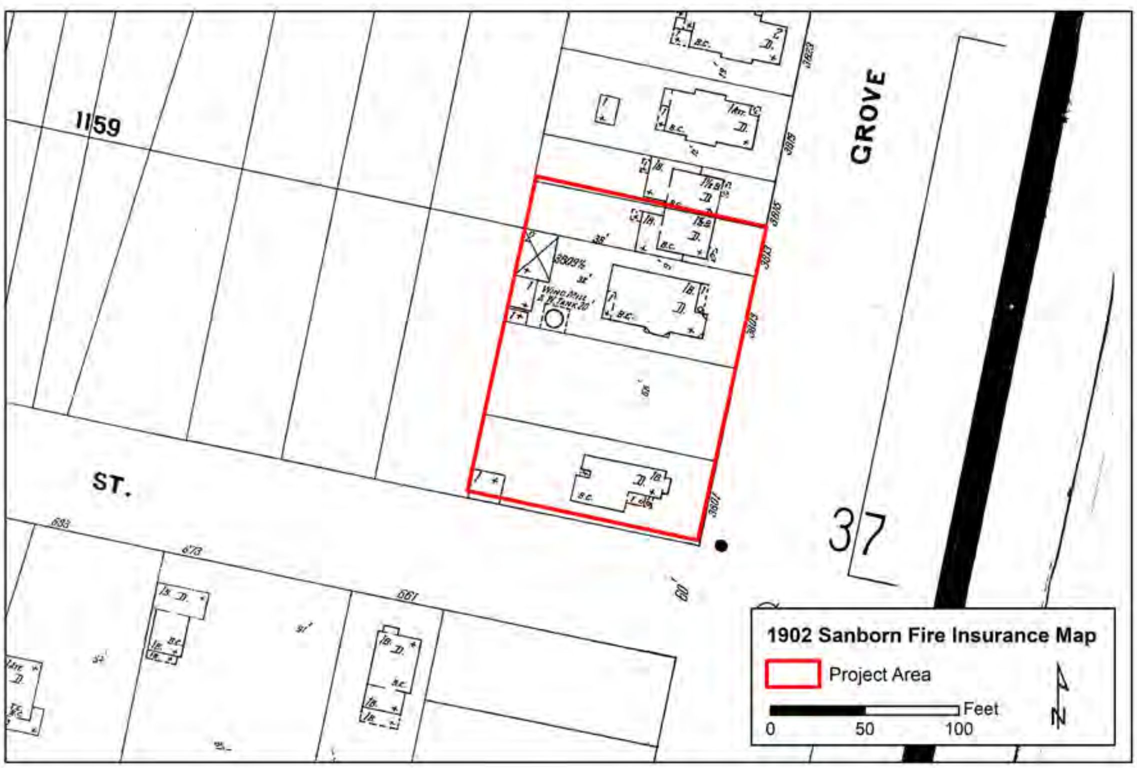

Figure 5: 1902 Sanborn Fire Insurance map showing buildings within the Project Area.

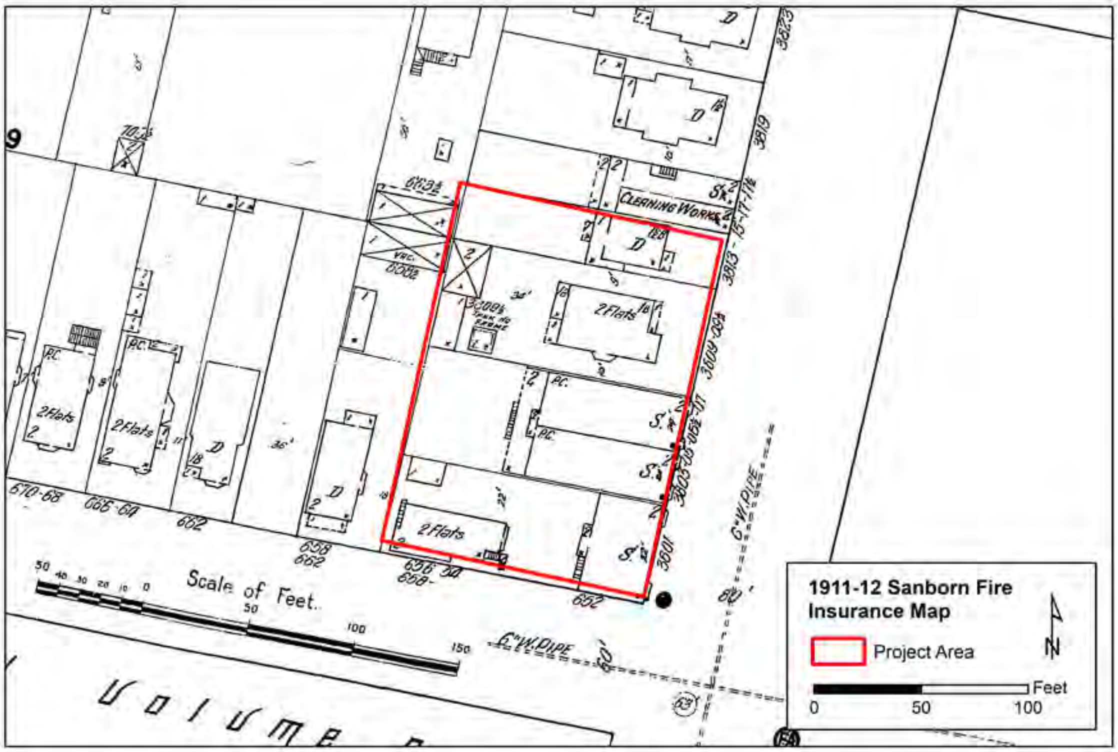

Figure 6: 1911-1912 Sanborn Fire Insurance map showing buildings within the Project Area.

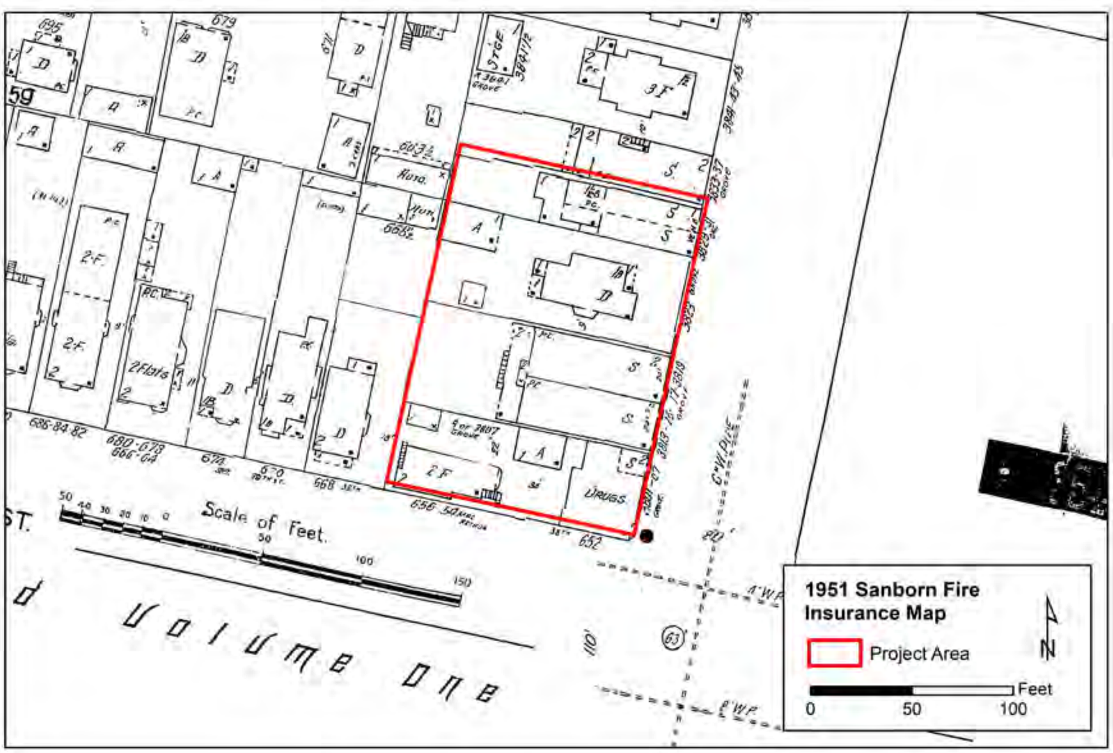

Figure 7: 1951 Sanborn Fire Insurance map showing buildings within the Project Area.

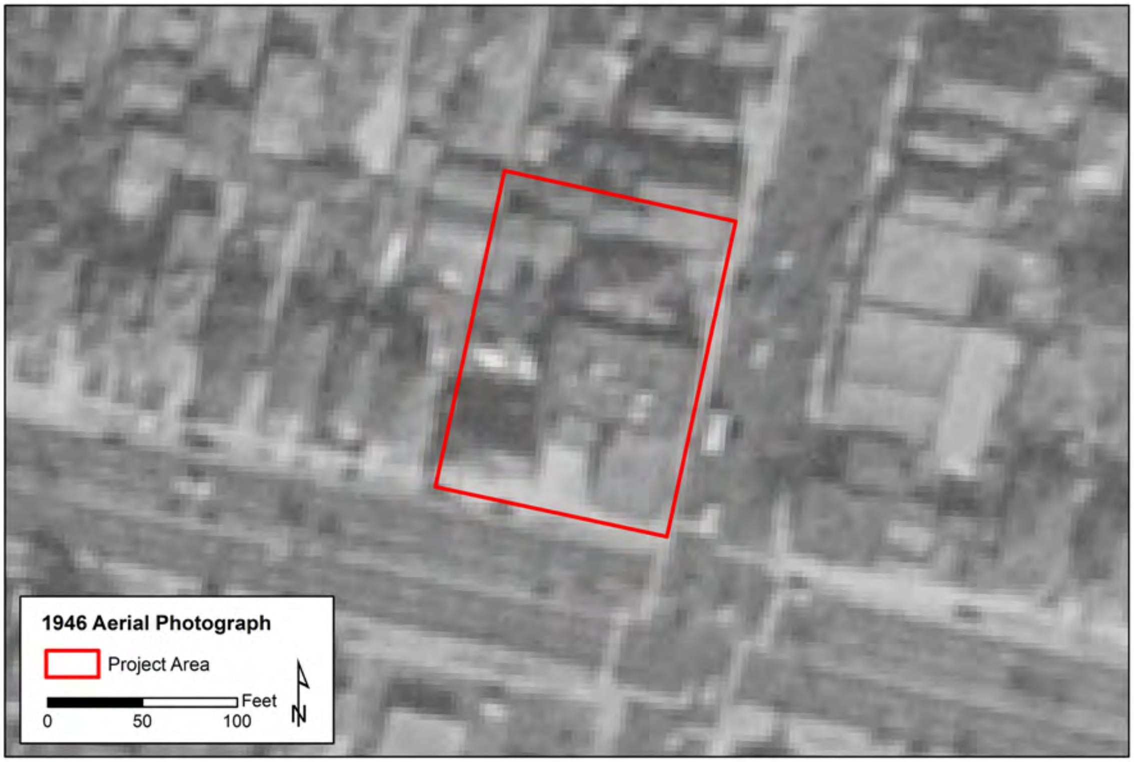

Figure 8: 1946 aerial photograph showing Project Area (U.C. Santa Barbara 2019).

Figure 9: 1965 aerial photograph showing Project Area (U.C. Santa Barbara 2019).

3.4 REVIEW OF SOILS AND GEOLOGY

The background research included a review of information about the soils, geology, and sediments in the Project Area that was used to assess the potential presence of buried archaeological resources within the Project Area. The potential for the Project Area to contain buried prehistoric archaeological resources was assessed because the northern San Francisco Bay Area has undergone dramatic changes in the landscape over the past 13,000 years due to rising sea levels and increased sedimentation, and these changes resulted in many late Pleistocene and early Holocene land surface being covered by thick deposits of alluvial soils that are generally less than 5,000 years old and that have established an interface with an older land surface represented by a paleosol[1] (Meyer and Rosenthal 2007). Holocene-age[2] surface landforms commonly contain multiple Holocene-age paleosols that would have been available for human occupation prior to alluvial deposition; therefore, most Holocene-age landforms have the potential for buried sites. Conversely, most Pleistocene-age landforms (1.8 million years to 11,800 calibrated years before present) have little or no potential to contain buried prehistoric archaeological resources because the formed prior to occupation by humans (Meyer and Rosenthal 2007). Additionally, certain landforms such as alluvial fans, floodplains, and areas along rivers and streams, are more likely to contain buried prehistoric archaeological sites than other types of landforms.

According to the geologic map of the Oakland Metropolitan Area (Graymer 2000) and the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soils map and associated soil descriptions (USDA 2019), the Project Area is situated on a landform that consists of a Holocene-age (post 11,800 cal BP) alluvial fan and fluvial deposit (geologic unit: Qhaf) containing fine-grained Holocene alluvium with soils of the Urban land-Danville complex (USDA 2019). Danville soil is alluvium derived from sedimentary rock and both urban and Danville soils occurs on alluvial fans and fan terraces. In a typical profile, Danville soil consist of clay loam to a depth of 21 inches, followed by sandy clay from 21 inches to 53 inches, and silty clay loam from 53 inches to 80 inches (USDA 2019).

The Project Area is situated within a topographically flat area in the Longfellow district of northern Oakland at approximately 60 feet above mean sea level (amsl), and is located approximately 1.5 miles east of San Francisco Bay; however, prior to the reclamation of marshlands and subsequent urban development, the Project Area was situated approximately 1.1 miles east of the historical tidal marsh and bay lands boundary (Figure 10). The nearest waterways include Temescal Creek located 0.5 miles to the north and Glen Echo Creek located 0.6 miles to the east. Temescal Creek flows from the Berkeley hills west to San Francisco Bay, and Glen Echo Creek flows south from the Berkley hills and empties into Lake Merritt.

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[1] A paleosol is a layer of buried, ancient soil formed from weathering at or near the ground surface during a period of landform stability.

[2] Post 11,800 BP.

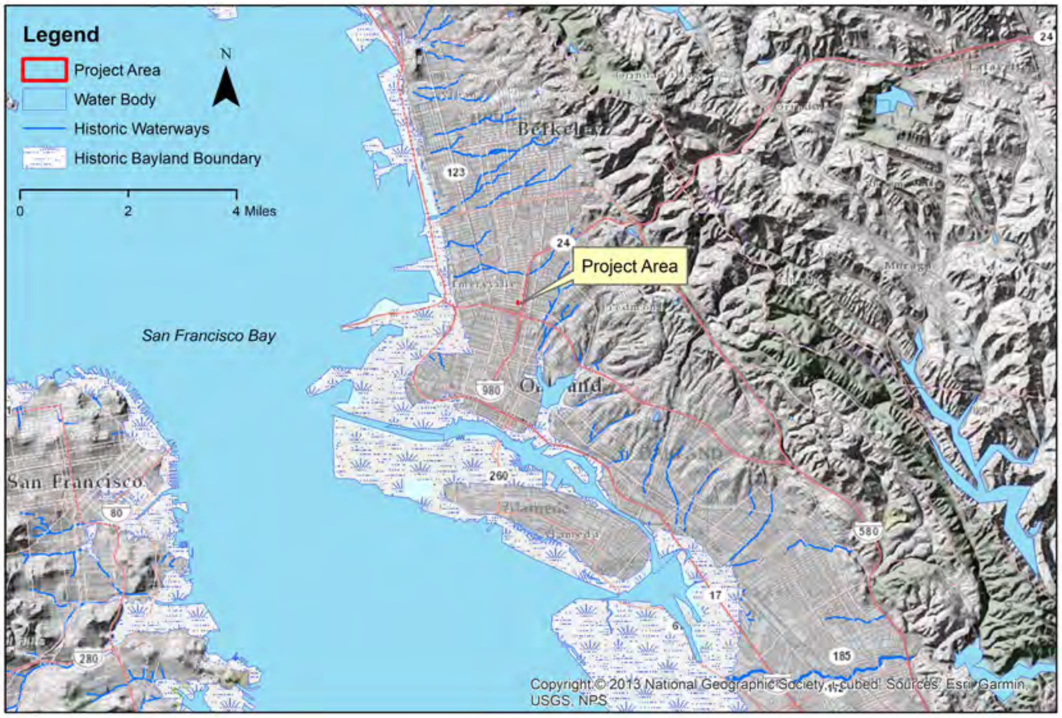

Figure 10: Project Area environmental Setting.

The Project Area is situated on a Holocene-age alluvial fan, which is a depositional landform that has the potential for buried sites (Meyer and Rosenthal 2007), and is located approximately 1.1 miles east of the historical tidal marsh and bay lands boundary and within 0.5 miles of Temescal Creek and 0.6 miles of Glen Echo Creek. Due to these factors, it was determined that the Project Area has a moderate potential to contain buried prehistoric archaeological resources.

3.5 ARCHAEOLOGICAL RESOURCE SENSITIVITY OF THE PROJECT AREA

Based on the archival research presented above there appears to be a moderate to high potential for buried historic archaeological resources to be present within the Project Area due to the presence of at least one building within the Project Area by 1895; and there appears to be a moderate potential for buried prehistoric archaeological to be present due to the Project Area being located on a Holocene-age alluvial fan that may contain Holocene-age buried soils (i.e. paleosols) that would have been available for human occupation prior to alluvial deposition.

4.0 RESEARCH DESIGN

This research design follows the Secretary of Interior's Guidelines for Archaeological Documentation. Its purpose is to describe research themes and address the types of anticipated artifacts, probable depth of cultural deposits, previous disturbances, and NRHP-eligibility. This research design has been prepared in the event that potentially significant archaeological resources are discovered during excavation associated with development of the Project.

Scientific or scholarly research values are judged within the context of a research design that provides the framework for examining variability and change in the archaeological record. A research design outlines the topics or questions that could be asked, given the kinds of data that a particular property type is likely to contain, and evaluates whether that information can be gained from other sources.

Based on the archaeological sensitivity of the Project Area, it is possible that prehistoric or historic resources might be encountered. When resources are discovered during earth-disturbing activities or construction, and if they cannot be avoided, a more comprehensive research design should be developed that is appropriate to the discovered resource. To preclude the need for additional time spent in review once construction begins, a preliminary Research Design is provided below. Discussion of potential research values that might be important if associated deposits are identified are reflected as broad, modest themes based on archaeological data for the Project Area and its surroundings.

4.1 RESEARCH ORIENTATION

A fundamental premise of archaeological research is that behavior and social practices of individuals and communities are in some way represented in the material record of past human activities. The study of the patterning in the material record allows us to construct interpretations of how people lived in the past and adapted to their changing environments. The material record comprises artifacts, features, and ecofacts. By definition, an artifact is a movable object transformed by a human being, such as a projectile point; a feature is a non-portable remnant of human activity, such as a hearth, road, or house. Lastly, an ecofact is any floral or faunal material, that has not been altered by people, but that nonetheless has cultural relevance. An archaeological site is any concentration of artifacts, ecofacts, and features manufactured or modified by humans.

4.2 RESEARCH DESIGN

This section describes the types of archaeological resources that may be encountered within the Project Area and the types of research questions that can be addressed if such resources are identified.

4.2.1 Cultural Resource Property Types

Cultural resources relate to remains and sites associated with human activities and include prehistoric and ethnohistoric Native American sites, historic cultural resource sites, historic buildings, and elements or areas of the natural landscape that have traditional cultural significance. Significant prehistoric cultural resources are defined as human burials, features or other groupings of materials modified or used by Native American peoples in the past. Indicators of prior cultural occupation by Native Americans include artifacts and burials of human remains, soil discoloration, faunal bone, shell, modified cobbles, ashy areas, and baked or vitrified clays. Materials may include human bone, artifacts of chipped stone such as projectile points, groundstone artifacts, such as mortars and pestles, and bone and shell artifacts. Various features and samples may be encountered including hearths of fire-affected rock, baked and vitrified clay, unmodified faunal and shellfish remains; these characteristics may permit dietary reconstruction, and other evidence, such as differences in compaction in house floors.

Historic cultural materials in the region may have occurred anytime in the last two hundred years, between the late eighteenth through the twentieth centuries. These materials may include structural remains, such as portions of walls and foundations, or glass bottles, metal cans or other manufactured artifacts found in refuse deposits, privies, and wells.

4.2.2 Site Formation Process

It is essential to understand the processes by which cultural and natural strata are formed in order to interpret cultural resource data and to evaluate their importance. The formation of layers and the creation of new feature interfaces create archaeological strata that represent the sequence of events that have occurred at a particular site. Cultural resource deposits reflect periods of continuous use, as well as intervals of transition in site occupation and use. Continuous use of a site creates a gradually accumulated layer of deposition, such as sheet refuse or an ash layer, over a period of months, years, or thousands of years. Deposits of these types allow archaeologists to examine research questions including those that relate to change over time (i.e. diachronic changes). In contrast, other cultural resource deposits are created during events of transition. Catastrophic occurrences, such as floods or fires, and human activity, such as digging a hole or filling a pit, mark intervals of transition. Knowing this allows for the assessment of the integrity of a site. If a site has lost its integrity and its contents have been mixed or disturbed, then the site has limited interpretive value because archaeological interpretations are based on the associations between a site's constituents and its depositional context.

4.2.3 Context of Evaluation

This research design is based on a contextual approach, which emphasizes the specific historical, social, and cultural behaviors contributing to the creation of cultural resource sites. Through this approach, an archaeologist can examine cultural processes on a small scale, at the level of the mundane and day-to-day activities and experiences that together form a society's broader patterns of development. Use of a contextual approach requires the development of an historic context within which to place the activities that have led to the creation of a cultural resources site. A historic context for a cultural resource deposit might include information about specific characteristics of an individual or group, such as ethnicity and profession, as well as information about the political, social, and economic climate of the larger society, and it may address technological trends relating to site formation processes and site components.

4.2.4 Objectives

The objectives of archaeological investigations for this Project may include determining site boundaries, function, data potential and evaluating the historical significance of archaeological resources, if present. For the purpose of this CRMP, cultural resources research topics for prehistoric archaeological resources revolve around three main themes: refining cultural chronology, site formation processes, and the prehistoric adaptations evidenced at the site. Cultural resource research topics for historic archaeological resources revolve around chronology, settlement and land use, and consumer behavior, social identity and status.

4.2.5 Refining Cultural Chronology

Refinement of the cultural chronology is an important aspect of archaeological investigations to any area. Since there have been relatively few excavations in the vicinity of the Project Area, it is important to collect any available data that may help to clarify how Native American culture may have changed over time, particularly in reaction to political and environmental changes.

4.2.6 Chronological Data

Collecting chronological data is a prerequisite to analyzing changes in settlement systems. Radiocarbon dating – using charcoal, shell or other organic matter from clearly cultural contexts, such as features or occupation surfaces – is the preferred method of dating a prehistoric archaeological site or component. Cross dating of temporally diagnostic artifacts, such as beads or projectile points, and obsidian hydration analysis can also provide chronological data; although the resolution is typically lower than for radiocarbon dating.

4.2.7 Requisite Data

If archaeological resources are discovered that cannot be avoided, specific information should be recovered during mitigation to facilitate the interpretation process. This information may include, but is not limited to evaluating areas of moderate and high artifact densities; determining the vertical limits of the site; the presence of intact, sub-surface, and/or stratified deposits; site structure; and site formation processes. One of the more traditional and standard means of recovering this information is through the archaeological excavation of test units. Specific data requirements are those related to chronology, lithic technology, tool stone procurement, fauna and archaeobotany. Site or component function can usually be elucidated through analysis of lithic technology, faunal and archaeobotanical remains, as well as cultural features.

Lithic Data

There are various relationships between lithic technology and land-use strategies. In simplified terms, mobile foragers are expected to employ a formal technology in which bifaces are important for their portability and multiple functions; more sedentary people tend to use a relatively expedient technology. Lithic technological data can be generated through functional, morphological, and technological analyses of debitage and tools; these data form the foundation for other analyses such as measurements of assemblage diversity and other intra- and inter-site comparisons. Reliable analyses are dependent upon sufficient sample sizes.

Faunal Data

Faunal data directly reflects subsistence practices. Numbers of identified species represented per assemblage provides a qualitative measure of animal selection, which, when compared with other sites/components, can indicate spatial or temporal changes in resource selection, seasonability, availability and over-harvesting.

Archaeobotanical Data

Cultural botanical remains provide direct evidence of subsistence and seasonality, and can contribute to understanding site function(s). Flotation of soil samples from cultural features and macrobotanical identification of floral specimens are necessary to acquire this information. Vegetal resources played important roles in many areas; as mobility decreased, use of plant remains intensified and cultural landscapes were more fully maintained.

Osteological Data

Osteological analysis of human remains present within the archaeological site can be used to reconstruct the age and sex composition of a population, their mortality rates for different ages, length of life, population size and effects of nutrition and disease on demography. The mortality rate of a population and documenting evidence of inter-personal violence can help to understand and interpret the overall health and demography of a population.

4.2.8 Data Collection Methods

Shovel Test Probes (STPs), Excavation Units (EUs), and backhoe trenching may be employed to determine site boundaries. Hand excavation would be used to expose features and human remains, and to facilitate the understanding of site formation processes. All soils would be screened through 1/4-inch or 1/8-inch hardware mesh depending on the nature of the resource. Wet screening is preferable, but dry screening may be employed as dictated by the deposit or as the situation allows. Samples of bone, shell, charcoal and soils would be collected and submitted for radiocarbon dating, using specific radiocarbon collection strategies. Flotation samples would also be bagged separately. All recovered cultural material, including historic artifacts, faunal remains, ecofacts, and organic materials, would be inventoried, processed, and analyzed. Cultural artifacts collected for laboratory analysis would be bagged and labeled with the complete excavation provenience (site number, the unit number, grid location, level depth), including the excavator's name and date. All artifacts collected and bagged in the field would be washed and re-bagged according to artifact type prior to being sent to the laboratory for cataloging and analysis. Artifacts would be cataloged, classified, weighed, measured, numbered, and photographed following professional standards.

Historic materials will be cataloged separately from prehistoric materials following functional categories generally accepted for late nineteenth century sites. The assemblages will be analyzed with reference to functional and morphological attributes, enabling chronological indicators and descriptions to be made for classes of artifactual and ecofactual materials. The historical archaeological collection will be cataloged and processed using standard historic material type categories: shell, animal bone, botanical remains, ceramics, glass, metal, architectural debris (brick, concrete, wood, etc.) and miscellaneous small personal items.

Time-sensitive artifacts, such as projectile points and historic artifacts with "maker's marks" or a dateable manufacturing process, will be classified following appropriate typological schemes, and summarized by unit and depth. This information in conjunction with other data is used to assess depositional integrity and to define temporal components.

4.2.9 Research Questions

Research questions that can be addressed by data from the potential archaeological sites present within the Project Area are outlined below. For the purpose of the CRMP, Prehistoric archaeological research will revolve around the broad themes of chronology, settlement patterns and land use, site function and demographics. Historic archaeological research will revolve around chronology, settlement and land use, and consumer behavior, social identity and status. The research questions can and should be modified as needed if potentially significant archaeological resources is encountered during Project-related earth-disturbing activities.

Site Formation Processes- Prehistoric and Historic Periods

What site formation processes have been active on the site? Are features and artifacts in a primary context or have they been disturbed and redeposited?

The identification of context and site formation involves systematic observation during excavation in order to recognize regional and locally specific processes and their effects. An analysis of site formation processes helps to establish site integrity of deposits and features and directly affects all cultural and behavioral interpretations. It is also crucial when evaluating if a cultural resource meets the eligibility requirements of the NRHP.

Chronology- Prehistoric and Historic Periods

What is the temporal range of deposits at the site? How does it relate to others in the region and does it support existing regional chronology?

Chronology is best established through radiocarbon and obsidian hydration dating. Stratigraphic analysis and site formation analysis are used to evaluate the integrity of the results from various tests such as radiocarbon and obsidian hydration dating. X-ray florescence (XRF) to identify obsidian sources allows for each hydration result to be calibrated. Testing material found in primary context and in association with intact features is preferable. The identification of temporally diagnostic artifact types and features also help establish temporal association (e.g., shell beads, projectile points, charmstones, makers' marks on ceramics and glass bottles and their manufacturing process).

Settlement Patterns - Prehistoric Period

Do the sites or features represent variation in the group size or length of occupation?

Datasets necessary to address settlement patterns would include artifact analysis to determine possible increases or decreases in abundance of artifacts and radiocarbon dating using charcoal, faunal bone, and/or shell may help to decipher how long a site was occupied.

Exotic Materials and Trade - Prehistoric Period

Does the presence of shell or lithic artifacts indicate either contact with groups outside the area or travel outside the area? What are the sources of the various materials used on site (e.g., Napa Valley, Casa Diablo, Annadel obsidian)? Did preferences for specific sources vary over time and how does it compare with other sites in the region?

Datasets that include analysis of distinctive artifact types, such as projectile points, beads, ornaments or other exotic materials representative of a particular culture may be useful for indicating trade patterns and practices with other groups. XRF analysis of obsidian can demonstrate where the raw material was obtained. The presence of obsidian temporally distinctive projectile points within a site can be analyzed for possible diachronic changes of obsidian sources.

Dietary Reconstruction - Prehistoric Period

What subsistence patterns can be identified from archaeological deposits? What were the primary dietary resources utilized and do changes in dietary remains suggest change in environment or resource exploitation over time?

Preserved floral and faunal remains offer the best opportunity to examine subsistence strategies and how they may have changed over time. Recovering both floral and faunal remains may require flotation of column samples and requires the identification of macrobotanical and faunal remains and statistical analyses for intrasite comparison. Changes in the quantities of tools (e.g. flaked tools vs. ground stone) within an assemblage and tool use (through lithic tool use-wear studies) can also be beneficial methods to elucidate subsistence questions. This requires analyzing and classifying bone and shell tools and artifacts, and carefully excavating features and screening soil through fine-mesh (e.g., to recover such evidence as obsidian microflakes indicative of knapping). Other datasets that may help to reconstruct diachronic environmental changes include protein residue and pollen and phytolith studies, which can indicate changes in plant and animal species at a site over time.

Demography, Health, and Violence - Prehistoric Period

What is the demographic profile of the population? What was the health of the burial population and how did it change over time? What is the nature of inter-personal violence and did it change over time?

Osteological analysis of human remains present within the archaeological site can reconstruct prehistoric life ways, the age and sex composition of a population, their mortality rates for different ages, length of life, population size and effects of nutrition and disease on demography. Field recording of burial position, orientation and associated features and artifacts is important in evaluating life ways. Making standard laboratory observations of age, sex, and pathology reflect demographics and health status of the population. Recording nonmetric traits can help identify biological distance among and within populations, as well as the effects of the surrounding environment. Metric analysis helps to determine stature, sexual dimorphism, and population differences. The identification of pathologies and trauma also assist in evaluating populations' overall health and inter-personal relations.

Settlement and Land Use - Historic Period

How was the land used in the historic period and did land use change over time?

Addressing these questions would require the identification of discreet features, such a domestic refuse pit, and the analysis of associated artifacts to establish function, and/or landscape features such as fences, roads, trails, pastures or orchards. Integrating feature information to determine land use strategy at different times is also important.

Consumer Behavior, Social Identity and Status - Historic Period

Does the historic artifact assemblage reflect the known availability of various consumer goods during a particular time and at a particular place? Do historical resources provide information on consumer practices of any particular social, economic, or ethnic group?

Shifts in homegrown foods to store-bought foods and other consumer products can best be illustrated by types and quantities of data sets that include faunal and other food remains and historic artifacts that provide evidence of subsistence, including food storage vessels such as bottles, canning jars, tin cans, and ceramic crockery. Domestic items, such as cooking and eating utensils, tableware, and personal items are other important indicators of consumer behavior. Analysis of historic artifacts has the potential to provide information about social and economic status (e.g., the presence of fine porcelain versus plain whiteware tableware). Imported manufactured goods may help to identify ethic identities and supply information on the cultural maintenance within a specific group.

5.0 CULTURAL RESOURCES MONITORING PLAN

The following sections outlines the monitoring protocols and procedures that will be implemented during archaeological monitoring, including the procedures that will be implemented in the event that archaeological resources and/or human remains are encountered during earth-disturbing activities.

5.1 MONITORING PERSONNEL

A Project Manager (PM), Principal Investigator (PI) and at least one Archaeological Monitor shall be assigned to the Project; one person can subsume the responsibilities of one or more of these positions, if qualified to do so. The PI shall be a Registered Professional Archaeologist (RPA) who is Secretary of Interior-qualified. The role of the PI will be to oversee the archaeological monitoring program. The PM shall serve as the primary contact for the client, manage the completion of assigned tasks, and perform contract administration, planning, scheduling and budgeting duties. The role of the PI and the PM can be assigned to one person if needed. The role of the Archaeological Monitor will be to monitor Project-related ground-disturbing activities under the direction of the PI. The Archaeological Monitor shall have a minimum of a B.A. in Anthropology, completion of an accredited archaeological field school, and have at least two years of full-time experience in California archaeology. Other qualified archaeologists may assist with the Project mitigation and monitoring, if warranted by the discovery of potentially significant cultural resources.

The archaeological monitor(s) will have access to a full complement of supplies that include a GPS unit, hand trowel, pin flags, caution tape, shaker screen, shovel, cell phone, digital camera, maps and all other supplies necessary to effectively and safely complete the construction monitoring task. Hard hats, boots, high visibility reflective vests, ear plugs, gloves, and safety glasses will be part of the monitor's attire.

5.2 MONITORING PROCEDURES AND PROTOCOLS

To address the possibility that unidentified but potentially important archaeological resources may be encountered during Project-related earth-disturbing activities monitoring procedures and protocols have been developed. A qualified Archaeological Monitor is required during earth-moving (ground disturbing) activities associated with the proposed Project to ensure that archaeological resources, if present, are identified and handled accordingly. Archaeological monitoring shall continue until the PI determines that cultural resources are unlikely to be encountered, at which time archaeological monitoring can cease.

Monitoring is defined as active observation of earth-moving or work that could adversely affect cultural resources with the Project Area. The archaeological monitoring program followed throughout the construction process may include a range of procedures including full-time monitoring, part-time monitoring or spot checks.

- Full-time monitoring will occur during the entire workday and continue on a daily basis until the excavation of a given area has reached a depth at which resources are not likely to occur, or until the PI determines that full-time archaeological monitoring can be reduced to part-time monitoring, spot checks, or is no longer warranted.
- Part-time monitoring will occur during part of a workday. Part-time monitoring will be conducted when a specific excavation activity occurring on any given day has the potential to uncover archaeological resources, and further excavation work beyond the scope of the specific excavation activity is not planned for the same day or does not have the potential to encounter archaeological resources.
- Spot checks consist of a field inspection of the progress of excavation over the course of the project. During spot checks all spoils, open excavations, recently graded areas, and other soil disturbances are inspected. The frequency and duration of spot checks is based on the relative sensitivity of the exposed soils and active work areas as determined by the PI.

Earth-moving activities include all construction ground disturbances, including, but not limited to grading, boring, and trenching. Excavation solely within fill soil (e.g., soil that has been brought into the project area for the purpose of development) will not be monitored by an archaeologist.

If the PI determines that full-time monitoring is no longer required in specific locations, an e-mail detailing the reasons for changing the level of monitoring shall be provided to the Project construction manager and/or Project developer.

At a minimum, the PI or PM shall consult weekly with the Project construction manager and or Project developer to confirm area(s) to be worked during the following week until ground disturbance is completed, or it is determined that archaeological monitoring is no longer warranted. The Project construction manager and/or Project developer shall promptly notify the PM of any changes to the scheduling of the construction phases.

Archaeological resource monitoring activities are the responsibility of the PI and the archaeologist assigned to monitor ground-disturbing activities. Any interference with monitoring activities, removal of a monitor from duties assigned by the PI, or direction to a monitor to relocate monitoring activities by anyone other than the PI shall be considered noncompliance.

5.2.1 Changes in Level of Archaeological Monitoring

The archaeologist shall monitor, on a full-time basis, construction ground disturbances comprising of grading, boring, trenching, and other ground-disturbing activities within the Project Area that penetrate native soil whether previously disturbed or not. If the PI determines that the level of monitoring requires a different level of intensity, which could include the need for additional monitors or reducing to spot-check monitoring only, then a letter or an email describing justification for the change in monitoring procedures shall be drafted by the PI to the Project developer for approval.

5.2.2 Work Curtailment Procedures

The archaeological monitor(s) and PI have the authority to halt construction in the area of a discovery to ensure that an archaeological resource is protected from further impacts. If necessary, the instruction to suspend an activity can be given directly to a heavy equipment operator or to a crew member. If the monitor determines that a potentially significant archaeological resource has been encountered, all work within 25 feet (or greater distance if warranted) of the discovery area shall be redirected and the excavated area and any back dirt will be secured. In cases where the objects or materials are determined to be non-significant, work will be allowed to resume immediately.

If a potentially significant archaeological resource is encountered, as soon as the immediate danger to it is abated, the archaeological monitor will report the find directly to the PI and the appropriate contractor to explain the action taken, why it was necessary, and the subsequent actions to be taken. The PI acts as the party responsible for all cultural resource issues and will immediately report any issues to the Project construction manager and/or Project developer.

The halting or redirection of construction activities in a discovery area shall remain in effect until the PI and the Project construction manager and/or Project developer, have conferred and determined if avoidance is possible. If avoidance of the potentially significant archaeological resource is not feasible, the archaeological deposit shall be evaluated for its eligibility for listing in the NRHP (see Section 2.2.2 for eligibility requirements) in consultation with the SHPO. If the deposit is found not eligible, mitigation is not necessary. If the deposit is eligible, adverse effects on the deposit shall be mitigated. Mitigation may include excavation of the archaeological deposit in accordance with a data recovery plan using standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; preparation of a report detailing the methods, findings, and significance of the archaeological site and associated materials; and accessioning of archaeological materials and report at a curation facility. Construction shall continue to be suspended in the discovery area until any further data recovery and mitigation has been completed.

If data recovery or other mitigation measures are required, additional archaeological monitors shall continue to monitor construction activities while mitigation of the resource is performed. All necessary and required data recovery and other mitigation shall be completed as promptly as possible after the discovery of any previously unknown cultural resource unless all parties agree to additional time.

In the event of an archaeological resource discovery, avoidance measures such as flagging or fencing (or in case of human remains steel plating) will be used to prohibit or otherwise restrict access to sensitive areas.

5.2.3 Procedures for the Discovery of Archaeological Resources

In the event that an archaeological resource is uncovered during construction and the archeological monitor is not on site, employees shall halt all excavation and earth moving activities within 50 feet of the potential archaeological resource discovery area and immediately report the find to their supervisor or foreman. The PI shall then be immediately notified.

In the event that an archaeological resource is uncovered during construction and an archeological monitor is present, the archaeological monitor will assess whether the discovery is potentially significant and report to the PI. If the discovery is of a potentially significant archaeological resource, then the PI will follow the procedures in the mitigation plan as summarized in this report and will notify the Project construction manager and/or the Project developer within 24 hours. The Project construction manager and/or the Project developer will notify the construction personnel to begin work again within the discovery area only after mitigation has occurred.

If the discovery includes suspected human remains, a Secretary of Interior qualified archaeologist or other specialist who is trained in the identification of human remains (i.e. osteologist or bioarchaeologist) shall inspect the find and report it to the PI. The PI will contact the Project construction manager and/or Project developer immediately if the remains are determined to be human. The archaeological monitor or the PI shall also contact the Alameda County Coroner's Office immediately. The coroner may consult with the archaeological monitor or PI who identified the remains as human. The human remains will be secured immediately with steel plating. The Alameda County Coroner must be contacted upon each occurrence of human remains identified within the Project Area.

- Alameda County Coroner: (510-382-3000)

California Health and Safety Code 7050.5 establish intentional disturbance, mutilation or removal of interred human remains as a misdemeanor. It requires that further excavation or disturbance of land, upon discovery of human remains outside of a dedicated cemetery, cease until a county coroner makes a report. It requires the county coroner to contact the Native American Heritage Commission (NAHC) within 24 hours if the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the remains to be those of a Native American.

Native American Heritage Commission and Most Likely Descendants (MLD)

Public Resource Code §5097.98 requires the NAHC, upon notification by a county coroner, to notify the most likely descendants (MLD) regarding the discovery of Native American human remains. It enables the MLD, within 48 hours of notification by the NAHC, to inspect the site of the discovery of Native American human remains and to recommend to the landowner or the person responsible for the excavation work means for treating or disposition, with appropriate dignity, the human remains and any associated grave goods. In the event that no descendant is identified, or the descendant fails to make a recommendation for disposition within 48 hours, or the landowner rejects the recommendation of the descendant PRC §5097.98 requires the owner of the land to reinter the remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance. The re-burial location is to be documented and reported to the NAHC and the NWIC.

If a dispute arises between the landowners and the MLD related to the treatment and disposition of Native American human remains and associated grave goods the NAHC will mediate the dispute. If the landowner does not accept the descendant's recommendations for treatment of the remains, the owner or the descendent may request mediation by the NAHC. The NAHC may also assist landowners in developing agreements with MLDs to ensure protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction and provide for sensitive treatment and disposition of Native American burials, skeletal remains, and associated grave goods consistent with the planned use of, or the approved project on, the land.

Under SB 447 (Chapter 404, Statutes of 1987) it is a felony to obtain or possess Native American remains or associated grave goods except as otherwise provided by law or in accordance with an agreement reached pursuant to PRC §5097.94 or § 5097.98. Any person who removes, without authority of law, any Native American artifacts or human remains from a Native American grave with intent to sell or dissect or with malice or wantonness is guilty of a felony which is punishable by state imprisonment.

Consultation with the MLD the PI and the Project developer shall determine the appropriate treatment and level of analysis of any human remains discovered within the Project Area.

5.2.4 Native American Participation

Important prehistoric archaeologist materials and Native American human remains could be disturbed if prehistoric archaeological deposits are encountered during project construction. Currently, Native American monitoring is not recommended or required. However, the presence of a Native American monitor (in addition to an archaeological monitor) is recommended if prehistoric resources are encountered during earth-disturbing activities.

If human remains are discovered during monitoring or mitigation activities, then the specific guidelines, protocol, and channels of communication outlined by the California NAHC (1991), and in accordance with Section 7050.5 of the Health and Safety Code, Section 5097.98 of the Public Resource Code (Chapter 1492, Statutes of 1982, Senate Bill 297), and SB447 (Chapter 44, Statutes of 1987) will be followed. Section 7050.5 (c) will guide the MLD and Native American involvement, in the event of discovery of human remains.

5.2.5 Reporting Procedures - Daily Log, Weekly and Monthly Reports

During the monitoring period, a daily log will be completed for each day monitoring that is conducted. The log will track earth-moving activities, detail cultural resource discoveries, and other actions taken including noncompliance issues. These logs will be compiled into monthly progress reports of cultural resource related activities to be prepared by the PI and submitted to the Project developer.

Cultural Materials Considered Less than 50 Years of Age

All of the cultural materials listed below are less than fifty years of age and, unless of exceptional significance, will not be considered potentially significant cultural resources. The following materials will not be reported unless exceptional:

- Plastic products limited to Styrofoam® and other foamed polystyrene products, Velcro®, Teflon® coated cookware, polyvinylchloride (PVC) pipe, high-density polyethylene, polypropylene, polyimide, thermoplastic polyester, linear low-density polyethylene, liquid crystal polymers, and products marked with resin codes.
- Cans made from aluminum or bi-metal, or those with pull-tab or push-tab (metal or plastic) openings.
- Aluminum foil containers.
- Synthetic tires, car parts.
- Modern electronics (CD players, VCRs, electronic appliances, personal electronics, computers, printers, and associated parts).
- Compact disks, floppy computer disks, magnetic tape media.
- Unidentifiable metal fragments.
- Rubber and rubberized metal.
- Clothing or shoes made of plastic or synthetic materials.
- Modern bottles and other similar containers

Any materials that are found with materials older than 50 years will be reported.

5.3 FIELD RECORDATION AND MITIGATION PLAN

5.3.1 Cultural Materials Considered 50 Years of Age or Older and Not Human Remains

In the event that a potentially significant archaeological resource is encountered during construction the following procedures will be followed:

1. Excavation work or any other earth-moving activities within 25 feet, or greater if deemed necessary by the archaeological monitor to protect the archaeological resource, will halt and be redirected.
2. If there is no archaeological monitor on site, the workers will stop work in the area and notify the site/area supervisor or construction manager who will then immediately notify the PI or PM.
3. If the archaeological monitor or a specialist in human osteology determines that the discovery includes human remains, those remains will be treated under the protocol for treatment of human remains (see section 5.2.3).
4. The archaeological monitor will notify the PI of the discovery.
5. If the PI determines the discovery qualifies for prescribed treatment, then the procedures in section 5.3.4 will be followed.
6. If the discovery does not qualify for prescribed treatment, procedures outlined in Section 5.3.5 will be followed. Excavations where archaeological material has been discovered will not be back-filled until the archaeological monitor or PI approves the back-filling. If the area needs to be secured, this will be done by plating, fencing, or other temporary measures approved by the archaeological monitor or PI. Steel plates should be made available by the contractor for this purpose.

5.3.2 Expansive Exposure of Discovered Resources is Possible

In some cases, broad excavations are possible within a linear right of way (ROW) (when ROW is through open land). When discoveries are made in areas where investigations can be made over broad areas the following will be completed:

1. The horizontal and vertical boundaries of the deposit will be defined.
2. The stratigraphic relationships and depth of the deposit will be defined.
3. The content of deposit, i.e., the date range and information potential, will be investigated by means of subsurface testing.
4. Sufficient information will be gathered to make a recommendation of eligibility utilizing the research design outlined in Section 4.0 (refining research questions as needed).

5. The site will be recorded on Department of Parks and Recreation (DPR) 523 forms that will include a location map, a scaled drawing, and a photograph of the resource.
6. An eligibility recommendation will be made for the resource on the form.
7. If the find cannot clearly be recommended as eligible or ineligible for the NRHP, the deposit will be assumed eligible.
8. The PI will develop a data recovery program based on the research design that reflects the information potential identified by the subsurface testing. If the PI determines that the find is eligible for the NRHP, then all mitigation required will be completed prior to continuation of construction in the area of the discovery.

5.3.3 Expansive Exposure of Discovered Resources is Not Possible

When discoveries are made in trenches within public roadways or areas where access is restricted, the possibility of completing a thorough evaluation of a discovery may be limited. Safety considerations may constrain excavation or testing of a cultural resource. Access to resources discovered at depth in a trench should not automatically be considered restricted. If there is a question about whether access is restricted, the PI and Project construction manager will consult and determine if the access is restricted.

In cases where exposure of the resource is limited, evaluation of a portion of a site or deposit for the NRHP may not be sufficient to allow an eligibility recommendation of the entire resource. The following information will be gathered:

1. The horizontal and vertical boundaries of the deposit or resource will be defined to the extent possible.
2. The stratigraphic relationships and the depth of the deposit will be identified by using subsurface testing. The content of the deposit, i.e., the date range and information potential, will be investigated. Where access is limited, the content and the date of the deposit (if possible) will be described, and the information potential will be evaluated, utilizing the research design described herein.
3. The site will be recorded on a DPR 523 form, including a location map, a scaled drawing, and a photograph of the resource.
4. If horizontal excavation is extremely limited, and the find cannot clearly be recommended as eligible or ineligible for the NRHP, the deposit will be assumed eligible. The deposit will be treated by preparing a DPR forms to provide a record of the find, including a location map, a scaled drawing, and a photograph of the resource; and by developing a limited data recovery program based on the research design described herein. All mitigation will be approved by Raintree Partners and completed prior to continuation of construction in the area of the discovery.

5.3.4 Prescribed Treatment of Cultural Resource Discoveries

Any discovery that contains human remains will not be subject to this protocol.

For some classes of resources, treatment (mitigation) can be agreed upon before starting construction on the Project. Defining the resource classes and treatments prior to starting any ground disturbing activities can limit delays in the construction schedule. When resources over 50 years of age are discovered, prescribed treatment for the classes of resources listed in this consists of the following:

1. Construction is halted in the immediate vicinity of the find, and the archaeological monitor records the find on a DPR 523 forms, including a location map and a photograph record.
2. The PI or PM notifies the Project construction manager and Project developer of the find within 24 hours.
3. Notification includes a description of the resource, a statement that it qualifies for prescribed treatment, and that the treatment has been completed.
4. Construction can resume when the archaeological monitor completes documentation and all concerning parties have been notified.

Classes of Prehistoric Period Archaeological Resources Eligible for Prescribed Treatment

- Small, sparse (less than 3 pieces per square meter) scatters of lithic debitage that lack depth (less than ten centimeters).
- Sparse occurrences of fragments of fire-affected rock (less than 3 pieces per square meter, with no other cultural constituents).
- Sparse occurrences of fragments of baked or vitrified clay (less than 3 pieces per square meter, with no other cultural constituents).
- Small midden remnants (smaller than 1 meter x 1 meter) that lack depth (less than 10 centimeters). If charcoal, bone or other diagnostic elements are found in the midden, or the deposit is exceptional as determined from associated artifacts, the midden and associated diagnostic elements will be treated following Section 5.3.5.
- Small clusters (less than 1 meter x 1 meter in size) of unidentifiable shell (whole or fragmented). If artifacts, rock material not native to the area (manuport) or other materials are found, the shell and associated deposit will be treated following Section 5.3.5.

Classes of Historic Period Archaeological Cultural Resources Eligible for Prescribed Treatment

- Roadside disposal of debris.
- Small, isolated artifact concentrations (fewer than 20 artifacts or the fragments of fewer than three objects) with no potential for subsurface deposit.

- Concrete, brick, or other building materials that lack structural integrity and are part of a documented disturbed (redeposited) context.
- Metal, concrete, or ceramic pipes, conduits, or culverts that lack structural integrity.

Prescribed Treatment for Diagnostic and Exceptional Isolated Finds

Certain isolated finds are subject to special treatment. They include diagnostic prehistoric artifacts, intact, unusual historic-period artifacts greater than 50 years old and other exceptional artifacts (high quality, unique, or labeled examples, e.g., mortars, pestles, projectile points, ornaments, embossed bottles, decorated or maker-marked ceramic vessels, or dated/inscribed metal objects). Diagnostic artifacts are defined as items that are indicative of a particular time and/or cultural group.

Examples of diagnostic artifacts include:

	Lithics	**Groundstone**	**Beads/Pendants**	**Other**
Prehistoric Artifacts	Points	Mortars	*Olivella* shell	Baked clay figurines
	Scrapers	Pestles	Abalone shell	Ear spools
	Drills	Mano	Stone	Bone tools
	Blanks	Metate	Bone	Pipes
		Net Sinkers	Other types of shell	Charmstones

	Ceramics	**Glass**	**Identifiable metal**	**Other**
Historic Artifacts	Decorated	Cut	Tools	Buttons
	Rim sherds	Pressed	Gun parts	Marbles
	Basal sherds	Decorated	Machine parts	Pipes
	Maker's marks	Vessels bases and lips	Hinges	Figurine, doll parts
	Complete vessels	Labels	Nails	Saw cut/butchered bone
	Insulators	Complete vessels	Buckles	
		Insulators	Flatware	
			Wagon hardware	
			Horse tack, shoes	

Diagnostic artifacts will be treated as follows:

1. Construction is halted within 25 feet while the archaeological monitor records the find on a DPR 523 form, including a location map and a photograph.
2. The isolate is collected and will be curated.
3. The PI or PM notifies the Project developer of the find within 24 hours. Notice includes a description of the resource and a description of the steps taken to determine that it was truly spatially isolated and not part of a larger deposit that would be treated according to Section 5.3.5.

4. Construction can resume when the archaeological monitor completes documentation.

5. All isolates will be listed and described in the final monitoring report.

5.3.5 Potentially Significant Cultural Resources Not Eligible for Prescribed Treatment and that Warrant Further Evaluation

Except for the materials listed in Section 5.3.4, all other cultural resource materials must be treated individually, as significant or potentially significant discoveries. Individual treatment consists of the following steps:

1. The archaeological monitor halts construction within 25 feet of the find (or greater if warranted) and secures the discovery area and associated back-dirt (spoils).

2. As soon as the immediate danger to it is abated, the archaeological monitor will report the find directly to the PI and the appropriate contractor to explain the action taken, why it was necessary, and the subsequent actions to be taken.

3. The PI or PM notifies the Project developer of the find within 24 hours.

4. The archaeological monitor records the find on a DPR 523 form, including a location map and a photograph record.

5. The PI provides the Project developer with a recommendation to avoid impacts to the resource via an avoidance plan.

6. If avoidance is not feasible, the archaeological deposit shall be evaluated for its eligibility for listing in the NRHP (see Section 2.2.2 for eligibility requirements) in consultation with the SHPO. EDS will provide a scope of work and cost estimate for eligibility testing within 48 hours of the decision that avoidance is not feasible, unless more time is required for the SHPO.

7. If the deposit is found not eligible for the NRHP, mitigation is not necessary and excavation can resume immediately.

8. If the deposit is determined eligible for the NRHP, adverse effects on the deposit shall be mitigated via a data recovery plan. Mitigation may include excavation of the archaeological deposit in accordance with a data recovery plan using standard archaeological field methods and procedures; laboratory and technical analyses of recovered archaeological materials; preparation of a report detailing the methods, findings, and significance of the archaeological site and associated materials; and accessioning of archaeological materials and report at a curation facility. Construction shall continue to be suspended in the discovery area until any further data recovery and mitigation has been completed.

5.4 CURATION

The Project developer will assume responsibility for any funding requirements related to the accessioning of archaeological materials and the data recovery report at a curation facility. Artifacts will be cataloged using protocols acceptable to the David A. Fredrickson Archaeological Collections Facility at Sonoma State University, which is the curation facility recommended for any archaeological discoveries that result from this Project. Another curation facility meeting the California Office of Historic Preservation's guidelines for the curation of archaeological collections may also be used.

5.5 TECHNICAL REPORTING

After the completion of all ground disturbance including landscaping and/or data recovery (if required), and data analyses, a final Cultural Resources Monitoring Report (CRMR) will be produced under the direction of the PI. If data recovery and data analysis occur, the report will comply with the Secretary of the Interior's Standards for Archaeological Documentation. A draft report will be provided to the Project developer for one round of comments. The final report will be submitted to the Project developer and the NWIC. The report will include DPR 523 forms for any newly discovered sites within the Project Area. The report and DPR 523 forms shall be submitted to the NWIC upon completion.

6.0 REFERENCES CITED

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UCSB (University of California at Santa Barbara)

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July 19, 2019

Native American Heritage Commission
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691

VIA EMAIL: NAHC@nahc.ca.gov

Dear NAHC Representative:

Our firm is conducting a cultural resources evaluation for new construction project in Oakland, Alameda County, California. We are seeking information from the Native American Heritage Commission regarding possible sacred lands and other cultural sites within the project area. We would also like to obtain a list of individuals whom it would be appropriate to contact regarding this project.

- County: Alameda County
- USGS Map: OAKLAND WEST 7.5' Quadrangle
- Township: T – 1 S
- Range: R – 4 W
- Section: 23

The project will be funded in part with federal funding from Project-Based Section 8 Voucher program of U.S. HUD, as administered by the City of Oakland. A brief description follows.

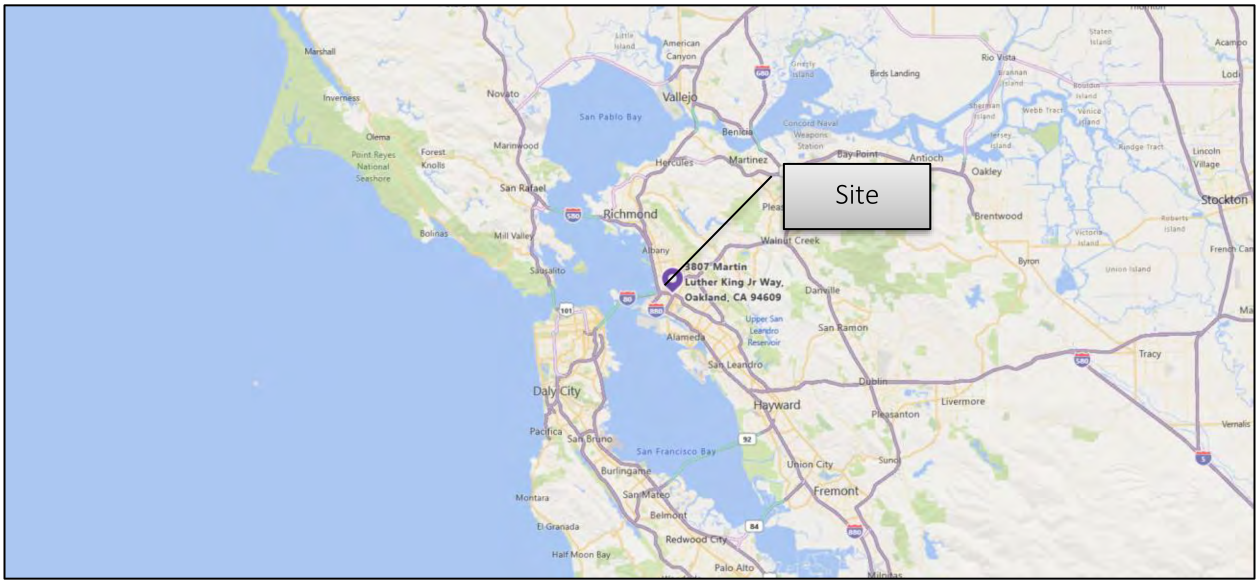
Resources for Community Development (RCD) proposes to acquire and develop the Longfellow Corner affordable housing project on four contiguous parcels (APNs 012-0964-007, -006, -005 and -004) with address 3801-3829 Martin Luther King, Jr. Way in Oakland, Alameda County, California 94609. The total site area is 0.49 acres. After demolition, RCD will construct a new, six-story building with 77 affordable apartments and 1,291 square feet of ground floor commercial/retail space. The unit mix will be 33 one-bedroom units, 19 two-bedroom units and 25 three-bedroom units for a total of 77 units. A total of 4,609 square feet of open space will be provided on site. A total of 39 parking spaces will be provided in the ground floor parking garage and include 50 long term bicycle parking spaces with 10% or minimum four short-term bicycle parking spaces.

Please contact me by phone or FAX at (707) 523-3710 or email ccrake@aemconsulting.net if you have any questions or need additional information. Thank you for your time and attention to this matter.

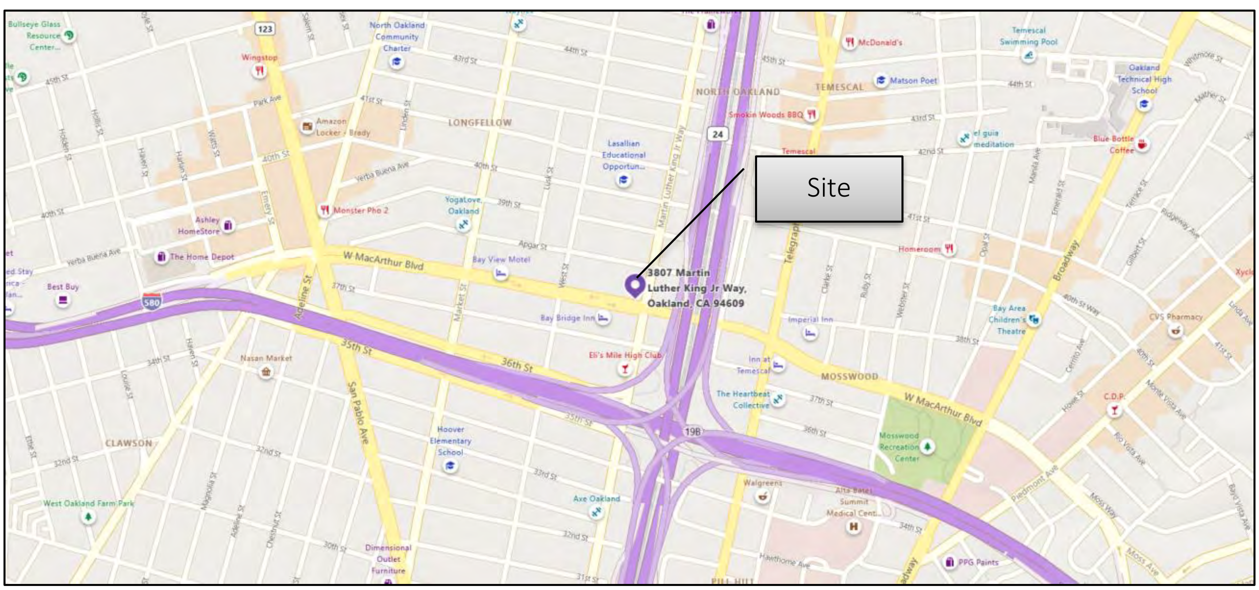
Sincerely,

Cinnamon Crake

Cinnamon Crake, Associate



MAP 1 REGION



MAP 2 DETAIL

MAP 3 U.S.G.S. MAP

FIGURE 1 AERIAL VIEW

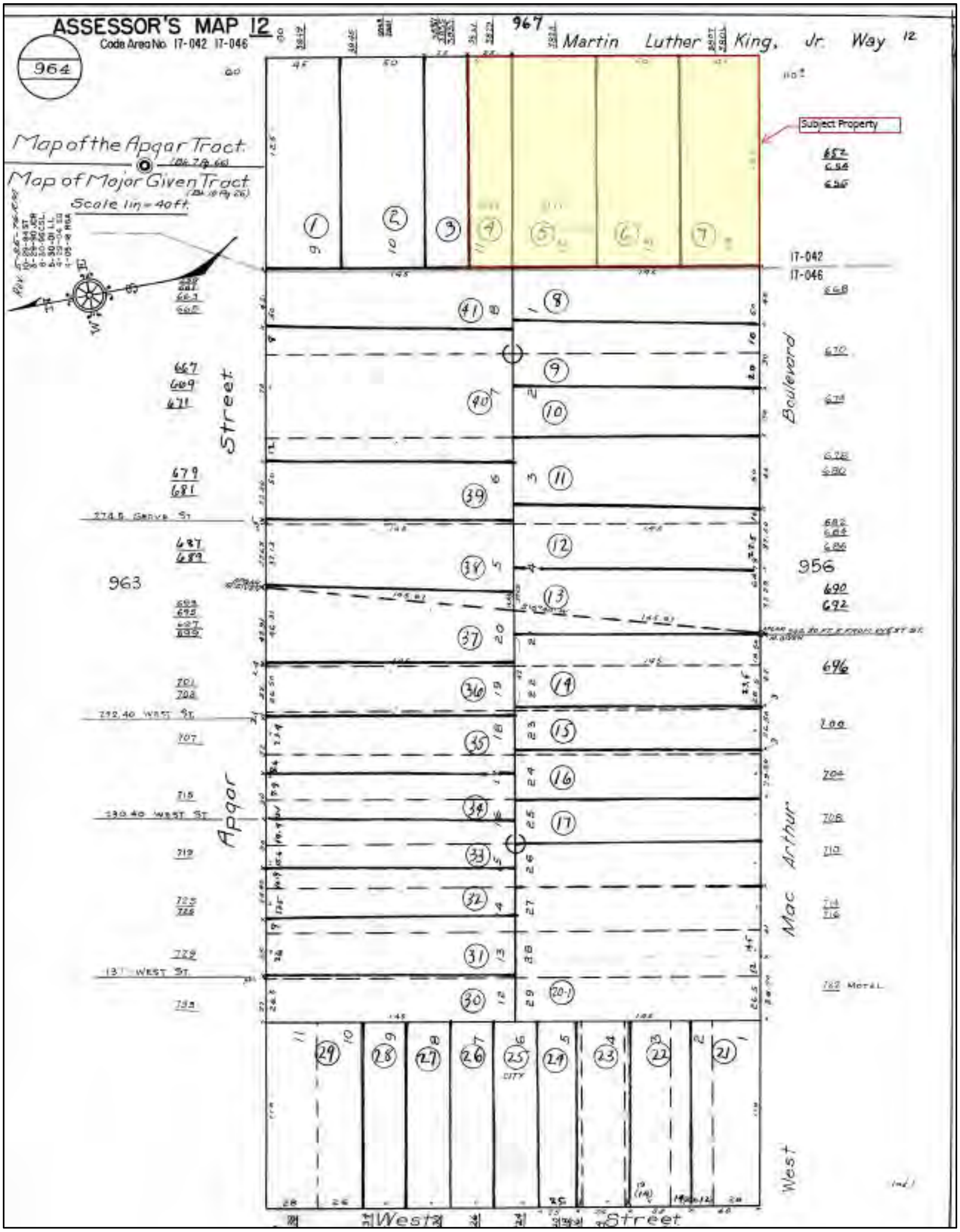


FIGURE 2 ASSESSOR PARCEL MAP

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov

July 24, 2019

Cinnamon Crake
AEM Consulting

VIA Email to: ccrake@aemconsulting.net

RE: **Longfellow Corner Affordable Housing Project**, City of Oakland; Oakland West USGS Quadrangle, Alameda County, California.

Dear Ms. Crake:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. The absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton

Gayle Totton, B.S., M.A., Ph.D.
Associate Governmental Program Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Alameda County
7/24/2019

Amah MutsunTribal Band	
Valentin Lopez, Chairperson	
P.O. Box 5272	Costanoan
Galt, CA, 95632	Northern Valley
Phone: (916) 743 - 5833	Yokut
vlopez@amahmutsun.org	
Amah MutsunTribal Band of Mission San Juan Bautista	
Irenne Zwierlein, Chairperson	
789 Canada Road	Costanoan
Woodside, CA, 94062	
Phone: (650) 851 - 7489	
Fax: (650) 332-1526	
amahmutsuntribal@gmail.com	
Indian Canyon Mutsun Band of Costanoan	
Ann Marie Sayers, Chairperson	
P.O. Box 28	Costanoan
Hollister, CA, 95024	
Phone: (831) 637 - 4238	
ams@indiancanyon.org	
Muwekma Ohlone Indian Tribe of the SF Bay Area	
Monica Arellano,	
20885 Redwood Road, Suite 232	Costanoan
Castro Valley, CA, 94546	
Phone: (408) 205 - 9714	
marellano@muwekma.org	
North Valley Yokuts Tribe	
Katherine Erolinda Perez, Chairperson	
P.O. Box 717	Costanoan
Linden, CA, 95236	Northern Valley
Phone: (209) 887 - 3415	Yokut
canutes@verizon.net	
The Ohlone Indian Tribe	
Andrew Galvan,	
P.O. Box 3388	Bay Miwok
Fremont, CA, 94539	Ohlone
Phone: (510) 882 - 0527	Patwin
Fax: (510) 687-9393	Plains Miwok
chochenyo@AOL.com	

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Longfellow Corner Affordable Housing Project, Alameda County.

CITY OF OAKLAND

250 FRANK H. OGAWA PLAZA, SUITE 3315 • OAKLAND, CALIFORNIA 94612-2032

Department of Planning and Building
Bureau of Planning

(510) 238-3941
FAX (510) 238-6538
TDD (510) 839-6451

July 19, 2019

Chairperson Silvia Burley
California Valley Miwok Tribe
4620 Shippee Lane
Stockton, CA 95212-9231

Re: Longfellow Corner, 3801-3829 Martin Luther King, Jr. Way, Oakland, Alameda County, California 94609 – U.S. HUD Funds – Project-Based Section 8 Vouchers

Dear Chairperson Burley,

The Oakland Housing Authority is considering funding the project listed above with federal funds from the U.S. Department of Housing and Urban Development (HUD) as administered by the Oakland Housing Authority. Under regulation 24 CFR 58.4, the City has assumed HUD's environmental review responsibilities for the project, including tribal consultation related to historic properties, on behalf of HUD. Historic properties include archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural places and landscapes, plant and animal communities, and buildings and structures with significant tribal association.

The City will conduct a review of this project to comply with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR Part 800. We would like to invite you to be a consulting party in this review to help identify historic properties in the project area that may have religious and cultural significance to your tribe, and if such properties exist, to help assess how the project might affect them. If the project might have an adverse effect, we would like to discuss possible ways to avoid, minimize or mitigate potential adverse effects.

To meet project timeframes, if you would like to be a consulting party on this project, can you please let us know of your interest within 30 days? If you have any initial concerns with impacts of the project on religious or cultural properties, can you please note them in your response?

Enclosed are maps showing the project area. Resources for Community Development (RCD) proposes to acquire and develop the Longfellow Corner affordable housing project on four contiguous parcels (APNs 012-0964-007, -006, -005 and -004) with address 3801-3829 Martin Luther King, Jr. Way in Oakland, Alameda County, California 94609. The total site area is 0.49 acres. RCD proposes to construct a new, six-story building with 77 affordable apartments and 1,291 square feet of ground floor commercial/retail space. The unit mix will be 33 one-bedroom units, 19 two-bedroom units and 25 three-bedroom units for a total of 77 units. A total of 4,609 square feet of open space will be provided on site. A total of 39 parking spaces will be provided in the ground floor parking garage and include 50 long term bicycle parking spaces with 10% or minimum four short-term bicycle parking spaces.

More information on the Section 106 review process is available at http://www.onecpd.info/environmental-review/historic-preservation/ . HUD's process for tribal consultation under Section 106 is described in a Notice available at https://www.onecpd.info/resource/2448/notice-cpd-12-006-tribal-consultation-under-24-cfr-part-58.

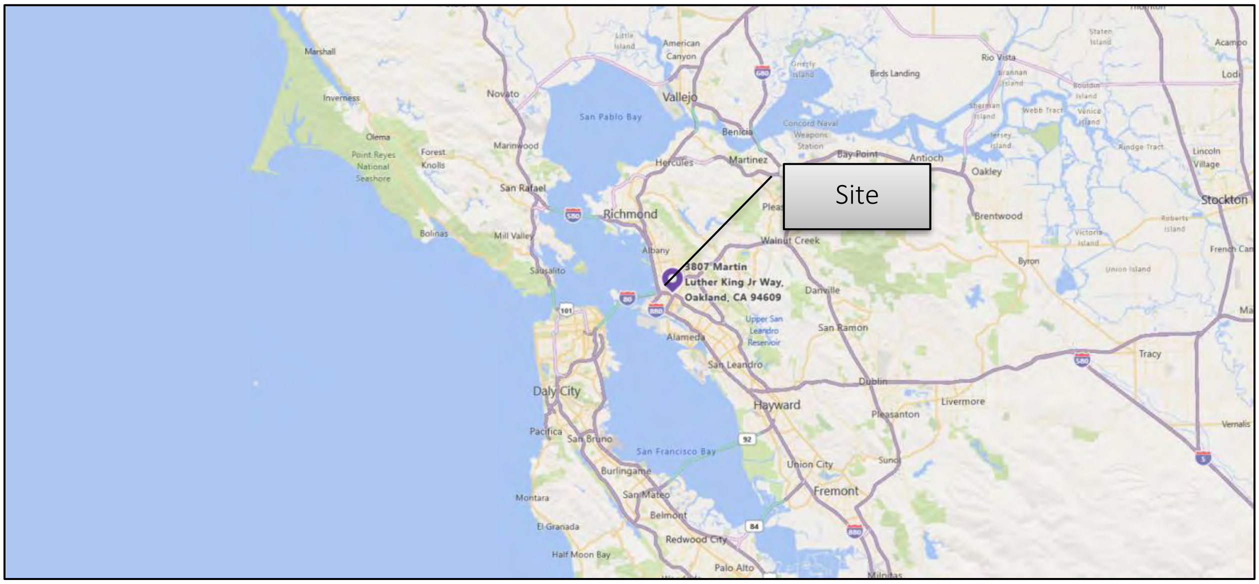
If you do not wish to consult on this project, can you please inform us? If you do wish to consult, can you please include in your reply the name and contact information for the tribe's principal representative in the consultation? Thank you very much. We value your assistance and look forward to consulting further if there are historic properties of religious and cultural significance to your tribe that may be affected by this project.

Sincerely,

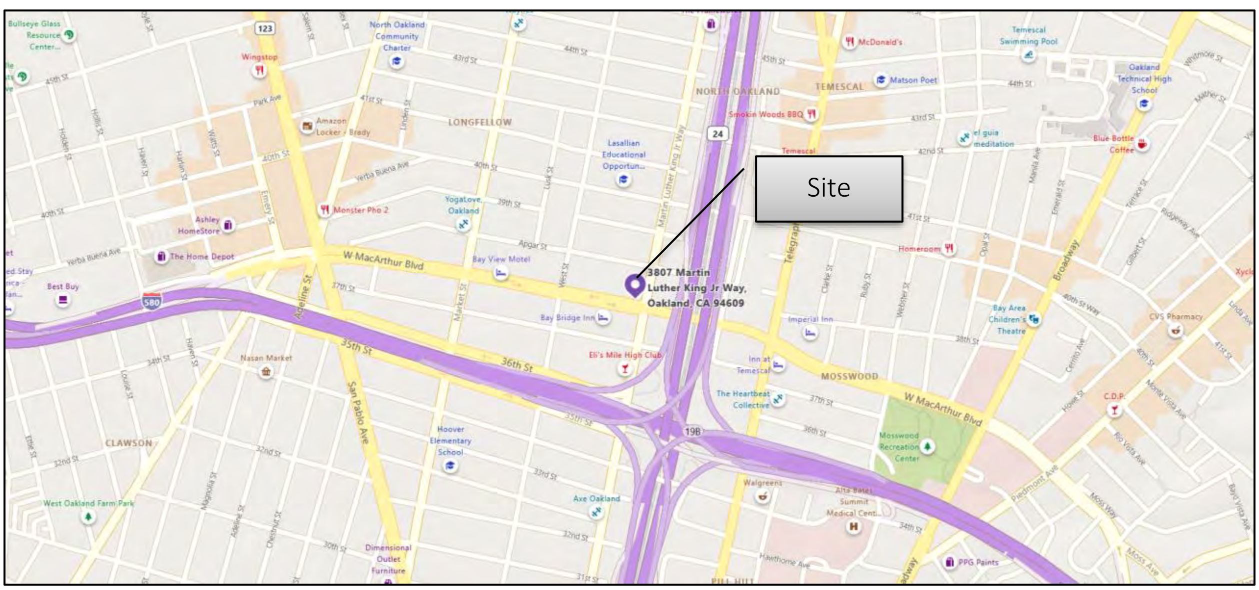
Betty Marvin

Betty Marvin
Historic Preservation Planner
(510) 238-6879
bmarvin@oaklandca.gov

enclosures



MAP 1 REGION



MAP 2 DETAIL

MAP 3 U.S.G.S. MAP

FIGURE 1 AERIAL VIEW

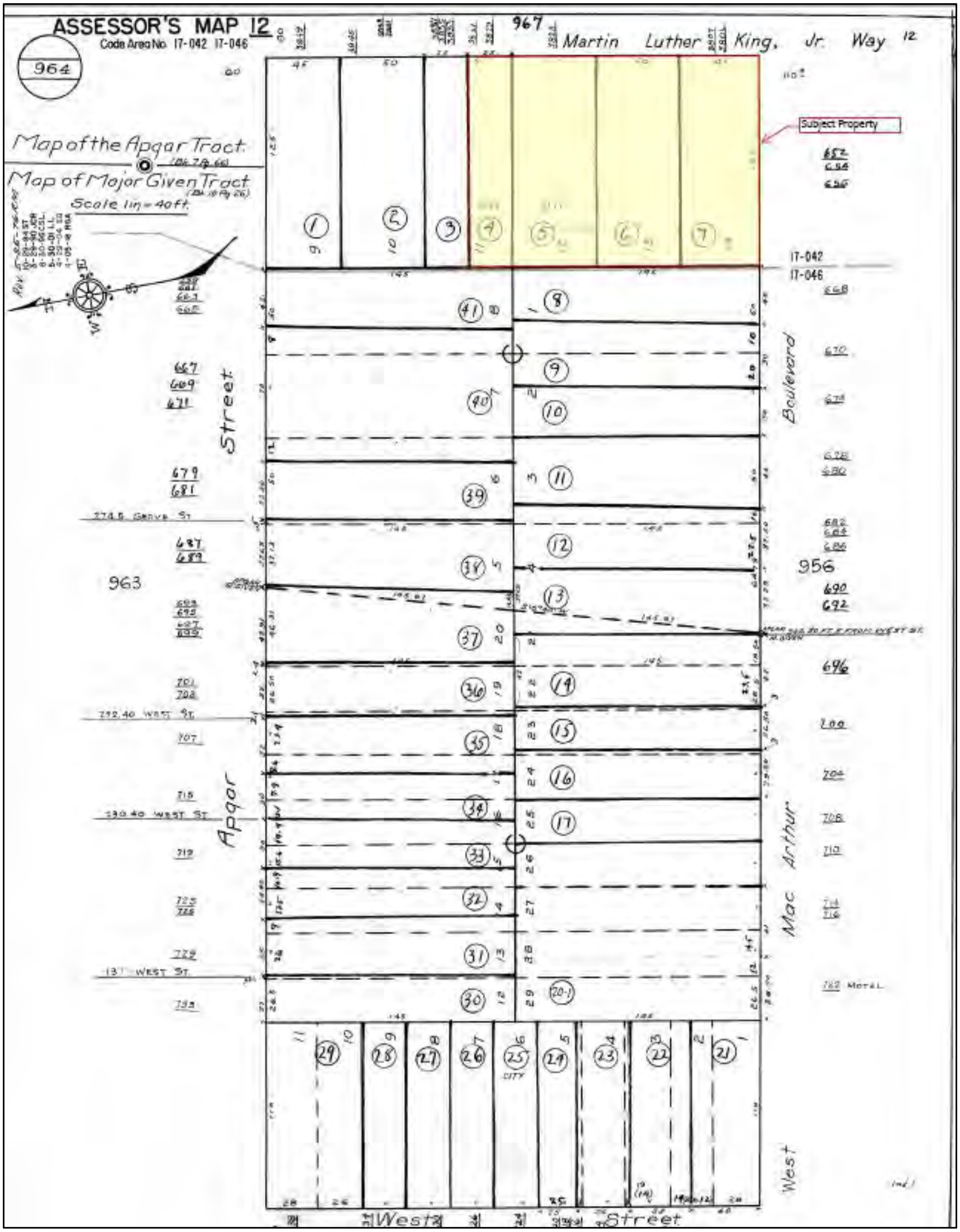


FIGURE 2 ASSESSOR PARCEL MAP

Export To Excel Print the Current Page

Contact Information for Tribes with Interests in Alameda County, California

Tribal Name	County Name
California Valley Miwok Tribe, California	Alameda

Contact Name	Title	Mailing Address	Work Phone	Fax Number	Cell Phone	Email Address	URL
Silvia Burley	Chairperson	4620 Shippee Lane Stockton, CA 95212-9231	(209) 931-4567	(209) 931-4333		office@cvmt.net	www.californiavalleymiwoktribe-nsn.gov

1 - 1 of 1 results « ‹ 1 › » 10

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Appendix G – Noise

- **Gilchrist, William.** *Special Environmental Clearance and Waiver of EIS for Longfellow Corner, 3801-3829 Martin Luther King, Jr. Way, Oakland, California.* s.l. : City of Oakland, September 2020.
- **Illingworth & Rodkin, Inc.** *3801 Martin Luther King Jr. Way Housing Project - NEPA Noise Assessment.* Cotati, CA : s.n., August 8, 2019. Project: 19-118.
- **TJKM Transportation Consultants.** *Trip Generation Study for Proposed Affordable Family Housing development at 3801 Martin Luther King Junior Way in Oakland,CA.* Pleasanton, CA : s.n., July 17, 2019.

MEMORANDUM

TO: Whom it May Concern

FROM: William Gilchrist, Director of Planning and Building
City of Oakland

DATE: September 2020

RE: *Special Environmental Clearance and Waiver of EIS for Longfellow Corner, 3801-3829 Martin Luther King, Jr. Way, Oakland, California*

This Environmental Assessment contains a Noise Assessment prepared per HUD guidelines for new construction of housing at the above-named address. Based upon this Assessment, the proposed site is impacted by external future noise that has a rating of up to **75 dBA DNL** which is "Unacceptable" per HUD Guidelines. Common outdoor space will be shielded by the building and calculated to be up to 64 dBA DNL. No mitigation for common outdoor space noise is required.

Under authority granted to me under 24 CFR Part 51, Section 51.104 (b)(1) and in order to provide a relatively noise free environment for the proposed project's residents, I am requiring the following noise mitigations be included in the final project:

1. Follow all recommended minimum STC ratings for window and wall components as set forth in the attached FIGURE 2 and FIGURE 3 and FIGURE 19.
2. To maintain a habitable interior environment, all units should be mechanically ventilated so that windows and doors can be kept closed at the occupant's discretion to control noise intrusion indoors.

Under my authority as Certifying Officer and Environmental Clearance Officer, per 24 CFR Section 51.104(b)(1), I am waiving the requirement to prepare an EIS for the project as it has been demonstrated to me that the noise exposure of the proposed living areas on site can be adequately mitigated, and no other issues or statutes were found to be of concern in the Environmental Assessment which would merit preparation of an EIS.

09/21/2020

William Gilchrist, Director of Planning and Building and NEPA Certifying Officer   Date

FIGURE 2 Preliminary Recommendations for Noise Insulation – MLK Jr. Way MacArthur Boulevard Elevations

FIGURE 3 Preliminary Recommendations for Noise Insulation – North and East Elevations

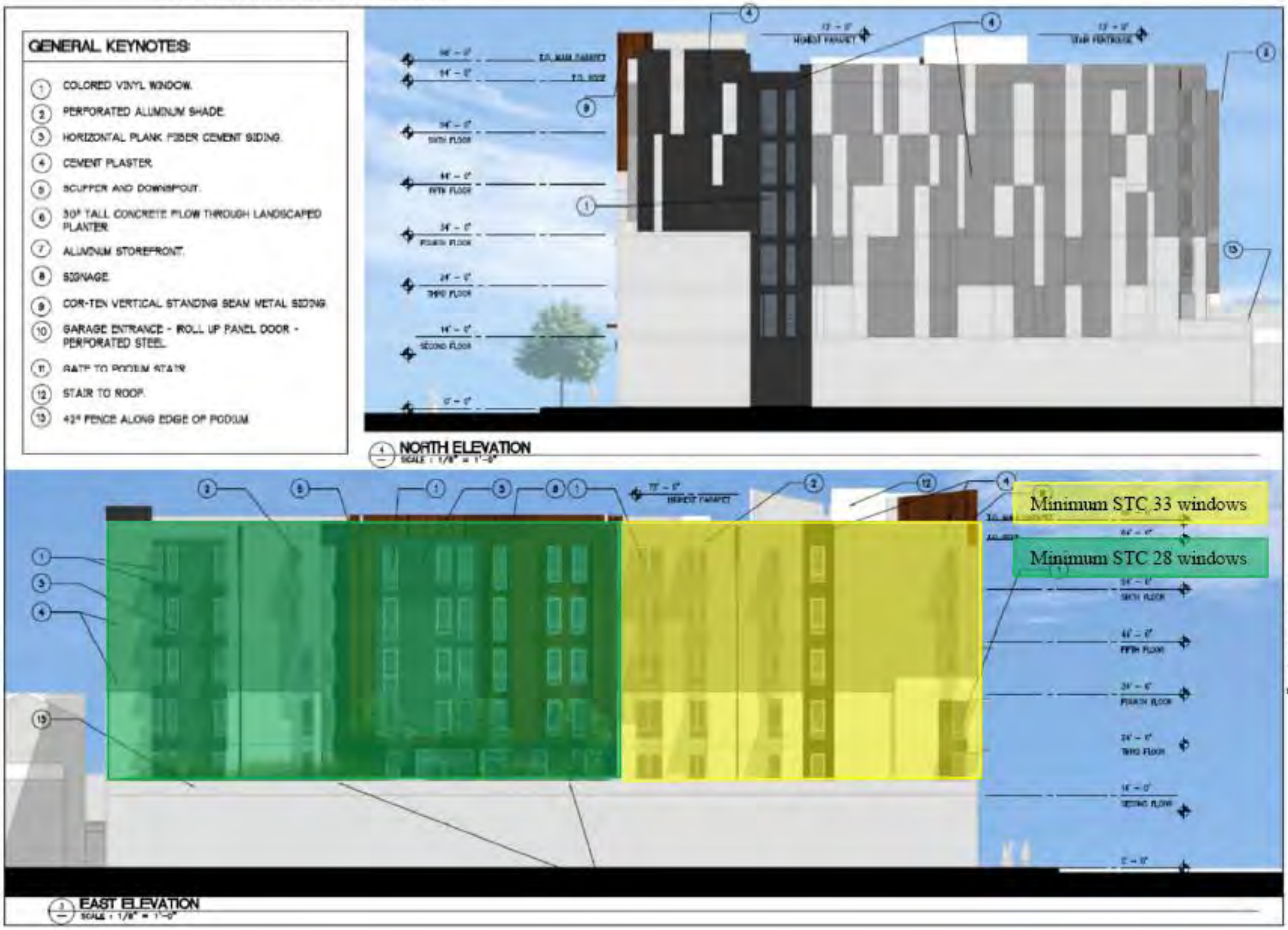


Figure 19 HUD Figure 19

Figure 19
Description of Noise Attenuation Measures
(Acoustical Construction)

Part I

Project Name: 3801 MLK Jr. Way, 1-Bedroom Unit, Living Room (Worst-Case Noise Exposure)

Location: Oakland, California

Sponsor/Developer: Resources for Community Development

Noise Level (From NAG): 76 dBA DNL Attenuation Required: 35 dBA
Primary Noise Source(s): W. MacArthur Boulevard, Martin Luther King Jr. Way

Part II

1. For wall(s) facing and parallel to the noise source(s) (or closest to parallel:
   a. Description of wall construction*: Stucco exterior siding, insulated wood stud, and gypsum board interior
   b. STC rating for wall (rated for no windows or doors): STC 46
   c. Description of windows: Vinyl, dual-pane
   d. STC rating for window type: STC 36
   e. Description of doors: Vinyl, dual-pane
   f. STC rating for doors: NA
   g. Percentage of wall (per wall, per dwelling unit) composed of windows: 76% and doors: 0%
   h. Combined STC rating for wall component: 35 dBA

2. For walls perpendicular to noise source(s):
   a. Description of wall construction*: N/A
   b. STC rating for wall (rated for no windows or doors): N/A
   c. Description of windows: N/A
   d. STC rating for window type: N/A
   e. Description of doors: N/A
   f. STC rating for doors: NA
   g. Percentage of wall (per wall, per dwelling unit) composed of windows: N/A
   h. Combined STC rating for wall component: N/A

3. Roofing component (if overhead attenuation is required to aircraft noise):
   a. Description of roof construction: N/A
   b. STC rating (rated as if no skylights or other openings): N/A
   c. Description of skylights or overhead windows: N/A
   d. STC rating for skylights or overhead windows: N/A
   e. Percentage of roof composed of skylights or windows (per dwelling unit): N/A
   f. Percentage of roof composed of large uncapped openings such as chimneys: N/A
   g. Combined STC rating for roof component: N/A

4. Description of type of mechanical ventilation provided: Satisfactory forced air mechanical ventilation system.

3801 MARTIN LUTHER KING JR. WAY HOUSING PROJECT NEPA NOISE ASSESSMENT

Oakland, California

August 8, 2019

Prepared for:

Cinnamon Crake
AEM Consulting
422 Larkfield Center #104
Santa Rosa, CA 95403

Alexandra Arjo
Resources for Community Development
2220 Oxford Street
Berkeley, CA 94704

Prepared by:

Cameron Heyvaert
Michael S. Thill

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
429 E. Cotati Avenue
Cotati, CA 94931
(707) 794-0400

Project: 19-118

INTRODUCTION

This report presents the results of the noise assessment completed for the mixed-use residential housing project proposed at 3801 Martin Luther King Jr. Way in Oakland, California. The proposed project would allow for the development of a six-story mixed use development, including 77 housing units, 2,052 square feet of ground-floor commercial use, and 39 parking spaces.

The project's potential to result in adverse effects with respect to applicable National Environmental Policy Act (NEPA) guidelines is assessed in this report. The report is divided into two sections. The Setting Section provides a brief description of the fundamentals of environmental noise, summarizes applicable regulatory criteria, and discusses the results of the ambient noise monitoring survey completed to document existing noise conditions. The NEPA Noise Assessment Section evaluates noise effects resulting from the project. Noise insulation is recommended to avoid the potential for adverse effects on the interiors of proposed residential units.

SETTING

Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (*frequency*) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A *decibel (dB)* is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level (dBA).* This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

This *energy-equivalent sound/noise* descriptor is called L_{eq}. The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the *sound level meter*. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level (CNEL*) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The *Day/Night Average Sound Level* (L_{dn} or *DNL)* is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

Effects of Noise

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA DNL. Typically, the highest steady traffic noise level during the daytime is about equal to the DNL and nighttime levels are 10 dB lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12 to 17 dB with open windows. With standard construction and closed windows in good condition, the noise attenuation factor is around 20 dB for an older structure and 25 dB for a newer dwelling. Sleep and speech interference is therefore of concern when exterior noise levels are about 57 to 62 dBA DNL with open windows and 65 to 70 dBA DNL if the windows are closed. Levels of 55 to 60 dBA are common along collector streets and secondary arterials, while 65 to 70 dBA is a typical value for a primary/major arterial. Levels of 75 to 80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed, those facing major roadways and freeways typically need special glass windows.

TABLE 1 Definition of Acoustical Terms Used in this Report

Term	Definition
Decibel, dB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
L_{max}, L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	
		Broadcast/recording studio
	10 dBA	
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

Regulatory Background

The U.S. Department of Housing and Urban Development (HUD) environmental noise regulations are set forth in 24CFR Part 51B (Code of Federal Regulations). The following exterior noise standards for new housing construction would be applicable to this project:

- 65 dBA DNL or less – acceptable.

- Exceeding 65 dBA DNL but not exceeding 75 dBA DNL – normally unacceptable (appropriate sound attenuation measures must provide an additional 5 decibels of attenuation over that typically provided by standard construction in the 65 dBA DNL to 70 dBA DNL zone; 10 decibels additional attenuation in the 70 dBA DNL to 75 dBA DNL zone).

- Exceeding 75 dBA DNL – unacceptable.

These noise standards also apply, "… at a location 2 meters from the building housing noise sensitive activities in the direction of the predominant noise source…" and "…at other locations where it is determined that quiet outdoor space is required in an area ancillary to the principal use on the site."

A goal of 45 dBA DNL is set forth for interior noise levels and attenuation requirements are geared toward achieving that goal. It is assumed that with standard construction any building will provide sufficient attenuation to achieve an interior level of 45 dBA DNL or less if the exterior level is 65 dBA DNL or less. Where exterior noise levels range from 65 dBA DNL to 70 dBA DNL, the project must provide a minimum of 25 decibels of attenuation, and a minimum of 30 decibels of attenuation is required in the 70 dBA DNL to 75 dBA DNL zone. Where exterior noise levels range from 75 dBA DNL to 80 dBA DNL, the project must provide a minimum of 35 decibels of attenuation to achieve an interior level of 45 dBA DNL or less.

Existing Noise Environment

The project site is located north of the Interstate 580 / State Route 24 interchange in Oakland, California. The site's southernmost boundary is formed by W. MacArthur Boulevard, and Martin Luther King Jr. Way forms the site's easternmost boundary.

A noise monitoring survey was made to quantify existing ambient noise levels at the project site between Wednesday, July 10, 2019 and Friday, July 12, 2019. The noise monitoring survey included two long-term noise measurements (LT-1 and LT-2) and two short-term measurements (ST-1 and ST-2), as shown in Figure 1. The results of the noise measurements indicated that vehicle traffic along W. MacArthur Boulevard and Martin Luther King Jr. Way are the predominant sources of environmental noise at the site, and that traffic along Interstate 580 and State Route 24 contribute to the background noise environment at the site.

Long-term noise measurement LT-1 was located just southwest of the site in front of a residence at 663 W. MacArthur Boulevard, and placed approximately 45 feet south of the centerline of W. MacArthur Boulevard. A review of the noise data collected at LT-1 showed that hourly average noise levels typically ranged from 62 to 70 dBA L_{eq} during the day and from 57 to 67 dBA L_{eq} at night. The calculated day-night average noise level at this location was 72 dBA DNL on Thursday, July 10, 2019. The daily trend in noise levels at LT-1 is shown in Appendix A.

Long-term noise measurement LT-2 was located approximately 35 feet east of the Martin Luther King Jr. Way centerline, just northeast of the project site in front of a residence at 3848 Martin Luther King Jr. Way. Hourly average noise levels at LT-2 were similar to the hourly average noise levels documented at LT-1, and typically ranged from 65 to 70 dBA L_{eq} during the day and from 58 to 68 dBA L_{eq} at night. The calculated day-night average noise level at this location was 71 dBA DNL on Thursday, July 10, 2019. The daily trend in noise levels at LT-2 is shown in Appendix A.

Two short-term noise measurements were made to complete the project's noise monitoring survey. Measurements at each short-term site were made at elevations of 5 feet and 24 feet above the ground. Short-term noise measurement ST-1 was made along the west boundary of the site, approximately 150 feet west of the centerline of Martin Luther King Jr. Way, and approximately 145 feet north of the centerline of W. MacArthur Boulevard. The estimated DNL at this site was 63 dBA at the 5-foot elevation (ground level) and 67 dBA DNL at the 24-foot elevation (second- to third-level). Short-term noise measurement ST-2 was made along the eastern site boundary, approximately 35 feet west of the centerline of Martin Luther King Jr. Way, and approximately 165 feet north of the centerline of W. MacArthur Boulevard. The estimated DNL at this site was 68 dBA at the 5-foot elevation (ground level) and 72 dBA DNL at the 24-foot elevation (second- to third-level). Table 3 summarizes the data collected at the short-term measurement locations.

FIGURE 1 Aerial Image Showing Site and Noise Monitoring Locations

Source: Google Earth, 2019.

TABLE 3 Summary of Short-Term Noise Measurement Data

Noise Measurement Location	L_{max}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	L_{eq}	DNL
ST-1a: 5-feet above the ground. (7/10/19, 1:30 - 1:40 p.m.)	72	68	59	57	55	58	63
ST-1b: 24-feet above the ground. (7/10/19, 1:30 - 1:40 p.m.)	77	70	63	61	59	62	67
ST-2a: 5-feet above the ground. (7/12/19, 11:50 a.m. - 12:00 p.m.)	70	68	64	61	59	62	68
ST-2b: 24-feet above the ground. (7/12/19, 11:50 a.m. - 12:00 p.m.)	73	71	67	66	64	66	72

Note: DNL approximated by correlating to corresponding period at long-term site.

NEPA NOISE ASSESSMENT

Significance Criteria

An adverse effect would result if noise levels at the project site would exceed HUD Guidelines for acceptability. Exterior noise levels exceeding 65 dBA DNL or interior noise levels exceeding 45 dBA DNL would exceed HUD's noise compatibility criteria.

Future Exterior Noise Environment

The future noise environment at the project site would continue to result primarily from vehicular traffic along Martin Luther King Jr. Way, W. MacArthur Boulevard, and distant traffic along State Route 24 and Interstate 580. Trains passing by on BART tracks to the east of the project site would be audible occasionally, but do not significantly contribute to the noise environment above ambient noise levels.

Pursuant to the HUD Guidelines, the noise exposure at least 10 years in the future must be considered in addition to the existing noise exposure. The future exterior noise environment at the project site was calculated by adjusting the measured noise data to account for future traffic conditions anticipated by 2030. The future traffic noise level increase was estimated based a review of data contained in the City of Oakland's Noise Element Update[1]. From these data, traffic noise levels on the surrounding roadways are anticipated to measurably increase by 1 dBA by the year 2025. For projections beyond 2025, the same traffic rates were applied, and traffic noise levels from the surrounding roadways are anticipated to increase by up to 1 dBA by 2035. Based on a review of the project's trip generation[2] study, the project is not anticipated to increase noise levels on the surrounding roadways. Therefore, future exterior noise levels at the proposed setback of the eastern façade from Martin Luther King Junior Way, are calculated to range from 71 dBA DNL at ground level (assuming a receptor height of 5 feet) to 75 dBA DNL at a height of 25 feet and above. Future exterior noise levels at the proposed setback of the southern façade from W. MacArthur Boulevard are calculated to range from 72 dBA DNL at ground level to 76 dBA DNL at a height of 25 feet and above.

Proposed outdoor activity areas would include a courtyard along the western portion of the building, on the second floor (podium level). The courtyard is surrounded by the proposed building to the north, east, and south, and includes a play structure, dining and seating areas, and built-in barbecue appliances. Receptors utilizing the podium courtyard would be shielded from traffic noise by the building itself, and future noise levels are calculated to be less than 65 dBA DNL when accounting for the acoustical attenuation provided by the intervening structure. Exterior noise levels at these proposed common use areas would meet HUD's "acceptable" threshold for at outdoor spaces (65 dBA DNL or less). No additional noise controls would be required to achieve HUD's "acceptable" threshold.

---

1 Illingworth & Rodkin, Inc., "City of Oakland Noise Element Update Environmental Noise Background Report", December 16, 2004.

2 Amin, N., "Trip Generation Study for Proposed Affordable Family Housing development at 3801 Martin Luther King Junior Way in Oakland, CA," July 17, 2019.

Future Interior Noise Environment

The HUD requirement for interior noise levels is 45 dBA DNL or less for residential land uses. Unit plans and elevations dated from July 16, 2019, were reviewed and calculations were made to quantify the transmission loss provided by the proposed building elements and to estimate interior noise levels resulting from exterior noise sources. The relative areas of the building elements (walls, windows, and doors) were then input into an acoustical model to calculate interior noise levels within individual rooms.

Proposed residential units adjacent to W. MacArthur Boulevard would be exposed to future exterior noise levels of up to 76 dBA DNL and residential units adjacent to Martin Luther King Jr. Way would be exposed to future exterior noise levels of up to 75 dBA DNL. The predicted exterior noise level would exceed HUD's "acceptable" threshold of 65 dBA DNL by up to 11 dBA DNL.

The results of the calculations showed that windows of residential units adjacent to W. MacArthur Boulevard and Martin Luther King Jr. Way should have minimum Sound Transmission Class ratings of STC 36. This would achieve an outdoor-to-indoor composite noise reduction ranging from 35 to 39 dBA and would maintain interior noise levels below 45 dBA DNL with an adequate margin of safety. Exterior noise levels at the westernmost and northernmost building façades would range from 65 to 72 dBA DNL. A standard stucco exterior wall and STC 28 to 33 windows/doors would maintain interior noise levels below 45 dBA DNL with an adequate margin of safety. Figures 2 and 3 summarize the above noise control recommendations. HUD Figure 19, located at the end of this report, provides a summary example of the inputs used to complete the calculations of interior noise levels at residential units with the future worst-case noise exposure.

To maintain a habitable interior environment, all units should be mechanically ventilated so that windows and doors can be kept closed at the occupant's discretion to control noise intrusion indoors.

FIGURE 2 Preliminary Recommendations for Noise Insulation – MLK Jr. Way MacArthur Boulevard Elevations

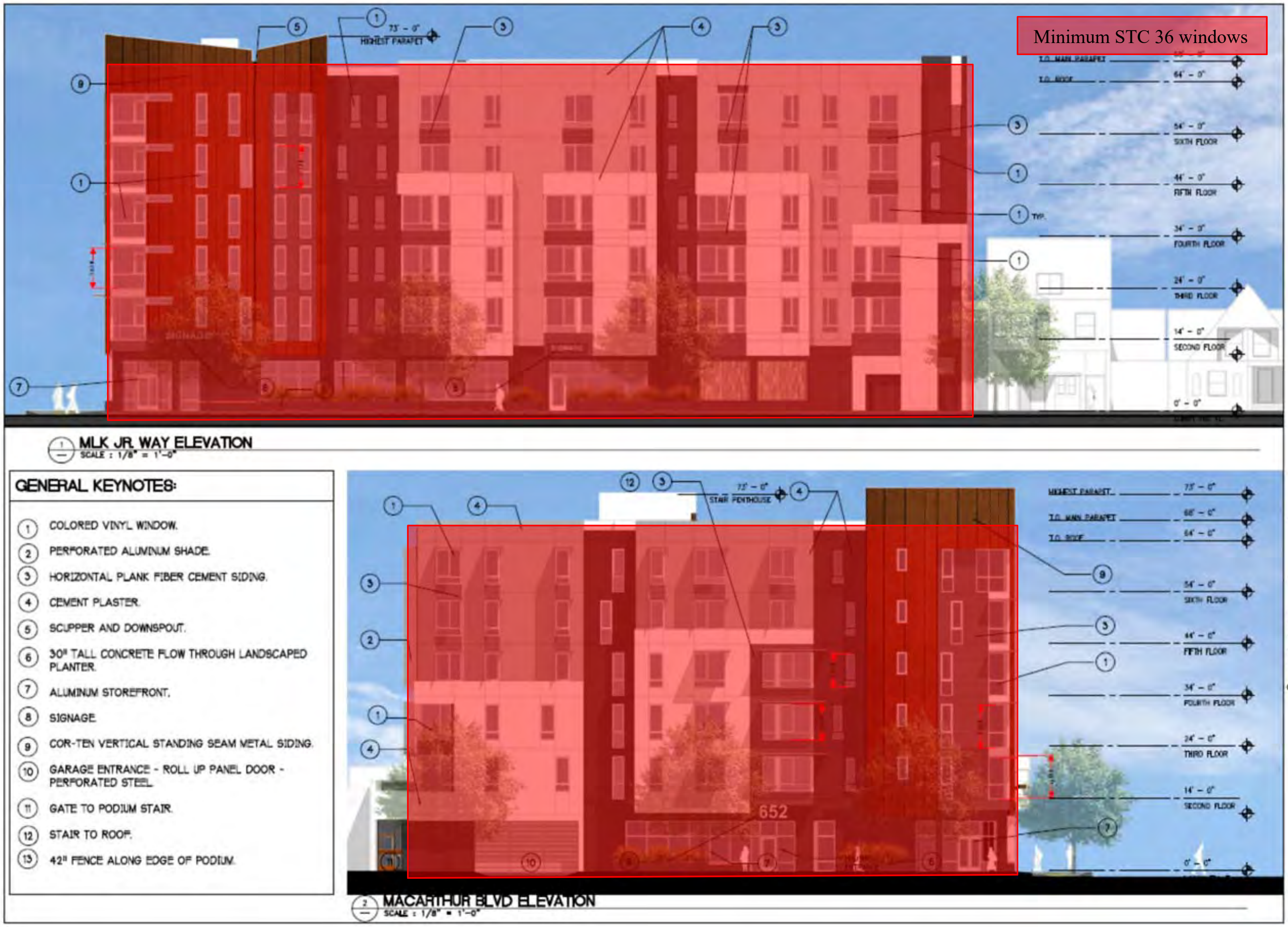


FIGURE 3 Preliminary Recommendations for Noise Insulation – North and East Elevations

Figure 19 HUD Figure 19

Figure 19
Description of Noise Attenuation Measures
(Acoustical Construction)

Part I

Project Name: 3801 MLK Jr. Way, 1-Bedroom Unit, Living Room (Worst-Case Noise Exposure)

Location: Oakland, California

Sponsor/Developer: Resources for Community Development

Noise Level (From NAG): 76 dBA DNL Attenuation Required: 35 dBA
Primary Noise Source(s): W. MacArthur Boulevard, Martin Luther King Jr. Way

Part II

1. For wall(s) facing and parallel to the noise source(s) (or closest to parallel:
   - a. Description of wall construction*: Stucco exterior siding, insulated wood stud, and gypsum board interior
   - b. STC rating for wall (rated for no windows or doors): STC 46
   - c. Description of windows: Vinyl, dual-pane
   - d. STC rating for window type: STC 36
   - e. Description of doors: Vinyl, dual-pane
   - f. STC rating for doors: NA
   - g. Percentage of wall (per wall, per dwelling unit) composed of windows: 76% and doors: 0%
   - h. Combined STC rating for wall component: 35 dBA

2. For walls perpendicular to noise source(s):
   - a. Description of wall construction*: N/A
   - b. STC rating for wall (rated for no windows or doors): N/A
   - c. Description of windows: N/A
   - d. STC rating for window type: N/A
   - e. Description of doors: N/A
   - f. STC rating for doors: NA
   - g. Percentage of wall (per wall, per dwelling unit) composed of windows: N/A
   - h. Combined STC rating for wall component: N/A

3. Roofing component (if overhead attenuation is required to aircraft noise):
   - a. Description of roof construction: N/A
   - b. STC rating (rated as if no skylights or other openings): N/A
   - c. Description of skylights or overhead windows: N/A
   - d. STC rating for skylights or overhead windows: N/A
   - e. Percentage of roof composed of skylights or windows (per dwelling unit): N/A
   - f. Percentage of roof composed of large uncapped openings such as chimneys: N/A
   - g. Combined STC rating for roof component: N/A

4. Description of type of mechanical ventilation provided: Satisfactory forced air mechanical ventilation system.

Appendix A

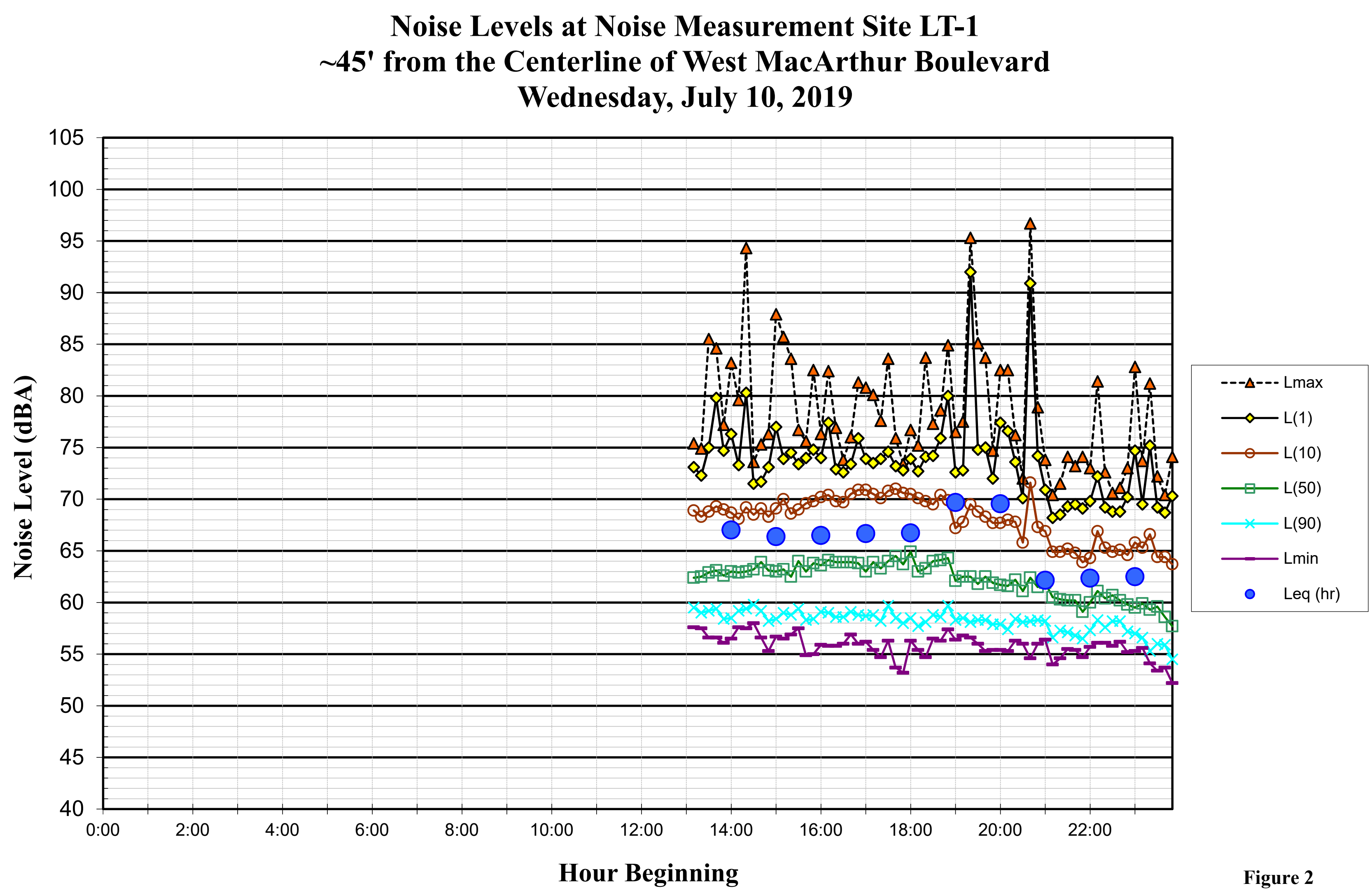
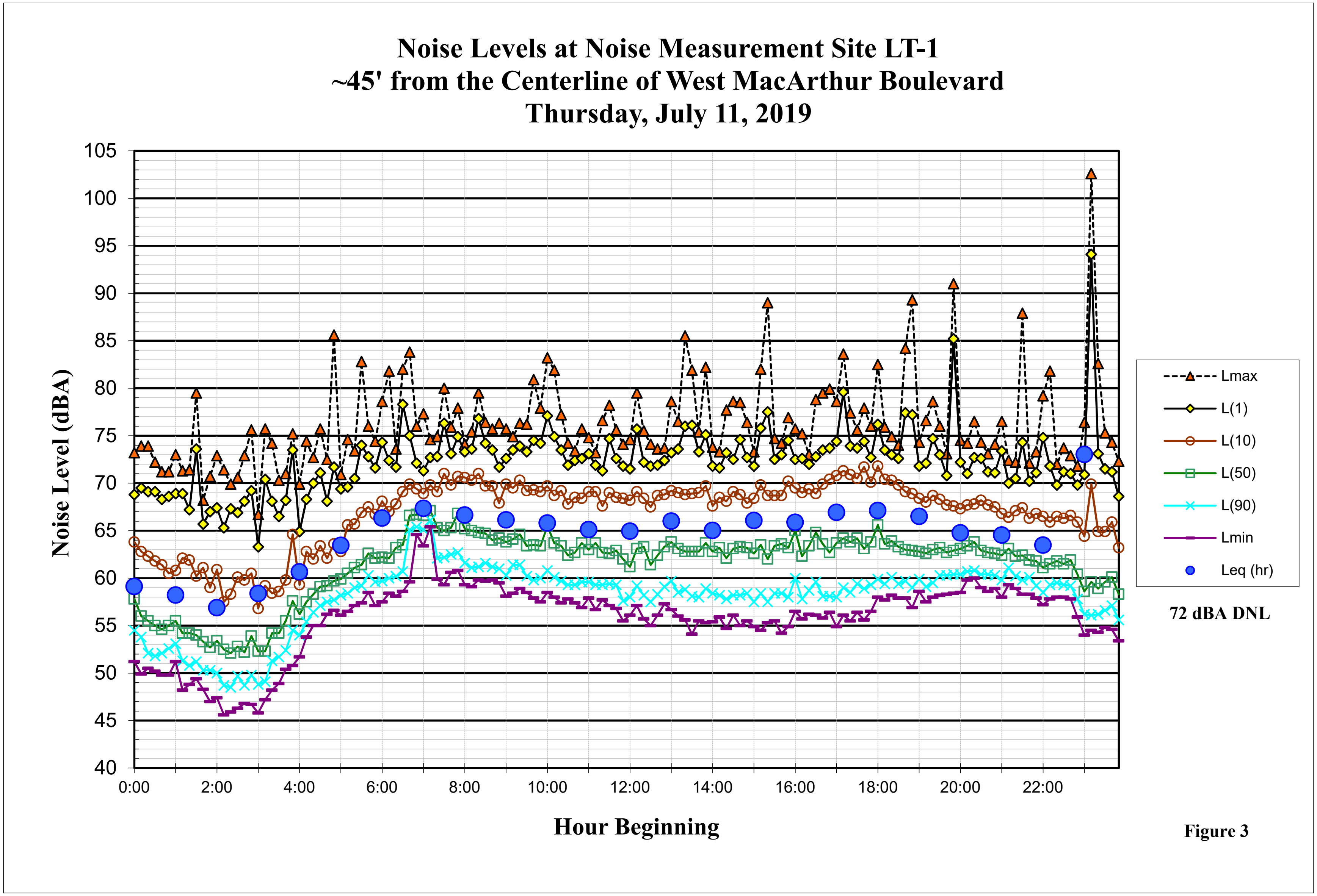
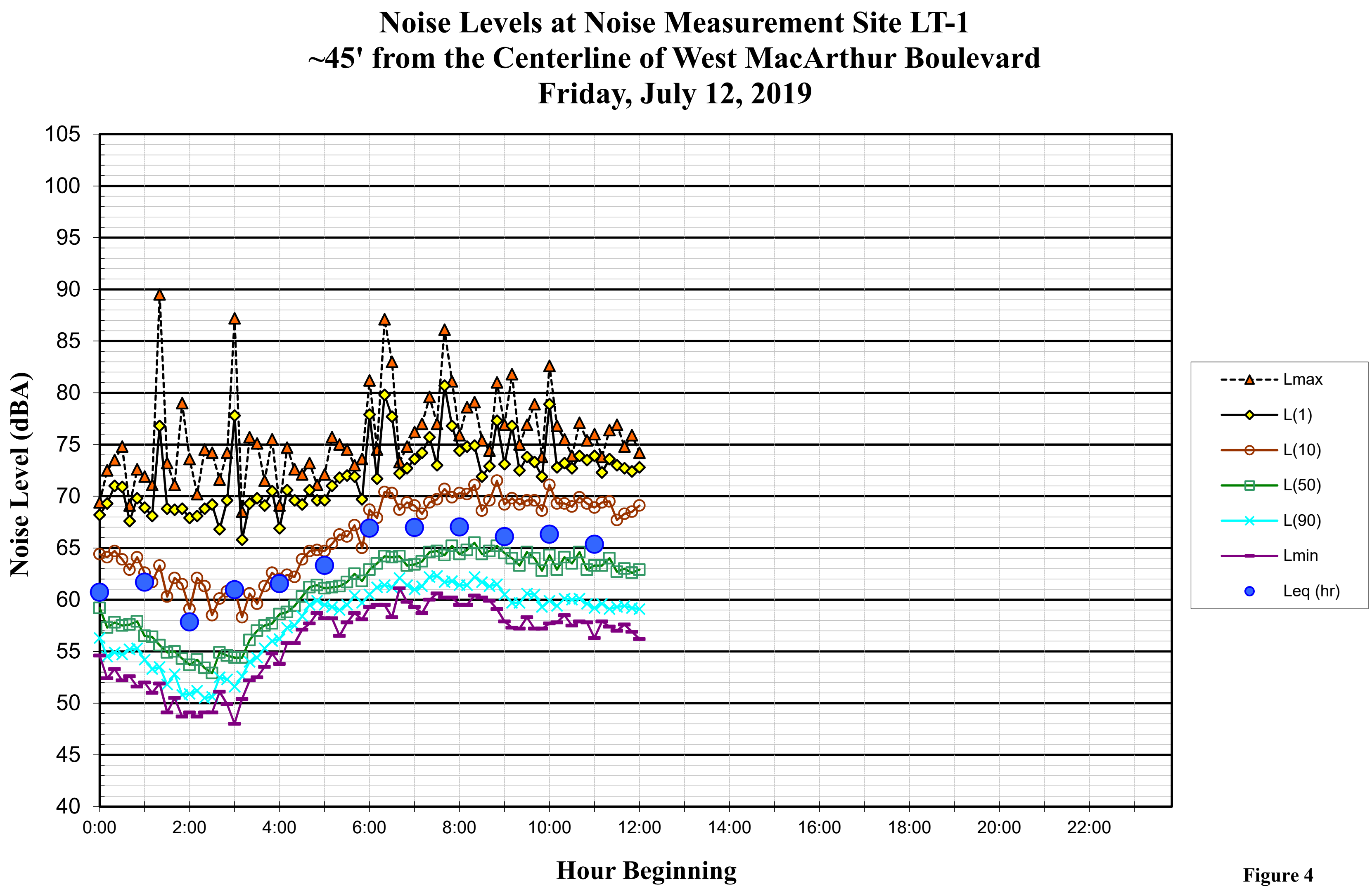

Noise Levels at Noise Measurement Site LT-1
~45' from the Centerline of West MacArthur Boulevard
Wednesday, July 10, 2019
Noise Level (dBA)
105
100
95
90
85
80
75
70
65
60
55
50
45
40
0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
Hour Beginning
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
Leq (hr)

Figure 2



Noise Levels at Noise Measurement Site LT-1
~45' from the Centerline of West MacArthur Boulevard
Thursday, July 11, 2019
Noise Level (dBA)
105
100
95
90
85
80
75
70
65
60
55
50
45
40
0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
Hour Beginning
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
Leq (hr)
72 dBA DNL

Figure 3



Noise Levels at Noise Measurement Site LT-1
~45' from the Centerline of West MacArthur Boulevard
Friday, July 12, 2019
Noise Level (dBA)
105
100
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90
85
80
75
70
65
60
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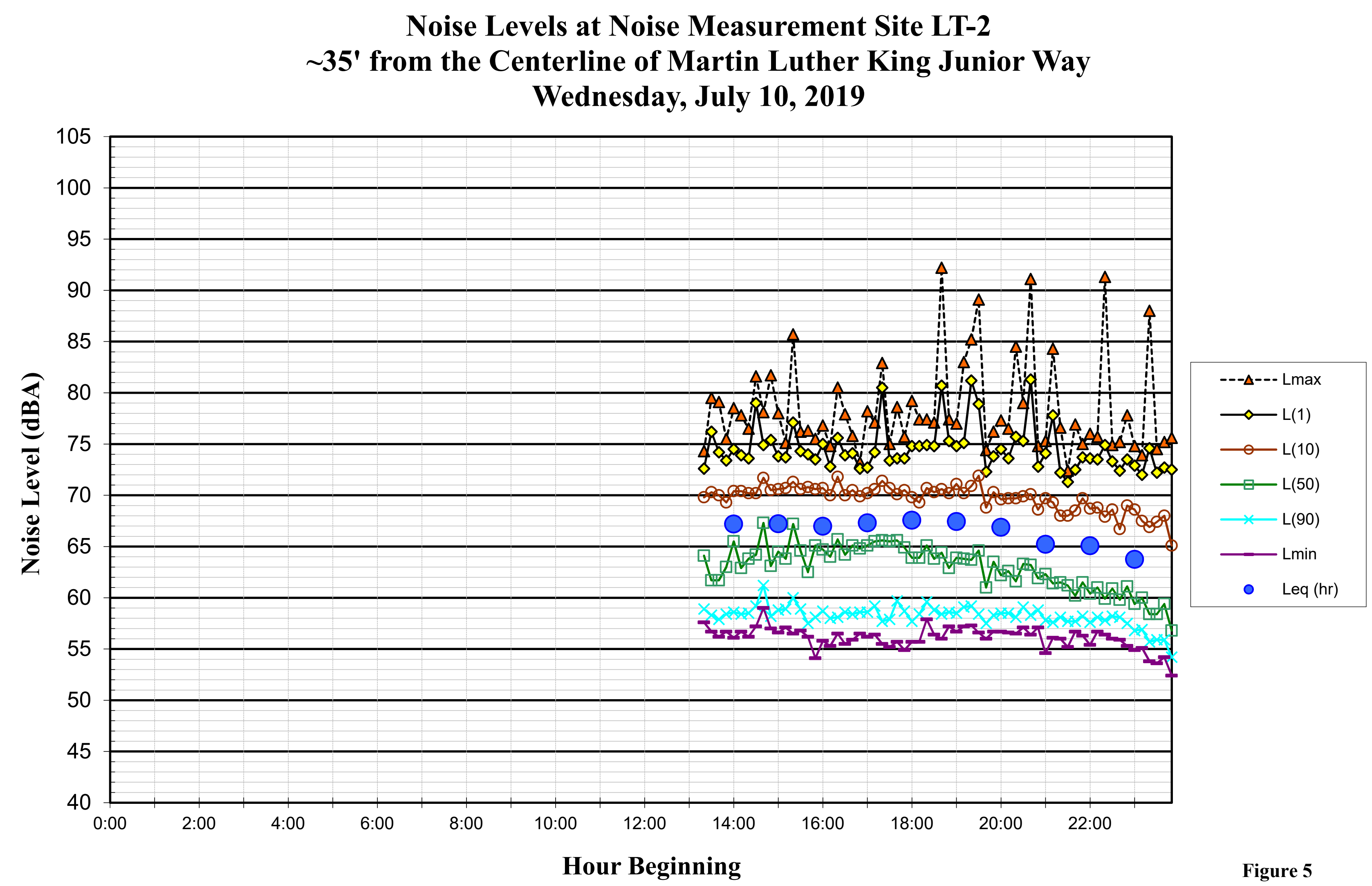
50
45
40
0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
Hour Beginning
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
Leq (hr)

Figure 4


Noise Levels at Noise Measurement Site LT-2
~35' from the Centerline of Martin Luther King Junior Way
Wednesday, July 10, 2019
Noise Level (dBA)
105
100
95
90
85
80
75
70
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60
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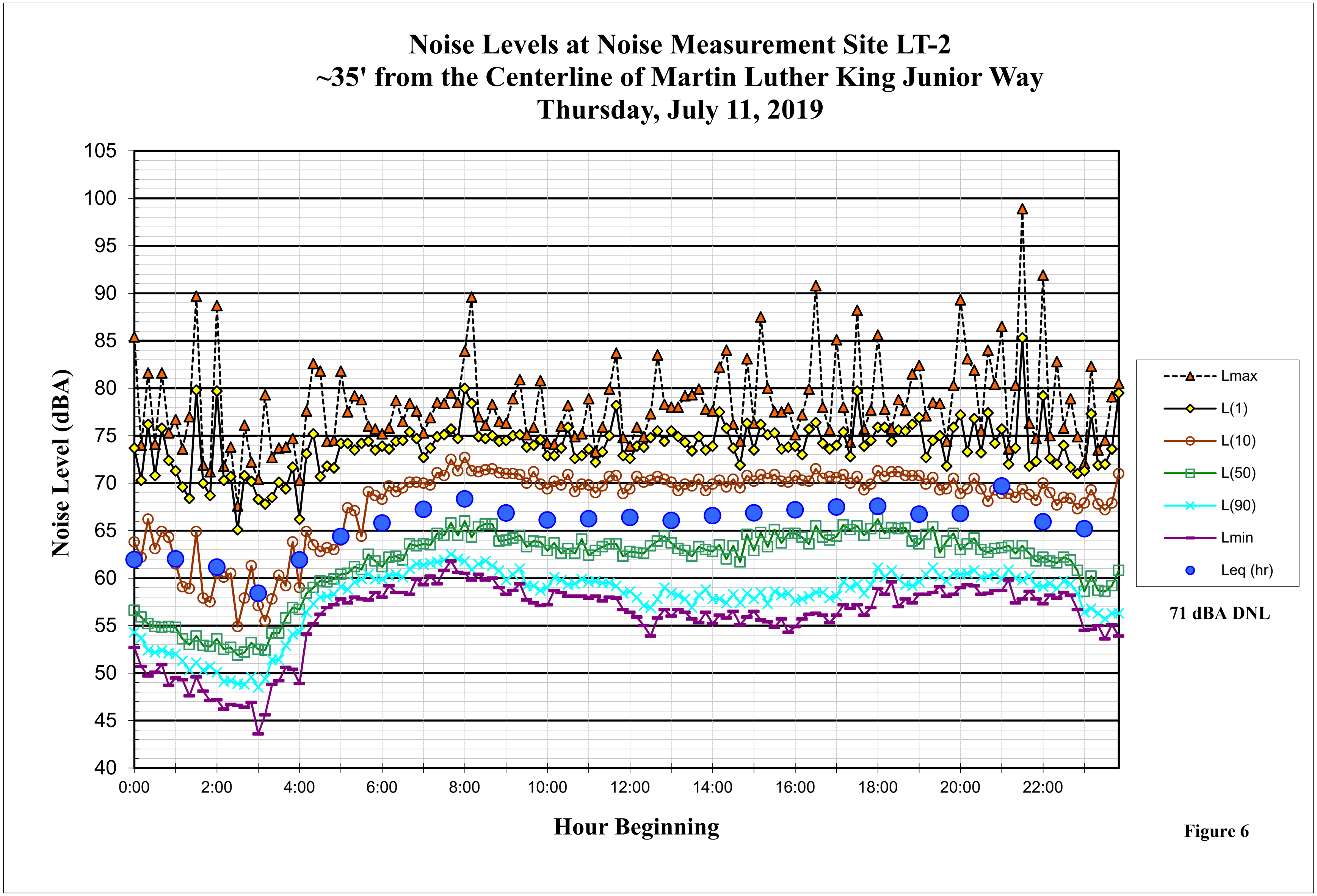
50
45
40
0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
Hour Beginning
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
Leq (hr)

Figure 5



Noise Levels at Noise Measurement Site LT-2
~35' from the Centerline of Martin Luther King Junior Way
Thursday, July 11, 2019
Noise Level (dBA)
105
100
95
90
85
80
75
70
65
60
55
50
45
40
0:00
2:00
4:00
6:00
8:00
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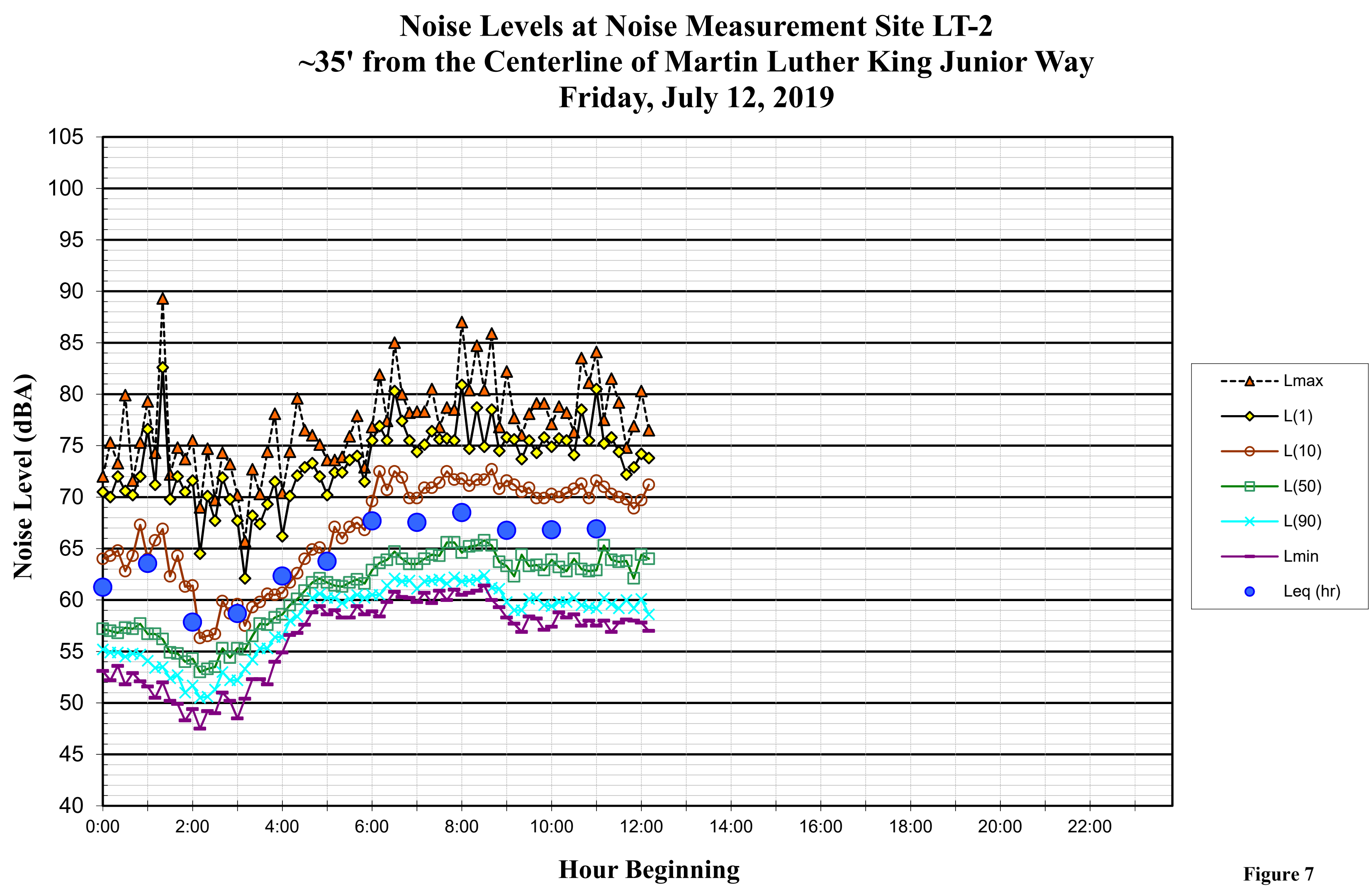
12:00
14:00
16:00
18:00
20:00
22:00
Hour Beginning
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
Leq (hr)
71 dBA DNL

Figure 6


Noise Levels at Noise Measurement Site LT-2
~35' from the Centerline of Martin Luther King Junior Way
Friday, July 12, 2019
Noise Level (dBA)
105
100
95
90
85
80
75
70
65
60
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0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
Hour Beginning
Lmax
L(1)
L(10)
L(50)
L(90)
Lmin
Leq (hr)

Figure 7

Technical Memorandum

Date: July 17, 2019

To: Cinnamon Crake
AEM Consulting
422 Larkfield Center #104
Santa Rosa,CA 95403
Phone & Fax: (707) 523-3710
Email: ccrake@AEMConsulting.net

From: Nayan Amin
Project Manager

Praveena Samaleti
Project Engineer

Jurisdiction: Oakland

Subject: ***Trip Generation Study for Proposed Affordable Family Housing development at 3801 Martin Luther King Junior Way in Oakland,CA.***

The purpose of this memorandum is to present the trip generation expected from the proposed project. The project proposes to construct a 6-story building to accommodate 77 units of affordable family housing at the corner of MacArthur Boulevard and Martin Luther King Junior Way. The project is located at 3801 Martin Luther King Junior Way. The development consists of a mixture of 33 one-bedroom, 19 two bedroom and 25 three bedroom units. The existing project site is currently not operational.

The proposed project would be located near to the MacArthur BART station. Based on the project site plan dated December,2018, the project would consist of the following:

- 77 affordable family housing units
- Approximately 2,052 square feet of first floor retail space

The project would also include 39 automobile parking spaces, including two accessible spaces in garage accessible via a driveway on MacArthur Boulevard. The project will also provide a total of 50 bicycle spaces. This analysis includes trip generation for the proposed project. **Figure 1** illustrates the proposed site plan, dated December, 2018.

Trip Generation

Trip generation is the process of estimating the number of vehicles that would likely access the project on any given day. **Table 1** summarizes the trip generation for the proposed project.

TJKM estimated the project trip generation for the proposed project based on the published trip generation rates from the ITE publication *Trip Generation, 10th Edition (2017)*. TJKM used published trip rates for the ITE land use Multifamily Housing – Mid-Rise (ITE Code 221), and Retail (ITE Code 820) for this project, as these land uses most closely matches the trip characteristics of the proposed development.

ITE rates are primarily based on data collected at single-use suburban sites where the automobile is often the only travel mode. However, the project site is located in a moderately dense area with streets generally laid out in a grid and sidewalks on most streets. It is located near some existing neighborhood-serving retail and industrial uses, and several projects are proposed in the area that would increase residential and employment densities and provide neighborhood-serving retail uses. Additionally, the project is located within two miles of Downtown Oakland, a dense employment center. Thus, many trips generated by the project may be walking, bicycling, or transit trips.

Since the project is near to the MacArthur BART station, this analysis reduces the ITE-based trip generation by about 47 percent to account for non-automobile trips. This reduction is consistent with the City of Oakland Transportation Impact review Guidelines (TIRG) and is based on US Census commute data for Alameda County from the 2014 5-Year estimates of the American Community Survey (ACS), which shows that the non-automobile mode share for areas less than 0.5 miles from a BART Station is about 47 percent.

To be conservative, no pass-by adjustments were applied to the retail portion of the site.

Table 1 shows the trips expected to be generated by the proposed project. The proposed project is expected to generate approximately 263 daily trips with 16 weekday a.m. peak hour trips (4 inbound trips, 12 outbound trips) and 22 weekday p.m. peak hour trips (13 inbound trips, 9 outbound trips).

Table 1. Project Trip Generation

Proposed Land Uses (ITE Code)	Size	Units	Daily		AM Peak						PM Peak					
			Rate	*Trips*	*Rate*	*In %*	*Out %*	*In*	*Out*	*Total*	*Rate*	*In %*	*Out %*	*In*	*Out*	*Total*
Multifamily Housing (Mid-Rise) (ITE Code 221)[1]	77	Du	*5.44*	419	*0.36*	*26*	*74*	7	21	28	*0.44*	*61*	*39*	21	13	34
Shopping Center (ITE Code 820)[2]	2.052	k.s.f	*37.75*	77	*0.94*	*62*	*38*	1	1	2	*3.81*	*48*	*52*	4	4	8
Sub-Total				**496**				**8**	**22**	**30**				**25**	**17**	**42**
Reduction : BART Station, 47%[3]				-233				-4	-10	-14				-12	-8	-20
Total Net Trips				**263**				**4**	**12**	**16**				**13**	**9**	**22**

Notes:

Source - ITE Trip Generation Manual, 10th Edition (2017).

Du-Dwelling Units; k.s.f-Thousand square feet

[1]Multifamily Housing Mid-Rise (ITE Land Use Code 221) vehicle trip rates are based upon number of dwelling units.

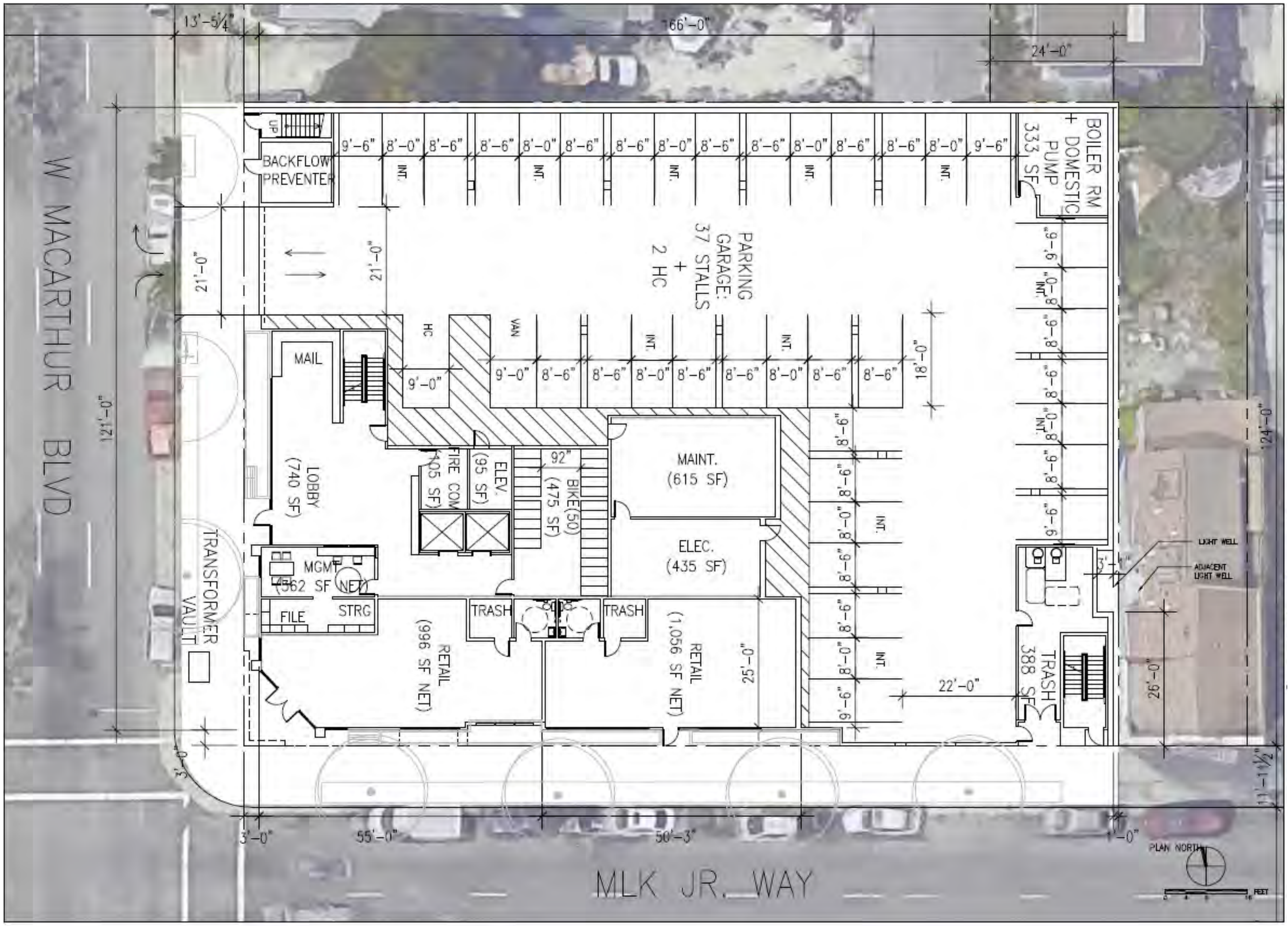
[2]Shoping Center (ITE Land Use Code 820) vehicle trip rates are based upon number of thousand square feet gross leasable area.

[3]Reduction of 47% assumed, based on City of Oakland Transportation Impact Review Guidelines, using Census data for urban environments less than 0.5 miles from a BART station.

CONCLUSIONS

The estimated trip generation for the new 77-unit affordable family housing development is 16 a.m. peak hour trips and 22 p.m. peak hour trips.

Project Site Plan



Appendix H – Soils and Miscellaneous

- **Rockridge Geotechnical.** *Geotechnical Investigation, Proposed Affordable Housing Building, 3801 Martin Luther King Junior Way, Oakland, California.* Oakland, CA : s.n., December 13, 2019. Project No. 19-1769.
- **United States Department of Agriculture.** *Custom Soil Resource Report for Alameda County, California, Western Part, Longfellow Corner.* s.l. : United States Department of Agriculture, October 21, 2019.
- **Merkamp, Robert D.** *Planning Application Approval - 3801-3829 Martin Luther King Jr. Way, APN: 012-0964-004 & 012-0964-005 & 012-0964-006 & 012-0964-007.* s.l. : City of Oakland, Planning and Building Department, September 11, 2019. PLN19-104.
- **United States Environmental Protection Agency.** *EJSCRREEN Report, Longfellow Corner.* September 26, 2019.

ROCKRIDGE GEOTECHNICAL

Prepared for **Resources for Community Development**

GEOTECHNICAL INVESTIGATION
PROPOSED AFFORDABLE HOUSING BUILDING
3801 MARTIN LUTHER KING JUNIOR WAY
OAKLAND, CALIFORNIA

December 13, 2019
Project No. 19-1769

December 13, 2019
Project No. 19-1769

Ms. Alexandra Arjo
Resources for Community Development
2220 Oxford Street
Berkeley, California 94704

Subject: Geotechnical Investigation
Proposed Affordable Housing Building
3801 Martin Luther King Junior Way
Oakland, California

Dear Ms. Arjo,

We are pleased to present our geotechnical investigation report for the proposed affordable housing building to be constructed at 3801 Martin Lither King Junior Way (MLK), in Oakland, California. Our services were provided in accordance with our proposal dated June 27, 2019.

The subject property is located at the northwestern corner of the intersection of West MacArthur Boulevard and MLK Jr. Way. The site is rectangular shaped with plan dimensions of about 125 by 170 feet. The site is currently vacant, except for two 2-story abandoned buildings located on the southern portion of the site.

Based on our review of the schematic drawings prepared by HKIT Architects, dated February 21, 2019, we understand plans are to demolish the existing structures and construct a six-story multi-family residential building consisting of five stories of wood-framed residential units above a one-story at-grade concrete podium. The residential units will wrap around a central courtyard at the top of the podium. The ground floor will include parking and retail space.

From a geotechnical standpoint, we conclude the site can be developed as planned, provided the recommendations presented in this report are incorporated into the project plans and specifications and implemented during construction. The primary geotechnical issues affecting the proposed development include: 1) the presence of moderately to highly expansive near-surface soil, and 2) providing adequate foundation support. We conclude the proposed building may be supported on individual spread footings at interior column locations and continuous, deepened perimeter footings. The perimeter footing should be deepened to act as a barrier to reduce the potential for moisture change in the soil beneath the footing and slab-on-grade floors. We also recommend building slab-on-grade be underlain by 18 inches of non-expansive soil (i.e. import select fill or lime-treated onsite soil).

The recommendations contained in our report are based on a limited subsurface exploration and laboratory testing program. Consequently, variations between expected and actual subsurface conditions may be found in localized areas during construction. Therefore, we should be engaged to observe excavation, grading, and foundation installation, during which time we may make changes in our recommendations, if deemed necessary.

We appreciate the opportunity to provide our services to you on this project. If you have any questions, please call.

Sincerely yours,
ROCKRIDGE GEOTECHNICAL, INC.

REGISTERED PROFESSIONAL ENGINEER
HUI JUN LIANG
GE2663
Exp. 6/30/2022
GEOTECHNICAL
STATE OF CALIFORNIA

Katie S. Dickinson
Project Engineer

Linda H. J. Liang, P.E., G.E.
Associate Engineer

REGISTERED PROFESSIONAL ENGINEER
CRAIG S. SHIELDS
GE2116
3/31/21
GEOTECHNICAL
STATE OF CALIFORNIA

Craig S. Shields, P.E., G.E.
Quality Control Reviewer

Enclosure

ROCKRIDGE GEOTECHNICAL

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APPENDIX B

ROCKRIDGE GEOTECHNICAL

GEOTECHNICAL INVESTIGATION
PROPOSED AFFORDABLE HOUSING BUILDING
3801 MARTIN LUTHER KING JR. WAY
Oakland, California

1.0 INTRODUCTION

This report presents the results of our geotechnical investigation for the proposed affordable housing building to be constructed at 3801 Martin Luther King Jr. Way in Oakland, California. The subject property is located at the northwestern corner of the intersection of West MacArthur Boulevard and Martin Luther King (MLK) Jr. Way, as shown on the Site Location Map, Figure 1.

The site is bordered by West MacArthur Boulevard to the south, MLK Jr. Way to the east, and residential properties to the north and west. The site is rectangular shaped with plan dimensions of about 125 feet by 170 feet. The site is currently vacant, except for two 2-story abandoned buildings located on the southern portion of the site.

Based on our review of the schematic drawings prepared by HKIT Architects, dated February 21, 2019, we understand plans are to construct a six-story multi-family residential building consisting of five stories of wood-framed residential units above a one-story at-grade concrete podium. The residential units will wrap around a central courtyard on top of the podium. The ground floor will include parking and retail spaces.

2.0 SCOPE OF SERVICES

Our services were performed in accordance with our proposal dated June 27, 2019. Our scope of services consisted of evaluating subsurface conditions at the site by advancing three cone penetration tests (CPTs), drilling two test borings, performing laboratory tests on selected soil samples, and performing engineering analyses to develop conclusions and recommendations regarding:

- subsurface conditions
- site seismicity and seismic hazards, including the potential for liquefaction and liquefaction-induced ground failure
- the most appropriate foundation type(s) for the proposed building
- design criteria for the recommended foundation type(s), including vertical and lateral capacities
- estimates of foundation settlement
- subgrade preparation for interior and exterior concrete slabs-on-grade
- surface drainage and bio-swales
- site preparation and grading, including criteria for fill quality and compaction
- 2019 California Building Code (CBC) site class and design spectral response acceleration parameters
- corrosivity of the near-surface soil and the potential effects on buried concrete and metal structures and foundations
- construction considerations.

3.0 FIELD INVESTIGATION AND LABORATORY TESTING

Subsurface conditions at the site were explored by advancing three CPTs, drilling two test borings, and performing laboratory testing on selected soil samples. Prior to performing the field exploration, we obtained a drilling permit from the Alameda County Public Works Agency (ACPWA). In addition, we contacted Underground Service Alert (USA) to notify them of our work, as required by law, and retained Precision Locating, LLC, a private utility locator, to check that the CPT and boring locations were clear of existing underground utilities. Details of the field investigation and laboratory testing are described in the following sections.

3.1 Cone Penetration Tests

CPT-1 through CPT-3 were advanced on November 12, 2019 by Middle Earth Geo Testing, Inc. of Orange, California. CPT-1 and CPT-2 were advanced to a depth of about 50 feet below the existing ground surface (bgs), and CPT-3 encountered practical refusal in very dense/hard soil at a depth of about 34 feet bgs. The approximate locations of the CPTs are shown on the Site Plan, Figure 2.

The CPTs were performed by hydraulically pushing a 1.7-inch-diameter cone-tipped probe with a projected area of 15 square centimeters into the ground. The cone-tipped probe measured tip resistance and the friction sleeve behind the cone tip measured frictional resistance. Electrical strain gauges within the cone continuously measured soil parameters for the entire depth advanced. Soil data, including tip resistance, frictional resistance, and pore water pressure were recorded by a computer while the test was conducted. Accumulated data were processed by computer to provide engineering information such as the soil behavior types, approximate strength characteristics, and the liquefaction potential of the soil encountered.

The CPT logs showing tip resistance, friction ratio, and pore pressure, as well as correlated soil behavior type, are presented in Appendix A on Figures A-1 through A-3. Upon completion, the CPTs were backfilled with neat cement grout in accordance with ACPWA requirements.

3.2 Borings

The test borings were drilled on November 12, 2019 by Exploration GeoServices of San Jose, California. The borings, designated B-1 and B-2, were each drilled to depth of 40 feet bgs using a Mobil B-40 drill rig equipped with eight-inch-diameter hollow-stem augers. During drilling, our field engineer logged the soil encountered and obtained representative samples for visual classification and laboratory testing. The logs of the borings are presented on Figures A-4 and A-5 in Appendix A. The soil encountered in the borings was classified in accordance with the classification system presented on Figure A-6.

Soil samples were obtained using the following samplers:

- Sprague and Henwood (S&H) split-barrel sampler with a 3.0-inch outside diameter and 2.5-inch inside diameter, lined with 2.43-inch inside diameter brass tubes
- Standard Penetration Test (SPT) split-barrel sampler with a 2.0-inch outside and 1.5-inch inside diameter; the sampler was designed to accommodate liners, but liners were not used.

The type of sampler used was selected based on soil type and the desired sample quality for laboratory testing. In general, the S&H sampler was used to obtain samples in medium stiff to very stiff cohesive soil and the SPT sampler was used to evaluate the relative density of granular soils.

The samplers were driven with a 140-pound, downhole, wireline hammer falling about 30 inches per drop. The samplers were driven up to 18 inches and the hammer blows required to drive the samplers were recorded every six inches and are presented on the boring logs. A “blow count” is defined as the number of hammer blows per six inches of penetration or 50 blows for six inches or less of penetration. The blow counts required to drive the S&H and SPT samplers were converted to approximate SPT N-values using factors of 0.63 and 1.08, respectively, to account for sampler type, approximate hammer energy, and the fact that the SPT sampler was designed to accommodate liners, but liners were not used. The blow counts used for this conversion were the last two blow counts. The converted SPT N-values are presented on the boring logs.

Upon completion, the borings were backfilled with neat cement grout in accordance with ACPWA requirements. The soil cuttings from the borings were spread in unpaved areas on site.

3.3 Laboratory Testing

We re-examined each soil sample obtained from our borings to confirm the field classifications and selected representative samples for laboratory testing. Soil samples were tested to measure moisture content, dry density, Atterberg limits (plasticity index), percent passing the No. 200 sieve, consolidation characteristics, and corrosivity. The results of the laboratory tests are presented on the boring logs and in Appendix B.

4.0 SUBSURFACE CONDITIONS

A regional geologic map prepared by Graymer (2000), a portion of which is presented on Figure 3, indicates the site vicinity is underlain by Holocene-age alluvial fan and fluvial deposits (Qhaf). Alluvial fan and fluvial deposits are generated when sediments are transported and deposited by rivers and streams. These types of deposits can be relatively uniform, but are often composed of different layers of different particle mixtures of gravelly, sandy and clayey soils.

The results of our borings and CPTs indicate the site is underlain by up to about two feet of fill in localized areas. The fill consists of medium dense sand and silty sand. The fill, or ground surface where fill is not present, is underlain by alluvium. Where explored, the alluvium consists of interbedded layers of stiff to hard clay with varying sand and gravel content and medium dense to very dense sand and gravel with varying clay and silt content that extends to the maximum depth explored of 50 feet bgs. Atterberg limits tests performed on samples of the near-surface clay and sandy clay indicate the dark brown clay with sand encountered at a depth of 2 feet bgs in Boring B-1 is highly expansive[1] with a plasticity index (PI) of 35 and the yellow-brown sandy clay at a depth of 3.5 feet bgs in Boring B-2 has low to moderate expansion potential with a PI of 15.

Groundwater was measured in our borings at depths of approximately 13 to 16 feet bgs during drilling. The groundwater levels may not have been fully stabilized at the time of these measurements. We reviewed the report Seismic Hazard Zone Report (2003) prepared by the California Geological Survey (CGS) for the Oakland West 7.5-Minute Quadrangle. The report indicates a historic high groundwater level in the site vicinity of about 8 feet bgs. The depth to groundwater is expected to vary several feet seasonally, depending on rainfall amounts.

5.0 SEISMIC CONSIDERATIONS

5.1 Regional Seismicity

The site is located in the Coast Ranges geomorphic province that is characterized by northwest-southeast trending valleys and ridges. These are controlled by folds and faults that resulted from the collision of the Farallon and North American plates and subsequent shearing along the San Andreas Fault system. Movements along this plate boundary in the Northern California region occur along right-lateral strike-slip faults of the San Andreas Fault system.

The major active faults in the area are the Hayward, San Andreas, Mount Diablo and Calaveras faults. These and other known Quaternary-ages faults that are believed to be sources of major

[1] Expansive soil undergoes large volume changes with changes in moisture content (i.e. it shrinks when dried and swells when wetted).

earthquakes (i.e. Magnitude>6.0) in the region are shown on the Regional Fault Map, Figure 4. For these and other active faults within a 50-kilometer radius of the site, the distance from the site and estimated mean characteristic Moment magnitude[2] [2007 Working Group on California Earthquake Probabilities (WGCEP) (USGS 2008) and Cao et al. (2003)] are summarized in Table 1.

TABLE 1
Regional Faults and Seismicity

Fault Segment	Approximate Distance from Site (km)	Direction from Site	Mean Characteristic Moment Magnitude
Total Hayward	4.1	East	7.00
Total Hayward-Rodgers Creek	4.1	East	7.33
Mount Diablo Thrust	21	East	6.70
Total Calaveras	23	East	7.03
N. San Andreas - Peninsula	25	West	7.23
N. San Andreas (1906 event)	25	West	8.05
Green Valley Connected	26	East	6.80
N. San Andreas - North Coast	27	West	7.51
San Gregorio Connected	31	West	7.50
Rodgers Creek	32	Northwest	7.07
West Napa	38	North	6.70
Greenville Connected	39	East	7.00
Great Valley 5, Pittsburg Kirby Hills	43	East	6.70

2 Moment magnitude is an energy-based scale and provides a physically meaningful measure of the size of a faulting event. Moment magnitude is directly related to average slip and fault rupture area.

Fault Segment	Approximate Distance from Site (km)	Direction from Site	Mean Characteristic Moment Magnitude
Monte Vista-Shannon	43	South	6.50

Since 1800, four major earthquakes have been recorded on the San Andreas Fault. In 1836, an earthquake with an estimated maximum intensity of VII on the Modified Mercalli (MM) scale occurred east of Monterey Bay on the San Andreas Fault (Toppozada and Borchardt 1998). The estimated Moment magnitude, M_w, for this earthquake is about 6.25. In 1838, an earthquake occurred with an estimated intensity of about VIII-IX (MM), corresponding to an M_w of about 7.5. The San Francisco Earthquake of 1906 caused the most significant damage in the history of the Bay Area in terms of loss of lives and property damage. This earthquake created a surface rupture along the San Andreas Fault from Shelter Cove to San Juan Bautista approximately 470 kilometers in length. It had a maximum intensity of XI (MM), an M_w of about 7.9, and was felt 560 kilometers away in Oregon, Nevada, and Los Angeles. The most recent earthquake to affect the Bay Area was the Loma Prieta Earthquake of 17 October 1989 with an M_w of 6.9. This earthquake occurred in the Santa Cruz Mountains about 94 kilometers southwest of the site.

In 1868, an earthquake with an estimated maximum intensity of X on the MM scale occurred on the southern segment (between San Leandro and Fremont) of the Hayward Fault. The estimated M_w for the earthquake is 7.0. In 1861, an earthquake of unknown magnitude (probably an M_w of about 6.5) was reported on the Calaveras Fault. The most recent significant earthquake on this fault was the 1984 Morgan Hill earthquake ($M_w = 6.2$).

The U.S. Geological Survey's 2014 Working Group on California Earthquake Probabilities has compiled the earthquake fault research for the San Francisco Bay area in order to estimate the probability of fault segment rupture. They have determined that the overall probability of moment magnitude 6.7 or greater earthquake occurring in the San Francisco Bay Region during the next 30 years (starting from 2014) is 72 percent. The highest probabilities are assigned to the

Hayward Fault, Calaveras Fault, and the northern segment of the San Andreas Fault. These probabilities are 14.3, 7.4, and 6.4 percent, respectively.

5.2 Seismic Hazards

Because the site is in a seismically active region, we evaluated the potential for earthquake-induced geologic hazards including ground shaking, ground surface rupture, liquefaction,[3] lateral spreading[4] and cyclic densification[5]. We used the results of our field investigation to evaluate the potential of these phenomena occurring at the project site.

5.2.1 Ground Shaking

The ground shaking intensity felt at the project site will depend on: 1) the size of the earthquake (magnitude), 2) the distance from the site to the fault source, 3) the directivity (focusing of earthquake energy along the fault in the direction of the rupture), and 4) subsurface conditions. The site is less than five kilometers from the Hayward Fault. Therefore, the potential exists for a large earthquake to induce strong to very strong ground shaking at the site during the life of the project.

5.2.2 Fault Rupture

Historically, ground surface displacements closely follow the trace of geologically young faults. The site is not within an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults exist on the site. We therefore conclude the risk of fault offset at the site from a known active fault is very low. In a seismically active area, the remote possibility exists for future faulting in areas where no faults previously

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3 Liquefaction is a phenomenon where loose, saturated, cohesionless soil experiences temporary reduction in strength during cyclic loading such as that produced by earthquakes.

4 Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

5 Cyclic densification, also referred to as differential compaction, is a phenomenon in which non-saturated, cohesionless soil is compacted by earthquake vibrations, causing ground-surface settlement.

existed; however, we conclude the risk of surface faulting and consequent secondary ground failure from previously unknown faults is also very low.

5.2.3 Liquefaction and Associated Hazards

Liquefaction is a phenomenon in which saturated soil temporarily loses strength from the build-up of excess pore water pressure, especially during earthquake-induced cyclic loading. Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Flow failure, lateral spreading, differential settlement, loss of bearing strength, ground fissures and sand boils are evidence of excess pore pressure generation and liquefaction.

The site has been mapped inside a zone of liquefaction potential on the map titled *State of California, Seismic Hazard Zones, Oakland West Quadrangle, Official Map,* prepared by the California Geological Survey (CGS), dated February 14, 2003 (Figure 5). The California Geological Survey (CGS) has provided recommendations for procedures and report content for site investigations performed within seismic hazard zones in Special Publication 117 (SP-117), titled *Guidelines for Evaluating and Mitigating Seismic Hazard Zones in California*, dated September 11, 2008. SP-117 recommends subsurface investigations in mapped liquefaction hazard zones be performed using rotary-wash borings and/or CPTs to a depth of at least 50 feet bgs.

We evaluated the liquefaction potential at the site using data collected from our CPTs, with consideration of laboratory testing performed on soil samples from the borings. Liquefaction susceptibility was assessed using the software CLiq v3.0 (GeoLogismiki, 2019). CLiq uses measured field CPT data and assesses liquefaction potential, including post-earthquake vertical settlement, given a user-defined earthquake magnitude and peak ground acceleration (PGA). Our liquefaction analyses were performed using the methodology proposed by Boulanger and Idriss (2014). We also used the relationship proposed by Zhang, et al (2002) to estimate post-liquefaction volumetric strains and corresponding ground surface settlement; a relationship that is an extension of the work by Ishihara and Yoshimine (1992).

Our analyses were performed using the approximate in-situ groundwater depths measured in our CPTs and a "during earthquake" groundwater depth of 8 feet bgs. In accordance with the 2019 CBC, we used a peak ground acceleration of 0.87 times gravity (g) in our liquefaction evaluation; this peak ground acceleration is consistent with the Maximum Considered Earthquake Geometric Mean (MCE_G) peak ground acceleration adjusted for site effects (PGA_M). We also used a moment magnitude 7.33 earthquake, which is consistent with the mean characteristic moment magnitude for the Hayward Fault, as presented in Table 1.

Our liquefaction analyses indicate there are several thin layers of medium dense sand between depths of about 8 and 32 feet bgs that are potentially liquefiable. The potentially liquefiable layers are generally less than 2 feet thick. We estimate total free-field ground settlement associated with liquefaction (referred to as post-liquefaction reconsolidation) at the site after the above-defined MCE event will be less than 3/4 inch and differential settlement will be less than 1/4 inch over a horizontal distance of 30 feet.

Ishihara (1985) presented an empirical relationship that provides criteria that can be used to evaluate whether liquefaction-induced ground failure, such as sand boils, would be expected to occur under a given level of shaking for a liquefiable later of given thickness overlain by a resistant, or protective, surficial layer. Our analysis indicated the non-liquefiable soil overlying the potentially liquefiable soil layers is sufficiently thick and the potentially liquefiable layers are sufficiently thin such that the potential for surface manifestations of liquefaction, such as sand boils, are very low.

Considering the site topography is relatively flat and the potentially liquefiable layers are not continuous, we conclude the risk of lateral spreading is very low.

5.2.4 Cyclic Densification

Cyclic densification (also referred to as differential compaction) of non-saturated sand (sand above groundwater table) can occur during an earthquake, resulting in settlement of the ground surface and overlying improvements. The soil encountered above the groundwater table is not susceptible to cyclic densification due to its cohesion. Therefore, we conclude the potential for cyclic densification to occur at the site is very low.

6.0 DISCUSSIONS AND CONCLUSIONS

From a geotechnical standpoint, we conclude the site can be developed as planned, provided the recommendations presented in this report are incorporated into the project plans and specifications and implemented during construction. The primary geotechnical concerns affecting the proposed development are 1) the presence of moderately to highly expansive near-surface soil, and 2) providing adequate foundation support. These and other geotechnical issues, as they pertain to the proposed development, are discussed in this section.

6.1 Expansive Soil

Atterberg limits tests performed on samples of the near-surface clay indicate the clay is moderately to highly expansive. Expansive near-surface soil is subject to volume changes during seasonal fluctuations in moisture content. These volume changes can cause movement and cracking of foundations, pavements, and slabs. Therefore, foundations, pavements, and slabs should be designed and constructed to resist the effects of the expansive soil. In general, the effects of expansive soil can be mitigated by moisture-conditioning the expansive soil, providing non-expansive soil below slabs, and either supporting foundations below the zone of severe moisture change or by providing a stiff, shallow foundation that can limit deformation of the superstructure as the underlying soil shrinks and swells.

At expansive soil sites, it is critical to properly manage surface and subsurface drainage to prevent water from collecting beneath pavements, slabs and foundations. If permeable pavements, tree wells, irrigated landscaped zone, and storm water infiltration basins will be constructed close to the proposed building, they should incorporate design elements that prevent saturation of the soil adjacent to and below building foundations. While the objective of permeable pavement systems and infiltration basins is to allow for water storage and infiltration, we conclude that infiltration into the subgrade soil is not feasible at this site due to the low permeability of the moderately to highly expansive clay. Furthermore, from a geotechnical standpoint, water should not be allowed to collect alongside or beneath the building foundations, pavements and flatwork. This can be achieved by providing subdrain systems and impermeable liners beneath permeable surfaces and installing vertical barriers between permeable surfaces underlain by subdrains and non-permeable surfaces underlain by conventional aggregate base.

6.2 Foundation Support and Settlement

The native alluvium encountered in our borings and CPTs has moderate strength and relatively low compressibility. Therefore, we conclude the proposed building may be supported on individual spread footings at interior column locations and continuous, deepened perimeter footings. The perimeter footing should be deepened to act as a barrier to reduce the potential for moisture change in the soil beneath the interior footings and slab-on-grade floor.

We estimate total settlement of the proposed building supported on properly designed and constructed footings will be less than 3/4 inch and differential settlement will be less than 1/2 inch in 30 feet. As discussed in Section 5.2.3, an additional 1/4 inch in 30 feet of differential settlement may occur following a major earthquake due to post-liquefaction reconsolidation.

6.3 Interior and Exterior Slabs-on-Grade

The building slab-on-grade floor and capillary break/vapor barrier should be underlain by at least 18 inches of non-expansive soil. The following two alternatives may be used to provide a 18-inch-thick layer of non-expansive soil beneath the slab-on-grade floor:

- Alternative No. 1: The building pad should be overexcavated to allow for placement of 18 inches of imported select (non-expansive) fill beneath the floor slab and capillary break/vapor retarder.
- Alternative No. 2: As an alternative to importing select fill, the upper 18 inches of soil beneath the building pad subgrade may be treated in place with lime. The purpose of the lime treatment is to reduce the expansion potential of the surface soil and provide a firm surface for construction of the floor slab.

We judge exterior concrete slabs-on-grade (i.e. concrete flatwork) should perform satisfactory if they are supported on a layer of non-expansive soil at least 12 inches thick (measured beneath the aggregate base layer).

6.4 Construction Considerations

The soil to be excavated for the new foundations and underground utilities is expected to be predominantly clay, which can be excavated with conventional earth-moving equipment such as loaders and backhoes. If the site grading is performed during the rainy season, the near-surface clay will likely be wet and will have to be dried before compaction can be achieved. Heavy rubber-tired equipment, such as haul trucks, scrapers, and vibratory rollers, could cause excessive deflection (pumping) of the wet clay and therefore should be avoided if this condition occurs. If the project schedule or weather conditions do not permit sufficient time for drying of the soil by aeration, the subgrade can be treated with lime prior to compaction to create a stable subgrade. It is also important that the moisture content of subgrade soil is sufficiently high to reduce the expansion potential. If the grading work is performed during the dry season, moisture-conditioning may be required.

We understand the proposed building will be constructed at-grade and, therefore, we do not anticipate significant deep excavations. However, construction of the proposed elevator(s) and any underground vaults, if planned, may require excavations in excess of five feet below the existing ground surface. Where there is sufficient clearance from the property line, the excavation sides may be slope cut at a maximum inclination of 1:1 (horizontal:vertical), which is consistent with OSHA Type B soil. Where there is insufficient space to slope-cut the excavations, shoring may be required. The selection, design, construction, and performance of the shoring system (if needed) should be the responsibility of the contractor.

6.5 Soil Corrosivity

Laboratory testing was performed by Project X Engineering of Murrieta, California on two samples of near-surface soil obtained from Boring B-1 at a depth of 3.5 feet bgs and Boring B-2 at a depth of 4 feet bgs. The results of the corrosivity tests are presented in Appendix B.

The resistivity test results (737 and 3,015 ohm-cm) indicate the near-surface soil is “moderately to highly corrosive” to buried metallic structures. Accordingly, all buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric-coated steel or iron may need to be protected against corrosion, depending upon the critical nature of the structure. If it is necessary to have metal in contact with soil, a corrosion engineer should be consulted to provide recommendations for corrosion protection.

The chloride ion concentrations (2.5 and 7.0 mg/kg) and pH (8.0 and 8.2) indicate the near-surface soil is “negligibly corrosive” to buried metallic structures and reinforcing steel in concrete structures below ground. The results also indicate the sulfate ion concentrations are sufficiently low such that sulfates do not pose a threat to buried concrete.

7.0 RECOMMENDATIONS

Our recommendations for site preparation and grading, foundation support and other geotechnical aspects of the project are presented in this section.

7.1 Site Preparation and Grading

Any vegetation and organic topsoil should be stripped in areas to receive improvements (i.e. building, pavement or flatwork). Site demolition should include the removal of all existing pavements, former foundation elements and underground utilities. In general, abandoned underground utilities should be removed to the property line or service connections and properly capped or plugged with concrete. Where existing utility lines will not interfere with the proposed construction, they may be abandoned in-place provided the lines are filled with lean concrete or cement grout to the property line. Voids resulting from demolition activities that extend below finished improvements should be properly backfilled with engineered fill under our observation and following the recommendations provided later in this section.

The near-surface clay at the site has a moderate to high expansion potential. To mitigate the detrimental effects of moderately to highly expansive near-surface soil, the building slab-on-grade floor should be underlain by at least 18 inches of non-expansive soil; the non-expansive soil should extend at least five feet beyond the perimeter of the proposed building, except where constrained by the property line. In addition, exterior concrete flatwork should be underlain by at least 12 inches of non-expansive soil; the non-expansive soil should extend at least six inches beyond the perimeter of the flatwork, except where constrained by the property line. The non-expansive soil may consist of imported select fill (see Section 7.1.1) or lime-treated onsite soil (see Section 7.1.2).

In areas to receive fill, the soil subgrade should be scarified to a depth of at least eight inches, moisture-conditioned to at least four percent above optimum moisture content and compacted to between 87 and 92 percent relative compaction[6]. If material to be used as fill is imported to the site, it should meet the requirements for select fill provided below in Section 7.1.1. A summary of the compaction requirements for the various types of fill that may be used at the site is presented in Table 2.

TABLE 2
Summary of Compaction Requirements

Location	Required Relative Compaction (percent)	Moisture Requirement
Building pad – expansive clay	87 – 92	4+% above optimum
Building pad – low-plasticity soil	90+	Above optimum
Exterior slabs – expansive clay	87 – 92	4+% above optimum
Exterior slabs – low-plasticity soil	90+	Above optimum
Pavements – expansive clay	90+	2+% above optimum
Pavements – low-plasticity soil	95+	Above optimum
Pavements - aggregate base	95+	Near optimum
General fill – expansive clay	87 – 92	4+% above optimum
General fill – low-plasticity soil	90+	Above optimum
General fill – granular soil	95+	Near optimum
Utility trench backfill – expansive clay	87 – 92	4+% above optimum
Utility trench backfill – low-plasticity	90+	Above optimum
Utility trench - clean sand or gravel	95+	Near optimum

6 Relative compaction refers to the in-place dry density of soil expressed as a percentage of the maximum dry density of the same material, as determined by the ASTM D1557 laboratory compaction procedure.

We recommend the upper eight inches of the soil subgrade beneath pavements be scarified, moisture-conditioned, and recompacted. The scarification and recompaction should extend at least two feet beyond the perimeters of the pavements, except where constrained by the property line. The scarified soil subgrade should be moisture-conditioned and compacted in accordance with the requirements provided in Table 2. The subgrade beneath pavements should be firm and non-yielding under construction equipment wheel loads.

7.1.1 Select Fill

Select fill should consist of imported soil or on-site soil that is free of organic matter, contain no rocks or lumps larger than three inches in greatest dimension, have a liquid limit less than 40 and plasticity index less than 12, and be approved by the Geotechnical Engineer. Select fill should be placed in lifts not exceeding eight inches in loose thickness, moisture-conditioned to above optimum moisture content, and compacted to the recommendations presented in Table 2. Samples of proposed select fill material should be submitted to the Geotechnical Engineer at least three business days prior to use at the site.

The grading contractor should provide analytical test results or other suitable environmental documentation indicating the imported fill is free of hazardous materials at least three days before use at the site. If this data is not provided, a minimum of two weeks will be required to perform any necessary analytical testing.

7.1.2 Lime-Treatment

Lime treatment of fine-grained soils generally includes site preparation, application of lime, mixing, compaction, and curing of the lime-treated soil. Field quality control measures should include checking the depth of lime treatment, degree of pulverization and density measurements, and mixing efficiency.

If the non-expansive soil to be placed beneath the building pad and exterior concrete flatwork will consist of lime-treated on-site soil, the upper 18 and 12 inches of the soil subgrade should be treated in place with Dolomitic Quicklime beneath building pad and exterior concrete flatwork, respectively. The lime treatment process should be designed by a contractor specializing in its use and who is experienced in the application of lime in similar soil conditions. Based on our experience with lime treatment, we judge that the specialty contractor should be able to treat the highly expansive on-site material to produce a non-expansive fill beneath the building pad and exterior concrete flatwork. For planning purposes, we recommend assuming the lime treatment will consist of five percent of Dolomitic Quicklime by dry weight of soil. The dry weight of soil should be assumed to be 105 pounds per cubic foot (pcf) for calculating lime quantities. The specialty contractor should: 1) perform a lime demand test prior to treatment to determine the percentage of Quicklime required to achieve a pH of 12.4 or higher in the treated soil, 2) perform an Atterberg limits test to confirm the proposed percentage of Quicklime will reduce the plasticity index of the treated soil to 15 or less, and 3) prepare a lime treatment procedure for our review prior to construction.

Prior to lime treatment, we recommend the site be graded to a level pad elevation in accordance with our previous recommendations and all below-grade obstructions be removed. The soil treated with lime should be mixed and compacted in one lift. The lime should be thoroughly blended with the soil and allowed to set for 24 hours prior to remixing and compaction. The lime-treated soil should be moisture-conditioned to above optimum moisture content and compacted to at least 90 percent relative compaction.

It should be noted that disposal of lime-treated soil is typically expensive because of the high pH of the treated soil. In addition, lime-treated soil should be completely removed from landscape areas as the high pH will prevent plant growth.

7.1.3 Utility Trench Backfill

Excavations for utility trenches can be readily made with a backhoe. All temporary excavations used in construction should be designed, planned, constructed, and maintained by the contractor and should conform to the current CAL-OSHA requirements. To provide uniform support, pipes or conduits should be bedded on a minimum of four inches of clean sand or fine gravel. After the pipes and conduits are tested, inspected (if required) and approved, they should be covered to a depth of six inches with clean sand or fine gravel, which should be mechanically tamped. The pipe bedding and cover should be eliminated where a low-permeability plug is required as described below.

Backfill for utility trenches and other excavations is also considered fill, and should be placed and compacted according to the recommendations presented in Table 2. If imported clean sand or gravel (defined as soil with less than five percent fines) is used as backfill, it should be compacted to at least 95 percent relative compaction. Jetting of trench backfill should not be permitted. Special care should be taken when backfilling utility trenches in pavement areas. Poor compaction may cause excessive settlements, resulting in damage to the pavement section.

Foundations for the proposed building should be bottomed below an imaginary line extending up at a 1.5:1 (horizontal to vertical) inclination from the base of utility trenches. Alternatively, the portion of the utility trench (excluding bedding) that is below the 1.5:1 line can be backfilled with controlled low-strength material (CLSM) with a 28-day unconfined compressive strength of at least 100 pounds per square inch (psi). If utility trenches are to be excavated below this 1.5:1 line after construction of the building foundations, the trench walls need to be fully supported with shoring until CLSM is placed.

Where utility trenches enter the building pad, low-permeability plug consisting of sand-cement slurry, at least three feet in length, should be installed where the trenches enter the building footprint. A typical detail for the recommended utility trench low-permeability plug at building perimeters is presented on Figure 6. Furthermore, where sand- or gravel-backfilled trenches cross planter areas and pass below asphalt or concrete pavements, a similar plug should be placed at the edge of the pavement. The purpose of these recommendations is to reduce the potential for water to become trapped in trenches beneath the building or pavements. This trapped water can cause heaving of soils beneath slabs and softening of subgrade soil beneath pavements.

7.2 Surface Drainage and Landscaping

7.2.1 Surface Drainage

Positive surface drainage should be provided around the building to direct surface water away from the foundations. To reduce the potential for water ponding adjacent to the building, we recommend the ground surface within a horizontal distance of five feet from the building slope down away from the building with a surface gradient of at least two percent in unpaved areas and one percent in paved areas. In addition, roof downspouts should be discharged into controlled drainage facilities to keep the water away from the foundations. The use of water-intensive landscaping around the perimeter of the building should be avoided to reduce the amount of water introduced to the expansive clay subgrade.

Care should be taken to minimize the potential for subsurface water to collect beneath flatwork and pavements. Where landscape beds and tree wells are immediately adjacent to pavements or flatwork that are not designed as permeable systems, we recommend vertical cutoff barriers be incorporated into the design to prevent irrigation water from saturating the subgrade and aggregate base. These barriers may consist of either flexible impermeable membranes or deepened concrete curbs.

7.2.2 Landscaping

Prior experience and industry literature indicate that some species of high water-demand[7] trees can induce ground-surface settlement by drawing water from the expansive clay, causing it to shrink. Where these types of trees are planted near buildings, the ground-surface settlement may result in damage to structures. This problem usually occurs 10 or more years after planting, as the trees reach mature height. To reduce the risk of tree-induced, building settlement, we recommend trees of the following genera not be planted within 25 feet of the proposed building unless adequate deep irrigation is provided at the tree locations: *Eucalyptus, Populus, Quercus, Crataegus, Salix, Sorbus* (simple-leafed), *Ulmus, Cupressus, Chamaecyparis,* and

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[7] "Water-demand" refers to the ability of the tree to withdraw large amounts of water from the soil subgrade, rather than soil suction exerted by the root system.

Cupressocyparis. Because this is a limited list and does not include all genera that may induce ground-surface settlement, a tree specialist should be consulted prior to selection of trees to be planted at the site.

7.2.3 Bioswales

The primary concerns with bioswales are: 1) providing suitable support for foundations and curbs constructed near the bioswales, and 2) potential for subsurface water from the bioswales to migrate (and possibly build up) beneath pavements and the proposed building. Consequently, we recommend that: 1) bioswales constructed at the site be provided with underdrains and/or drain inlets, and 2) bioswales be constructed no closer than five feet from the building. The subdrain pipes should be installed eight inches above the bottom of the bottom of the bioswale for treatment areas that are at least five feet away from the new building and pavements. The intent of this recommendation is to allow infiltration into the underlying soil, but to reduce the potential for bio-retention areas to flood during periods of heavy rainfall. The sides of bioswales should be sloped at a maximum gradient of 1.5:1 (horizontal:vertical).

Where bioswales must be located within five feet of the new building and pavements, the bottom of the bioswale should be lined with an impermeable liner. Where a vertical curb or foundation is constructed near a bioswale, the curb and the edge of the foundation should be founded below an imaginary line extending up at an inclination of 1.5:1 (horizontal:vertical) from the base of the bioswale.

7.3 Spread Footings

Continuous footings should be at least 18 inches wide and isolated spread footings should be at least 24 inches wide. The perimeter footing should be continuous and should be bottomed at least 30 inches below the outside grade. The perimeter footing embedment depth may be decreased by six inches where pavement or concrete flatwork is adjacent to the new building. Interior isolated spread footings should be bottomed at least 24 inches below the adjacent soil subgrade (top of select fill and bottom of capillary break, where included). Footings to be constructed near underground utilities or underslab vaults should be bottomed below an imaginary line extending up at an inclination of 1.5:1 (horizontal:vertical) from the bottom of the utility trench or vault.

The footings may be designed using allowable bearing pressures of 4,000 pounds per square foot (psf) for dead-plus-live loads and 5,300 psf for total design loads, which include wind or seismic forces. The recommended allowable bearing pressures for dead-plus-live loads and total loads include factors of safety of at least 2.0 and 1.5, respectively.

Lateral loads on shallow footings may be resisted by a combination of passive pressure acting on the vertical faces of the footings and friction between the bottoms of the footings and the supporting soil. To compute passive resistance for transient loading, we recommend using an allowable uniform pressure of 2,000 psf (rectangular distribution). To compute passive resistance for sustained lateral loads, we recommend using an equivalent fluid weight (triangular distribution) of 240 pcf. The upper foot of soil should be ignored unless confined by a slab or pavement. Frictional resistance should be computed using a base friction coefficient of 0.3. The passive pressure and frictional resistance values include a factor of safety of at least 1.5 and may be used in combination without reduction.

Footings should bottom on firm native alluvium. We should check footing excavations prior to placement of reinforcing steel. Foundation excavations should be free of standing water, debris, fill, and disturbed materials prior to placing concrete. If footings are excavated during the rainy season, they should incorporate a mud slab to protect the footing subgrade. This will involve over-excavating the footing by about 2 to 3 inches and placing lean concrete or sand-cement slurry in the bottom (following inspection by our engineer). A mud slab will help protect the footing subgrade during placement of reinforcing steel. Water can then be pumped from the excavations prior to placement of structural concrete, if present. The bottoms and sides of the footing excavations should be moistened following excavation and maintained in a moist condition until concrete is placed.

7.4 Floor Slabs

The building slab-on-grade floor should be underlain by at least 18 inches of non-expansive soil consisting of either imported select fill or lime-treated on-site soil. The capillary break material discussed below should not be counted as part of the non-expansive soil.

Where water vapor transmission through the slab is considered detrimental, we recommend installing a capillary moisture break and water vapor retarder beneath the floor slab (above the 18-inch-thick non-expansive fill layer). A vapor retarder and capillary moisture break are generally not required beneath parking garage floor slabs because there is sufficient air circulation to allow evaporation of moisture that is transmitted through the slab; however, we recommend the vapor retarder and capillary break be installed below the slab-on-grade in finished spaces, utility rooms, and any areas in or adjacent to the parking garage that will be used for storage and/or will receive a floor covering or coating.

A capillary moisture break consists of at least four inches of clean, free-draining gravel or crushed rock. The vapor retarder should meet the requirements for Class B vapor retarders stated in ASTM E1745. The vapor retarder should be placed in accordance with the requirements of ASTM E1643. These requirements include overlapping seams by six inches, taping seams, and sealing penetrations in the vapor retarder. The particle size of the capillary break material and sand (if used) should meet the gradation requirements presented in Table 3.

TABLE 3
Gradation Requirements for Capillary Moisture Break

Sieve Size	Percentage Passing Sieve
1 inch	90 – 100
3/4 inch	30 – 100
1/2 inch	5 – 25
3/8 inch	0 – 6

Concrete mixes with high water/cement (w/c) ratios result in excess water in the concrete, which increases the cure time and results in excessive vapor transmission through the slab. Where the concrete is poured directly over the vapor retarder, we recommend the w/c ratio of the concrete not exceed 0.45. Water should not be added to the concrete mix in the field. If necessary, workability should be increased by adding plasticizers. In addition, the slabs should be properly cured. Before floor coverings, if any, are placed, the contractor should check that the concrete surface and the moisture emission levels (if emission testing is required) meet the manufacturer's requirements.

7.5 Exterior Concrete Flatwork

We recommend a minimum of four inches of Class 2 aggregate base be placed over 12 inches of non-expansive soil (see Sections 7.1.1 and 7.1.2) beneath proposed exterior concrete flatwork; the non-expansive soil should extend at least six inches beyond the slab edges. Non-expansive soil beneath exterior slabs-on-grade, such as patios and sidewalks, should be moisture-conditioned and compacted in accordance with the requirements provided in Table 2. Class 2 aggregate base beneath concrete flatwork should be compacted to at least 90 percent relative compaction.

Even with 16 inches of non-expansive soil (including aggregate base layer), exterior slabs may experience some cracking due to shrinking and swelling of the underlying expansive soil. Thickening the slab edges and adding additional reinforcement will control this cracking to some degree. Where slabs are adjacent to landscaped areas, thickening the concrete edge will help control water infiltration beneath the slabs. In addition, where slabs provide access to the building, it would be prudent to dowel the entrance to the building to permit rotation of the slab as the exterior ground shrinks and swells and to prevent a vertical offset at the entries.

We do not recommend the use of pervious interlocking pavers at this site, due to the expansive subgrade soil. If pavers must be incorporated into this project, we should provide additional recommendations for proper subgrade preparation and subsurface drainage.

7.6 Permanent Below-Grade Walls

Below-grade walls (i.e., elevator pit walls) should be designed to resist lateral earth pressure imposed by the retained soil. Since the elevator pit walls will be restrained from movement at the sides, they should be designed for at-rest conditions. We recommend restrained walls be designed using at-rest equivalent fluid weights of 60 and 91 pcf if the walls are drained and undrained, respectively. To evaluate the below-grade walls for seismic loading, we recommend using an active equivalent fluid weight of 40 pcf plus a seismic increment of 35 pcf (triangular distribution) for drained conditions; and an active equivalent fluid weight of 82 pcf plus a seismic increment of 17 pcf (triangular distribution) for undrained conditions.

To protect against moisture migration, below-grade walls should be waterproofed and water stops should be placed at all construction joints. Although the below-grade walls will be above the design groundwater level, water can accumulate behind the walls from other sources, such as rainfall, irrigation, and broken water lines, etc. If the “drained” earth pressures presented above are used to design the walls, they will need to incorporate a drainage system. Alternatively, the walls may be designed for the recommended “undrained” earth pressures presented above over their entire height, in which case the drainage system may be omitted.

One acceptable method for backdraining an elevator pit wall is to place a prefabricated drainage panel against the back of the wall. The drainage panel should extend down to a perforated PVC collector pipe at the base of the wall. The pipe should be surrounded on all sides by at least four inches of Caltrans Class 2 permeable material or 3/4-inch drain rock wrapped in filter fabric (Mirafi NC or equivalent). A proprietary, prefabricated collector drain system, such as Tremdrain Total Drain or Hydroduct Coil (or equivalent), designed to work in conjunction with the drainage panel may be used in lieu of the perforated pipe surrounded by gravel described above. The pipe should be connected to a suitable discharge point; a sump and pump system may be required to drain the collector pipes.

7.7 Seismic Design

As discussed in Section 5.2.3, the site is underlain by relatively thin layers of potentially liquefiable soil. Although the 2019 CBC call for a Site Class F designation for sites underlain by potentially liquefiable soil, we conclude a Site Class D designation is more appropriate because the potentially liquefiable layers are thin and relatively dense such that the site will not incur significant non-linear behavior during strong ground shaking. Therefore, for seismic design, we recommend Site Class D be used.

The latitude and longitude of the site are 37.8270° and -122.2694°, respectively. For design in accordance with 2019 CBC (ASCE 7-16), we recommend the following:

- Site Class D
- S_S = 1.887g, S_1 = 0.720g

The 2019 CBC is based on the guidelines contained within ASCE 7-16. Per ASCE 7-16, where S_1 is greater than 0.2 times gravity (g) for Site Class D, a ground motion hazard analysis is needed unless the seismic response coefficient (C_s) value will be calculated as outlined in Section 11.4.8, Exception 2 of ASCE 7-16. Assuming the C_s value will be calculated as outlined in Section 11.4.8, Exception 2 of ASCE 7-16, we recommend the following seismic design parameters:

- F_a = 1.0, F_v =1.7
- S_{MS} = 1.887g, S_{M1} = 1.224g
- S_{DS} = 1.258g, S_{D1} = 0.816g
- Seismic Design Category D for Risk Factors I, II, and III

Depending on the structural design methodology and fundamental period of the proposed building, it may be advantageous to perform a ground motion hazard analysis (the project structural engineer should confirm). We can perform a ground motion hazard analysis upon request.

8.0 GEOTECHNICAL SERVICES DURING CONSTRUCTION

Prior to construction, Rockridge Geotechnical should review the project plans and specifications to verify that they conform to the intent of our recommendations. During construction, our field engineer should provide on-site observation and testing during site preparation, placement and compaction of fill and aggregate base and installation of foundations. These observations will allow us to compare actual with anticipated soil conditions and to verify that the contractor's work conforms to the geotechnical aspects of the plans and specifications.

9.0 LIMITATIONS

This geotechnical investigation has been conducted in accordance with the standard of care commonly used as state-of-practice in the profession. No other warranties are either expressed or implied. The recommendations made in this report are based on the assumption that the subsurface conditions do not deviate appreciably from those disclosed in the borings and CPTs. If any variations or undesirable conditions are encountered during construction, we should be notified so that additional recommendations can be made. The foundation recommendations presented in this report are developed exclusively for the proposed development described in this report and are not valid for other locations and construction in the project vicinity.

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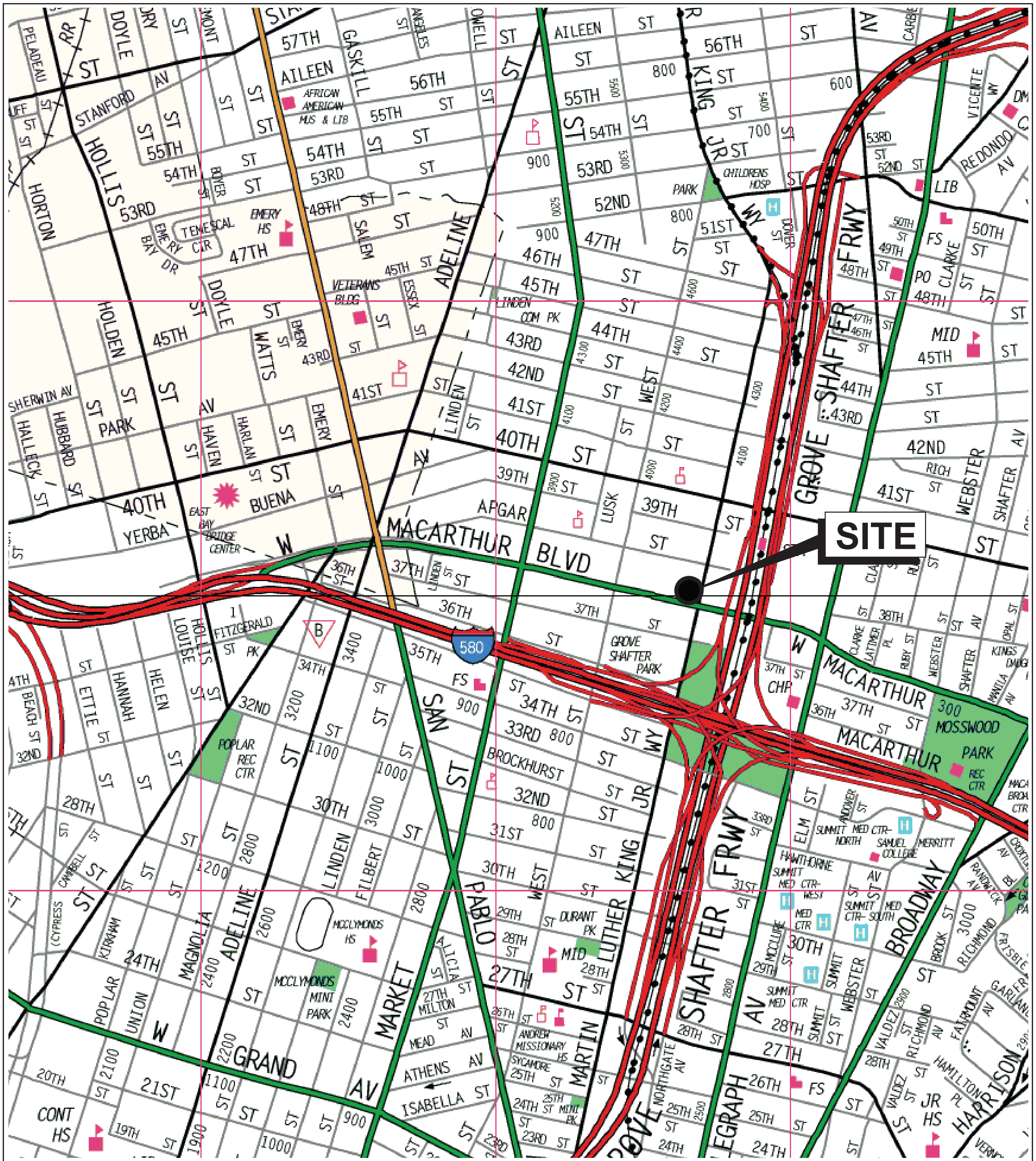
ROCKRIDGE GEOTECHNICAL

FIGURES



Base map: The Thomas Guide
Alameda County
2002

0 1/4 1/2 Mile
Approximate scale

3801 MARTIN LUTHER KING JUNIOR WAY
Oakland, California

ROCKRIDGE GEOTECHNICAL

SITE LOCATION MAP

Date 11/03/19	Project No. 19-1769	Figure 1

Base map: Google Earth Pro, 2018.

EXPLANATION

CPT-1 — Approximate location of cone penetration test by Rockridge Geotechnical Inc., November 12, 2019

B-1 — Approximate location of boring by Rockridge Geotechnical Inc., November 12, 2019

Project limits

0 50 Feet

Approximate scale

3801 MARTIN LUTHER KING JUNIOR WAY
Oakland, California

ROCKRIDGE GEOTECHNICAL

SITE PLAN

Date 12/09/19	Project No. 19-1769	Figure 2

Base map: USGS MF 2342, Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California (Graymer, 2000).

EXPLANATION

- Contact - Depositional or intrusive contact, dashed where approximately located, dotted where concealed
- Fault - Dashed where approximately located, small dashed where inferred, dotted where concealed, queried where locations is uncertain
- Reverse or thrust fault - Dotted where concealed
- Anticline -Shows fold axis, dotted where concealed
- Syncline
- 35 Strike and dip of bedding
- Overturned bedding
- Flat bedding
- Vertical bedding
- 35 Strike and dip of foliation
- Vertical foliation
- 35 Strike and dip of joints in plutonic rocks
- Vertical joint

af	Artificial fill (Historic)
Qhaf	Alluvial fan and fluvial deposits (Holocene)
Qpaf	Alluvial fan and fluvial deposits (Plestocene)
Qms	Merritt sand (Holocene and Pleistocene)
Qmt	Marine terrace deposits (Pleistocene)
Kfn	Sandstone of the Novato Quarry terrane of Blake and others (1984) (Late Cretaceous)

N

0 2,000 4,000 Feet

Approximate scale

3801 MARTIN LUTHER KING JUNIOR WAY
Oakland, California

ROCKRIDGE GEOTECHNICAL

REGIONAL GEOLOGIC MAP

Date 11/03/19 | Project No. 19-1769 | Figure 3

Base Map: U.S. Geological Survey (USGS), National Seismic Hazards Maps - Fault Sources, 2008.

EXPLANATION

Strike slip

Thrust (Reverse)

Normal

0 5 10 Miles

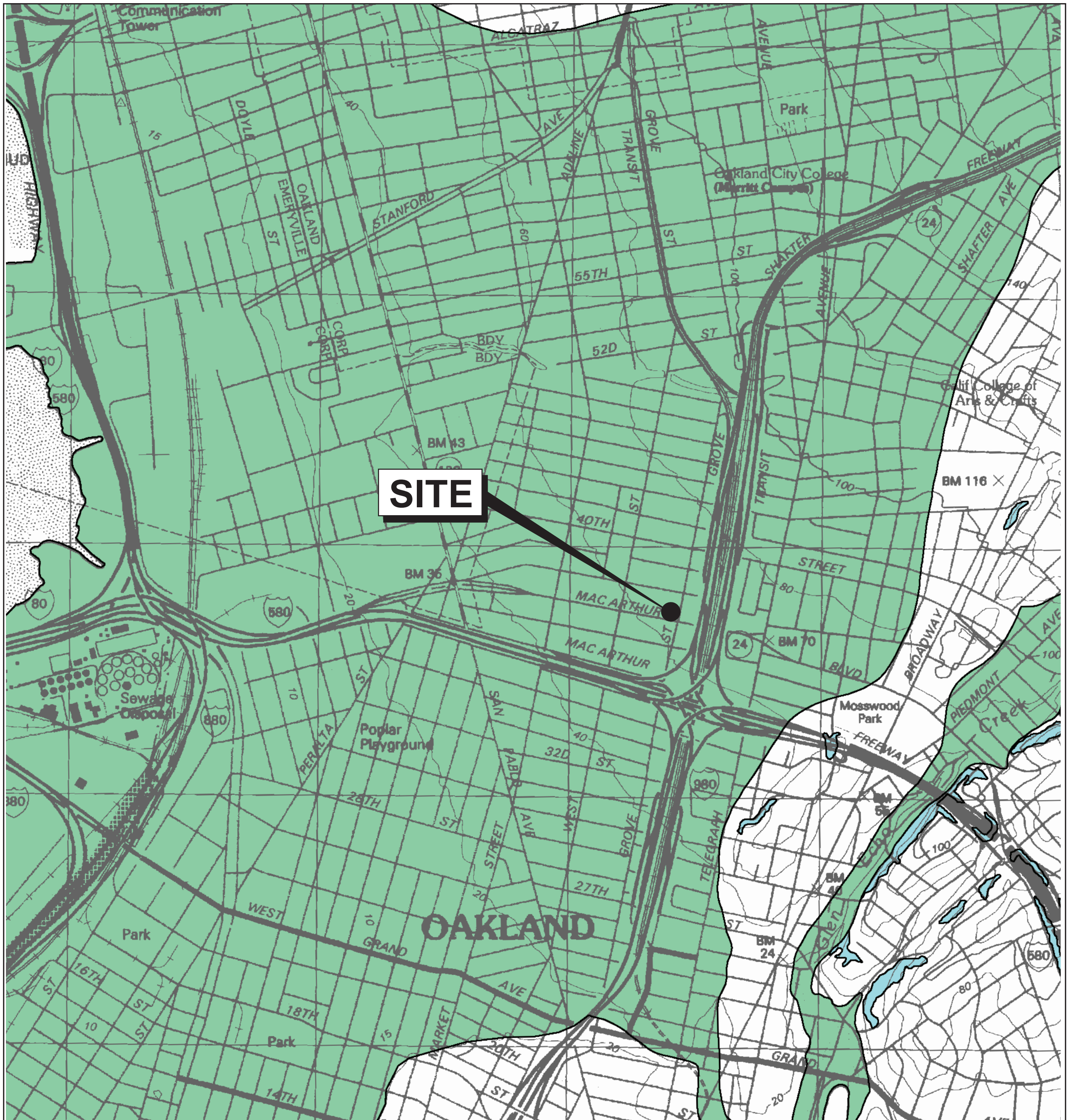
Approximate scale

3801 MARTIN LUTHER KING JUNIOR WAY
Oakland, California

ROCKRIDGE GEOTECHNICAL

REGIONAL FAULT MAP

Date 11/03/19 | Project No. 19-1769 | Figure 4



EXPLANATION

Liquefaction; Areas where historic occurence of liquefaction, or local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements.

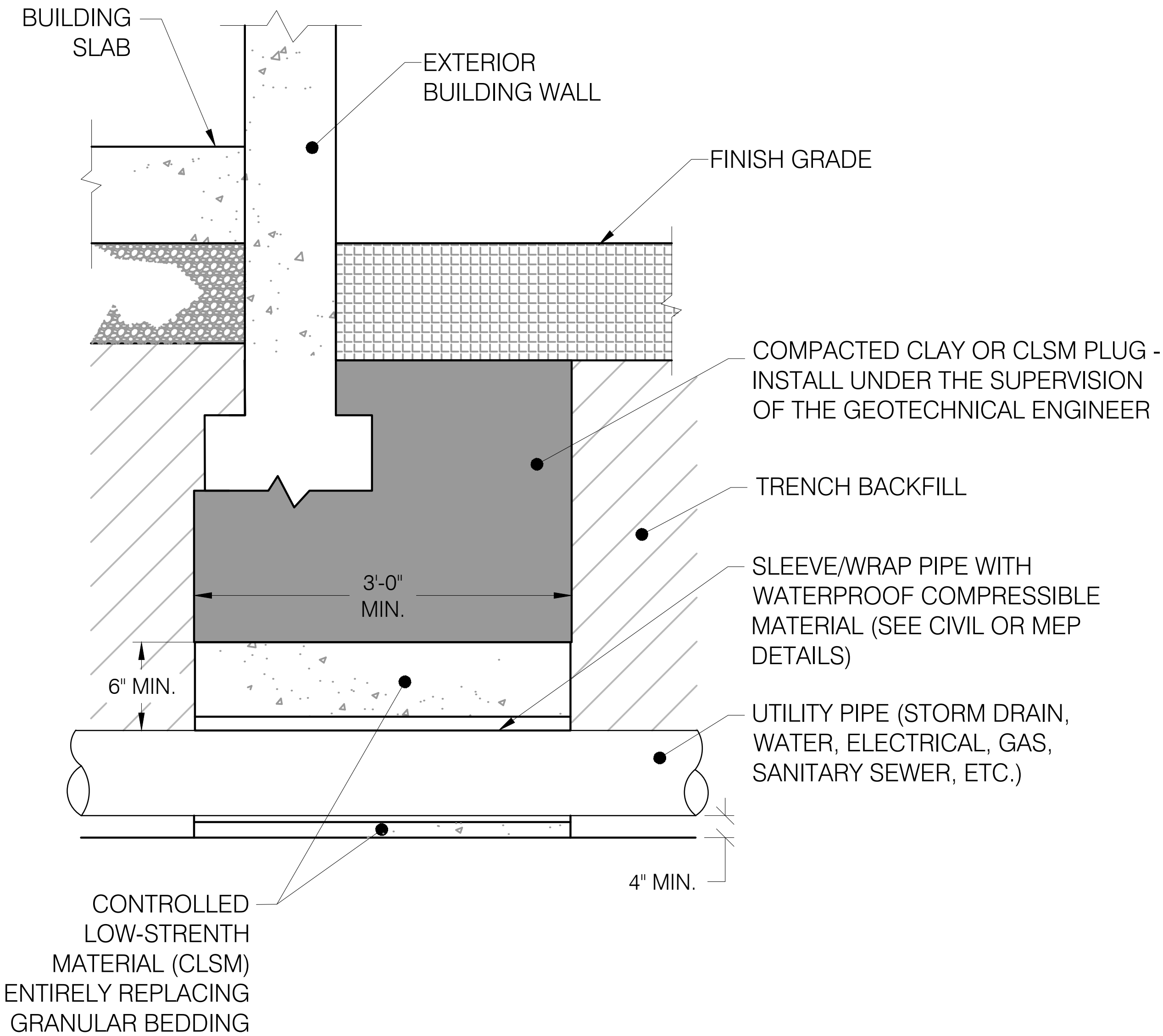
Earthquake-Induced Landslides; Areas where previous occurence of landslide movement, or local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements.

0 2,000 4,000 Feet

Approximate scale

Reference:
State of California "Seismic Hazard Zones"
Oakland West Quadrangle.
Released on February 14, 2003

3801 MARTIN LUTHER KING JUNIOR WAY Oakland, California	SEISMIC HAZARDS ZONE MAP		
ROCKRIDGE GEOTECHNICAL	Date 11/03/19	Project No. 19-1769	Figure 5



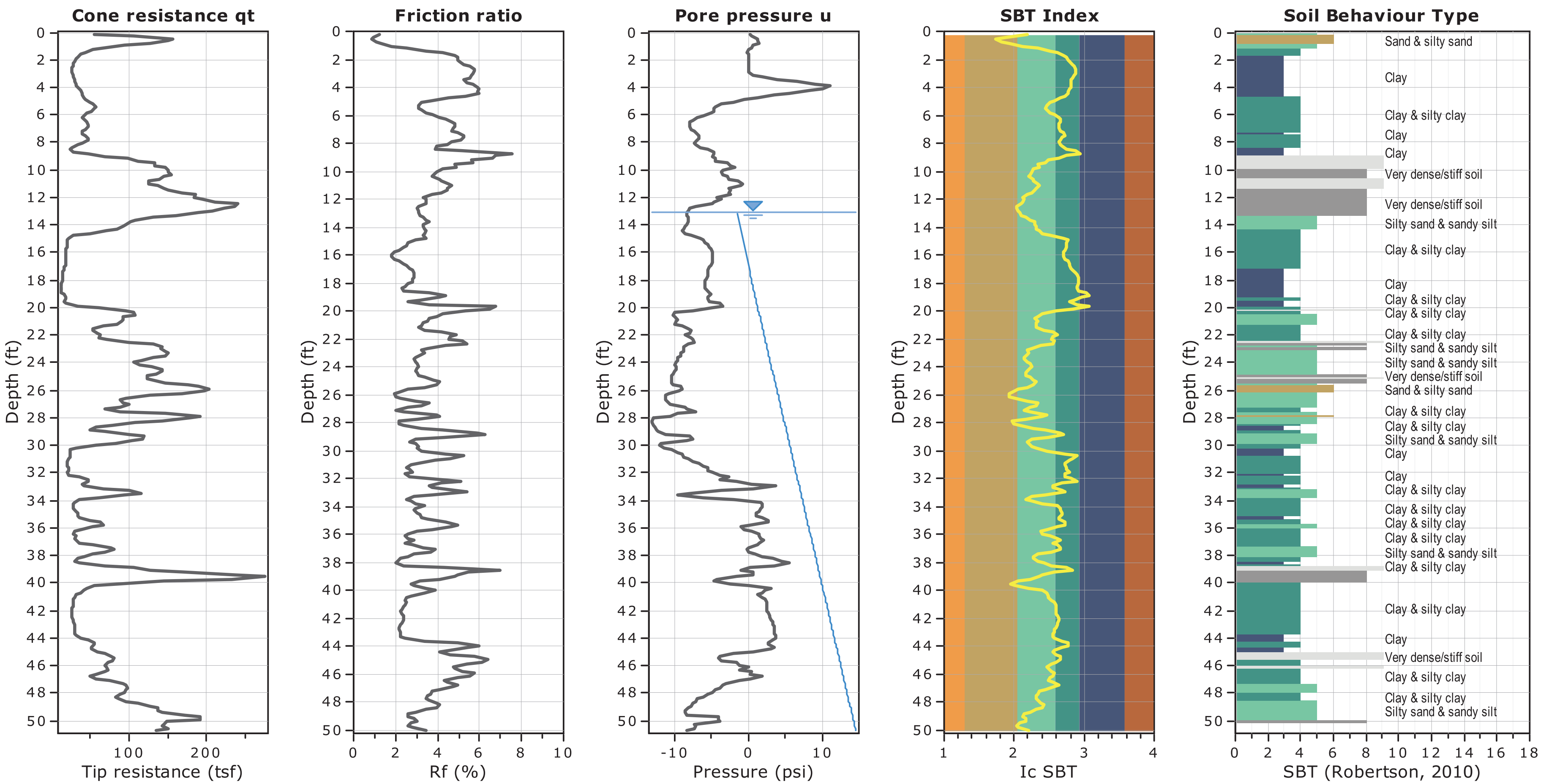
Not to Scale

3801 MARTIN LUTHER KING JUNIOR WAY Oakland, California	**UTILITY TRENCH LOW-PERMEABILITY PLUG AT BUILDING PERIMETER**
ROCKRIDGE GEOTECHNICAL	Date 12/03/19 | Project No. 19-1769 | Figure 6

ROCKRIDGE GEOTECHNICAL

APPENDIX A

Cone Penetration Test Results and Boring Logs



SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

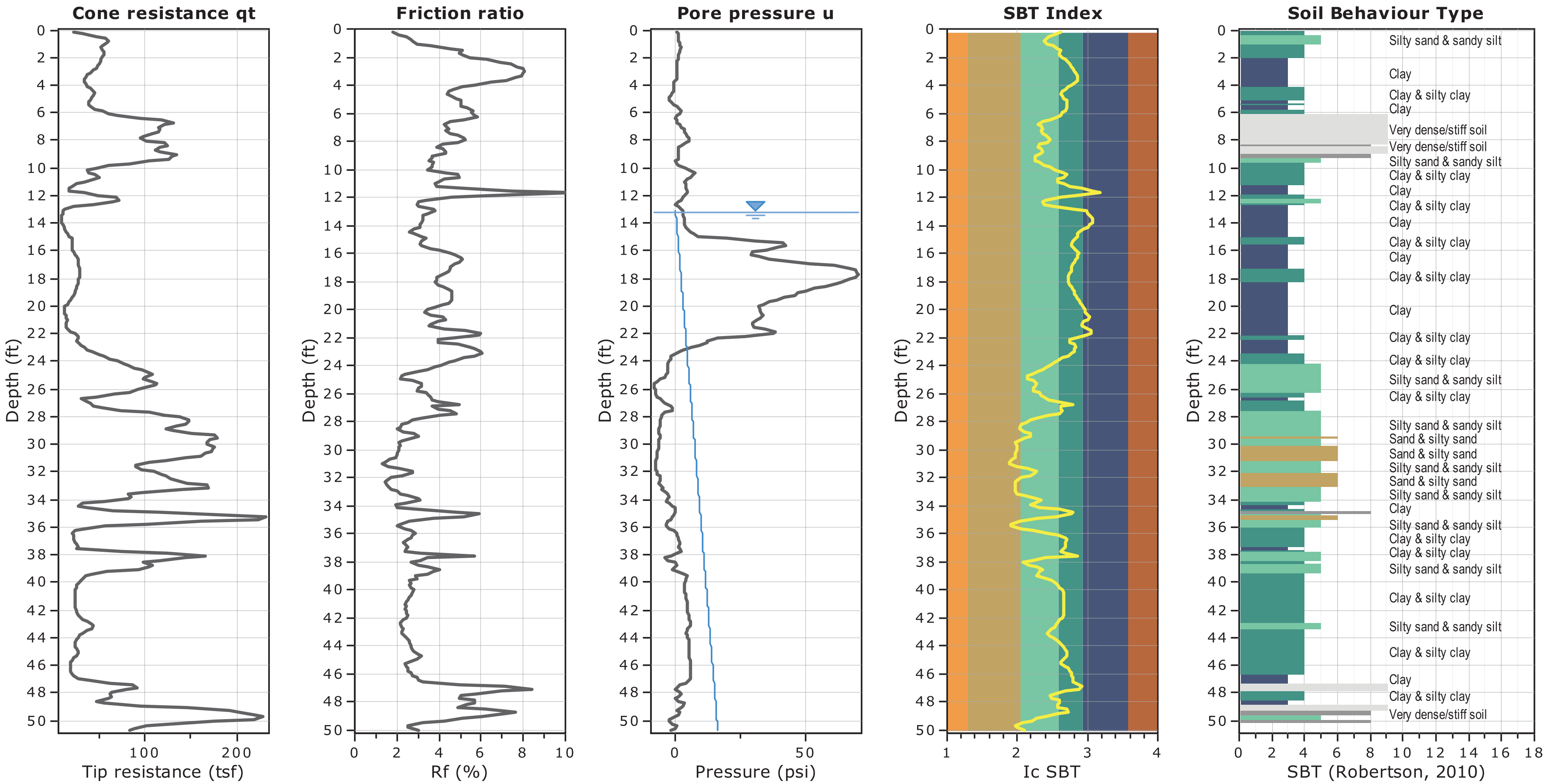
Total depth: 50.7 ft, Date: 11/12/2019
Estimated Groundwater Depth: 13 feet (based on Boring B-1 and B-2)
Cone Operator: Middle Earth Geo Testing, Inc.

3801 MARTIN LUTHER KING JUNIOR WAY
Oakland, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-1

Date 12/11/19 | Project No. 19-1769 | Figure A-1



SBT legend

1. Sensitive fine grained	4. Clayey silt to silty clay	7. Gravely sand to sand
2. Organic material	5. Silty sand to sandy silt	8. Very stiff sand to clayey sand
3. Clay to silty clay	6. Clean sand to silty sand	9. Very stiff fine grained

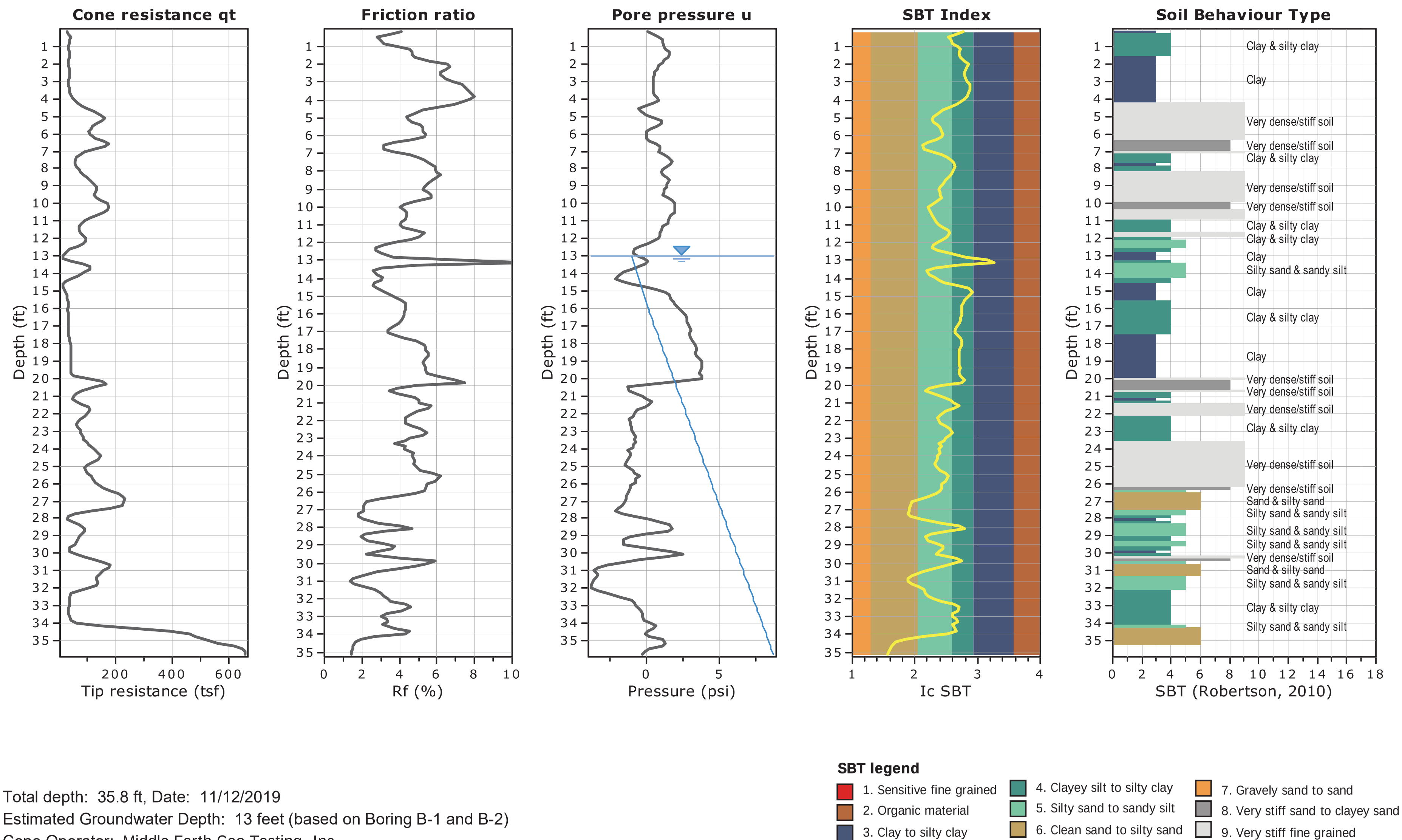
Total depth: 50.7 ft, Date: 11/12/2019
Estimated Groundwater Depth: 13 feet (based on Boring B-1 and B-2)
Cone Operator: Middle Earth Geo Testing, Inc.

3801 MARTIN LUTHER KING JUNIOR WAY
Oakland, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-2

Date 12/11/19 | Project No. 19-1769 | Figure A-2



Total depth: 35.8 ft, Date: 11/12/2019
Estimated Groundwater Depth: 13 feet (based on Boring B-1 and B-2)
Cone Operator: Middle Earth Geo Testing, Inc.

3801 MARTIN LUTHER KING JUNIOR WAY
Oakland, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-3

Date 12/11/19	Project No. 19-1769	Figure A-3

PROJECT: **3801 MARTIN LUTHER KING JUNIOR WAY**
Oakland, California

Log of Boring B-1

Boring location:	See Site Plan, Figure 2
Date started:	11/12/2019
Date finished:	11/12/2019
Drilling method:	8-inch-diameter Hollow-Stem Auger
Hammer weight/drop:	140 lbs./30 inches
Hammer type:	Downhole Wireline
Sampler:	Sprague & Henwood (S&H), Standard Penetration Test (SPT)
Logged by:	K. Dickinson
Drilled by:	Exploration Geoservices, Inc.
Rig:	Mobile B40

DEPTH (feet)	Sampler Type	Blows/ 6"	SPT N-Value[1]	LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
0–2.2	S&H	23, 21, 27	30	CH	CLAY with SAND (CH) dark brown, very stiff to hard, dry to moist LL = 57, PI = 35; see Appendix B					21.3	
2.2–5.5	S&H	11, 14, 27	26	CL	CLAY (CL) olive-brown, very stiff, moist Corrosivity Tests; see Appendix B					15.8	116
5.5–6.8	S&H	13, 22, 35	36	CL	CLAY with GRAVEL (CL) olive-brown, hard, moist						
6.8–10				SC	CLAYEY SAND (SC) red-brown, dense, moist						
10–15	S&H	14, 26, 30	35	SP-SC	SAND with CLAY (SP-SC) yellow-brown, dense, moist to wet, trace gravel ▼ (11/12/2019; 12:40 PM)						
15–16.5	S&H	9, 10, 16	16	GP-GC	GRAVEL with CLAY and SAND (GP-GC) brown, medium dense, wet ▽ (11/12/2019; 2:03 PM)						
16.5–20.5				CL	CLAY with SAND (CL) yellow-brown, very stiff, wet						
20.5–25	S&H	6, 7, 8	10	SC	CLAYEY SAND (SC) olive-brown and yellow-brown, loose to medium dense, wet Particle Size Distribution; see Appendix B				44	25.2	101
25–28	S&H	15, 26, 26	33	SP-SC	CLAYEY SAND with GRAVEL (SC) brown, dense, wet						
	SPT	11, 12, 13	27		medium dense						
28–30				SC	CLAYEY SAND (SC) olive-brown, wet						

ROCKRIDGE GEOTECHNICAL

Project No.: 19-1769
Figure: A-4a

PROJECT: **3801 MARTIN LUTHER KING JUNIOR WAY**
Oakland, California

Log of Boring B-1

DEPTH (feet)	Sampler Type	Sample	Blows/ 6"	SPT N-Value[1]	LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
31	S&H		28 46 27	46	SC	CLAYEY SAND with GRAVEL (SC) brown, dense, wet, coarse sand						
32												
33												
34												
35												
36	SPT		20 36 33	75	SC-SP	SAND with CLAY (SC-SP) brown, very dense, wet, coarse sand						
37												
38												
39	S&H		25 40 37	49		dense						
40					CL	SANDY CLAY (CL) olive-brown, hard, wet						
41												
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												

Boring terminated at a depth of 40 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at a depth of 13 and 16 feet during drilling.

[1] S&H and SPT blow counts for the last two increments were converted to SPT N-Values using factors of 0.63 and 1.08, respectively, to account for sampler type and hammer energy.

ROCKRIDGE GEOTECHNICAL

Project No.: 19-1769

Figure: A-4b

PROJECT: **3801 MARTIN LUTHER KING JUNIOR WAY**
Oakland, California

Log of Boring B-2

Boring location:	See Site Plan, Figure 2
Date started:	11/12/2019
Date finished:	11/12/2019
Drilling method:	8-inch-diameter Hollow-Stem Auger
Hammer weight/drop:	140 lbs./30 inches
Hammer type:	Downhole Wireline
Sampler:	Sprague & Henwood (S&H), Standard Penetration Test (SPT)
Logged by:	K. Dickinson
Drilled by:	Exploration Geoservices, Inc.
Rig:	Mobile B40

LABORATORY TEST DATA

DEPTH (feet)	Sampler Type	Blows/ 6"	SPT N-Value[1]	LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
0–1					SANDY CLAY (CL) dark brown, very stiff, dry to moist						
2	S&H	17 18 22	25							15.3	102
4	S&H	23 30 38	43		yellow-brown, hard LL = 30, PI = 15; see Appendix B Corrosivity Tests; see Appendix B					11.0	113
5				CL	gray-brown, moist, fine sand, trace gravel						
6	S&H	10 24 49	46							15.3	107
10				CL	CLAY with SAND (CL) brown, hard, moist, coarse sand, trace gravel						
11	S&H	11 18 30	30	CL	CLAY (CL) olive-brown, very stiff to hard, moist						
12				SC	CLAYEY SAND with GRAVEL (SC) brown, dense, moist to wet ∇ (11/12/2019; 3:40 PM)						
15				GP-GC	GRAVEL with CLAY and SAND (GP-GC) brown, wet						
16	S&H	6 5 9	9	CL	CLAY (CL) olive-brown, stiff, wet trace gravel Consolidation Test; see Appendix B					20.9	106
21	S&H	18 23 30	33	CL	CLAY with SAND and GRAVEL (CL) olive-brown, hard, wet						
22–23	SPT	18 28 30	63		CLAYEY SAND with GRAVEL (SC) brown, very dense, wet, coarse sand						
26	SPT	15 33 32	80	SC							
30											

ROCKRIDGE GEOTECHNICAL

Project No.: 19-1769

Figure: A-5a

PROJECT: **3801 MARTIN LUTHER KING JUNIOR WAY**
Oakland, California

Log of Boring B-2

DEPTH (feet)	Sampler Type	Sample	Blows/ 6"	SPT N-Value[1]	LITHOLOGY	MATERIAL DESCRIPTION	Type of Strength Test	Confining Pressure Lbs/Sq Ft	Shear Strength Lbs/Sq Ft	Fines %	Natural Moisture Content, %	Dry Density Lbs/Cu Ft
31	SPT		17 25 18	46	SC	CLAYEY SAND (SC) olive-brown, very dense, wet, trace gravel						
34						olive-gray, dense						
36	S&H		8 23 28	32	SC	CLAYEY SAND with GRAVEL (SC) olive-gray, dense, wet, coarse sand						
39	S&H		10 23 36	37	CL	CLAY with SAND (CL) olive-gray and red-brown, hard, wet						

Depth scale: 31–60 feet.

Boring terminated at a depth of 40 feet below ground surface.
Boring backfilled with cement grout.
Groundwater encountered at a depth of 13 feet during drilling.

[1] S&H and SPT blow counts for the last two increments were converted to SPT N-Values using factors of 0.63 and 1.08, respectively, to account for sampler type and hammer energy.

ROCKRIDGE GEOTECHNICAL

Project No.: 19-1769

Figure: A-5b

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		Symbols	Typical Names
Coarse-Grained Soils (more than half of soil > no. 200 sieve size)	Gravels (More than half of coarse fraction > no. 4 sieve size)	GW	Well-graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	Sands (More than half of coarse fraction < no. 4 sieve size)	SW	Well-graded sands or gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
Fine -Grained Soils (more than half of soil < no. 200 sieve size)	Silts and Clays LL = < 50	ML	Inorganic silts and clayey silts of low plasticity, sandy silts, gravelly silts
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	Silts and Clays LL = > 50	MH	Inorganic silts of high plasticity
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic silts and clays of high plasticity
Highly Organic Soils		PT	Peat and other highly organic soils

GRAIN SIZE CHART

Classification	Range of Grain Sizes	
	U.S. Standard Sieve Size	Grain Size in Millimeters
Boulders	Above 12"	Above 305
Cobbles	12" to 3"	305 to 76.2
Gravel coarse fine	3" to No. 4 3" to 3/4" 3/4" to No. 4	76.2 to 4.76 76.2 to 19.1 19.1 to 4.76
Sand coarse medium fine	No. 4 to No. 200 No. 4 to No. 10 No. 10 to No. 40 No. 40 to No. 200	4.76 to 0.075 4.76 to 2.00 2.00 to 0.420 0.420 to 0.075
Silt and Clay	Below No. 200	Below 0.075

Unstabilized groundwater level

Stabilized groundwater level

SAMPLE DESIGNATIONS/SYMBOLS

Sample taken with Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter. Darkened area indicates soil recovered

Classification sample taken with Standard Penetration Test sampler

Undisturbed sample taken with thin-walled tube

Disturbed sample

Sampling attempted with no recovery

Core sample

Analytical laboratory sample

Sample taken with Direct Push sampler

Sonic

SAMPLER TYPE

C	Core barrel
CA	California split-barrel sampler with 2.5-inch outside diameter and a 1.93-inch inside diameter
D&M	Dames & Moore piston sampler using 2.5-inch outside diameter, thin-walled tube
O	Osterberg piston sampler using 3.0-inch outside diameter, thin-walled Shelby tube
PT	Pitcher tube sampler using 3.0-inch outside diameter, thin-walled Shelby tube
S&H	Sprague & Henwood split-barrel sampler with a 3.0-inch outside diameter and a 2.43-inch inside diameter
SPT	Standard Penetration Test (SPT) split-barrel sampler with a 2.0-inch outside diameter and a 1.5-inch inside diameter
ST	Shelby Tube (3.0-inch outside diameter, thin-walled tube) advanced with hydraulic pressure

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Oakland, California

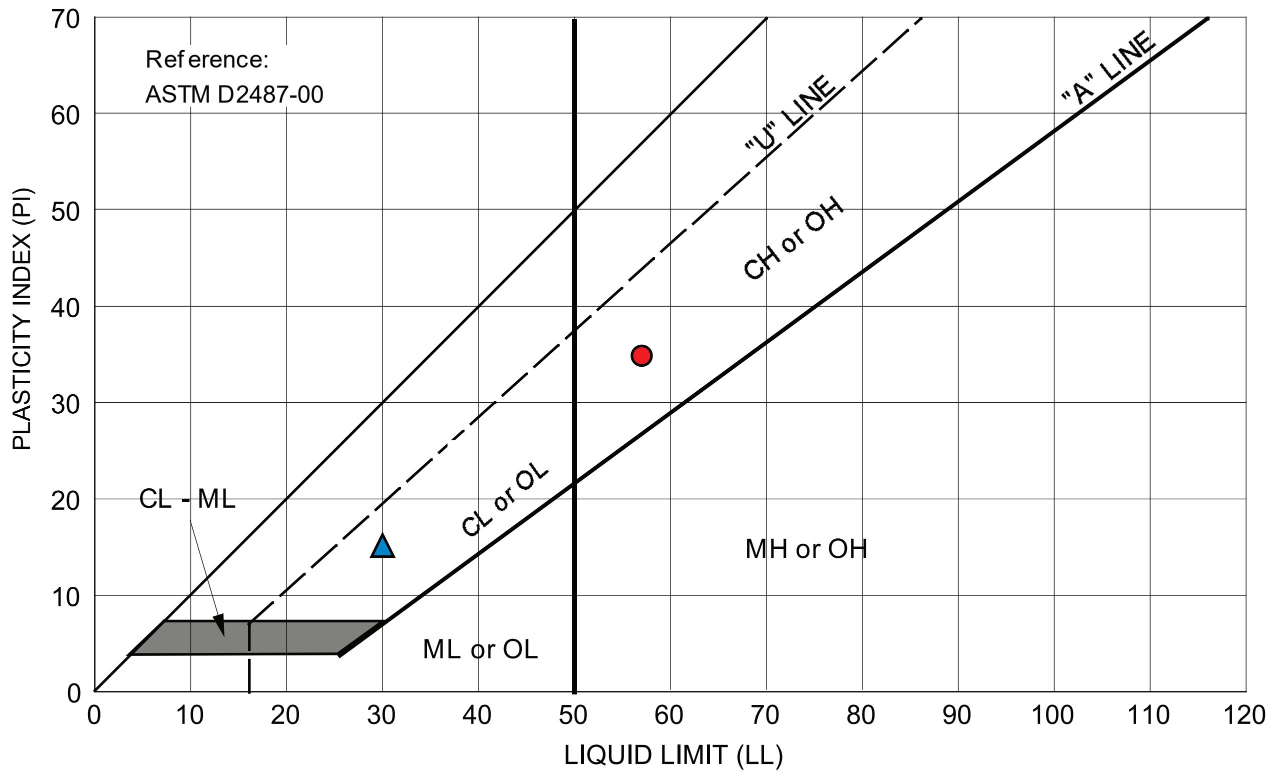
ROCKRIDGE GEOTECHNICAL

CLASSIFICATION CHART

Date 11/14/19 | Project No. 19-1769 | Figure A-6

APPENDIX B

Laboratory Test Results



Symbol	Source	Description and Classification	Natural M.C. (%)	Liquid Limit (%)	Plasticity Index (%)	% Passing #200 Sieve
●	B-1 at 2.0 feet	CLAY with SAND (CH), dark brown	21.3	57	35	--
▲	B-2 at 3.5 feet	SANDY CLAY (CL), yellow-brown	11.0	30	15	--

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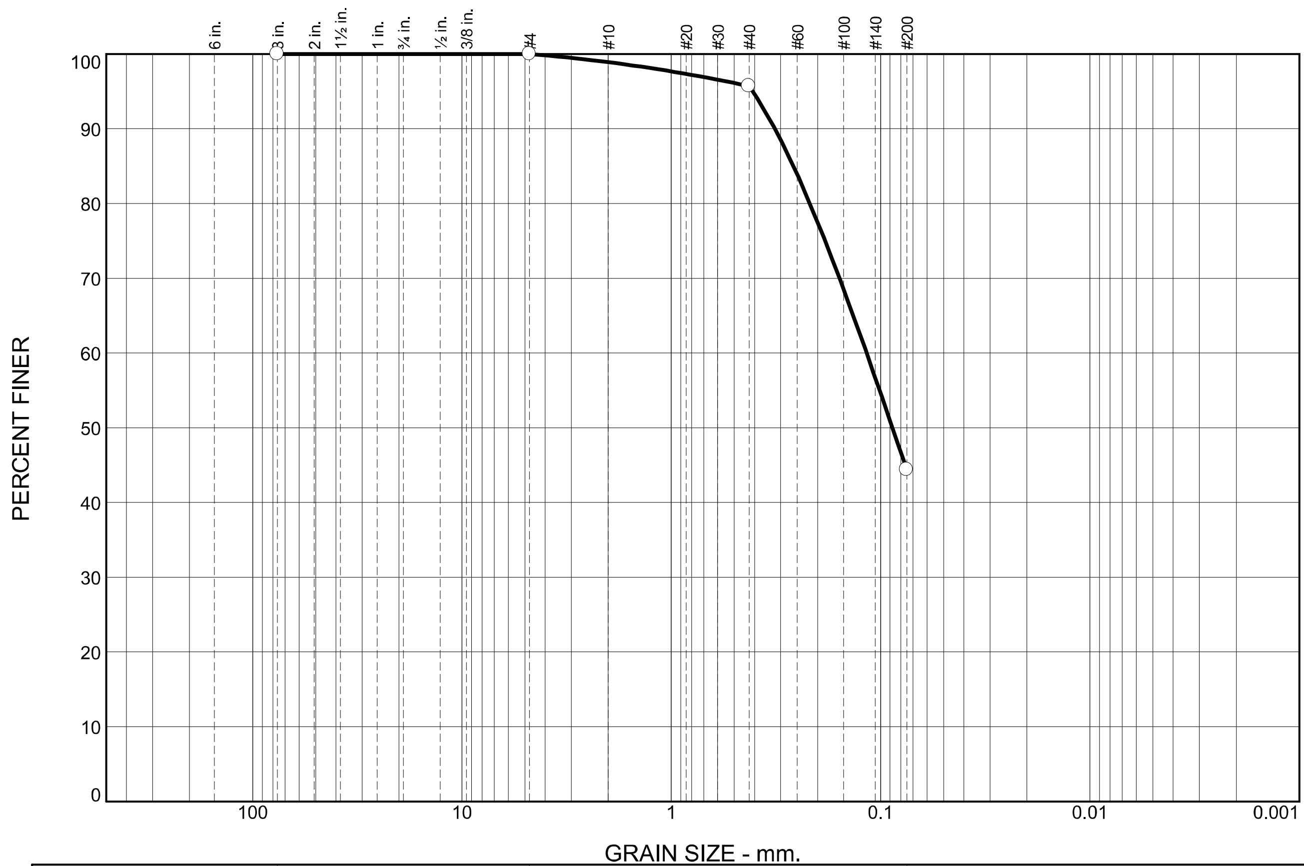
PLASTICITY CHART

Date 11/27/19 | Project No. 19-1769 | Figure B-1



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	1.1	3.2	51.3	44.4	

SOIL DATA

SYMBOL	SOURCE	DEPTH (ft.)	Material Description	USCS
○	B-1	21.0'	CLAYEY SAND, olive-brown and yellow-brown	SC

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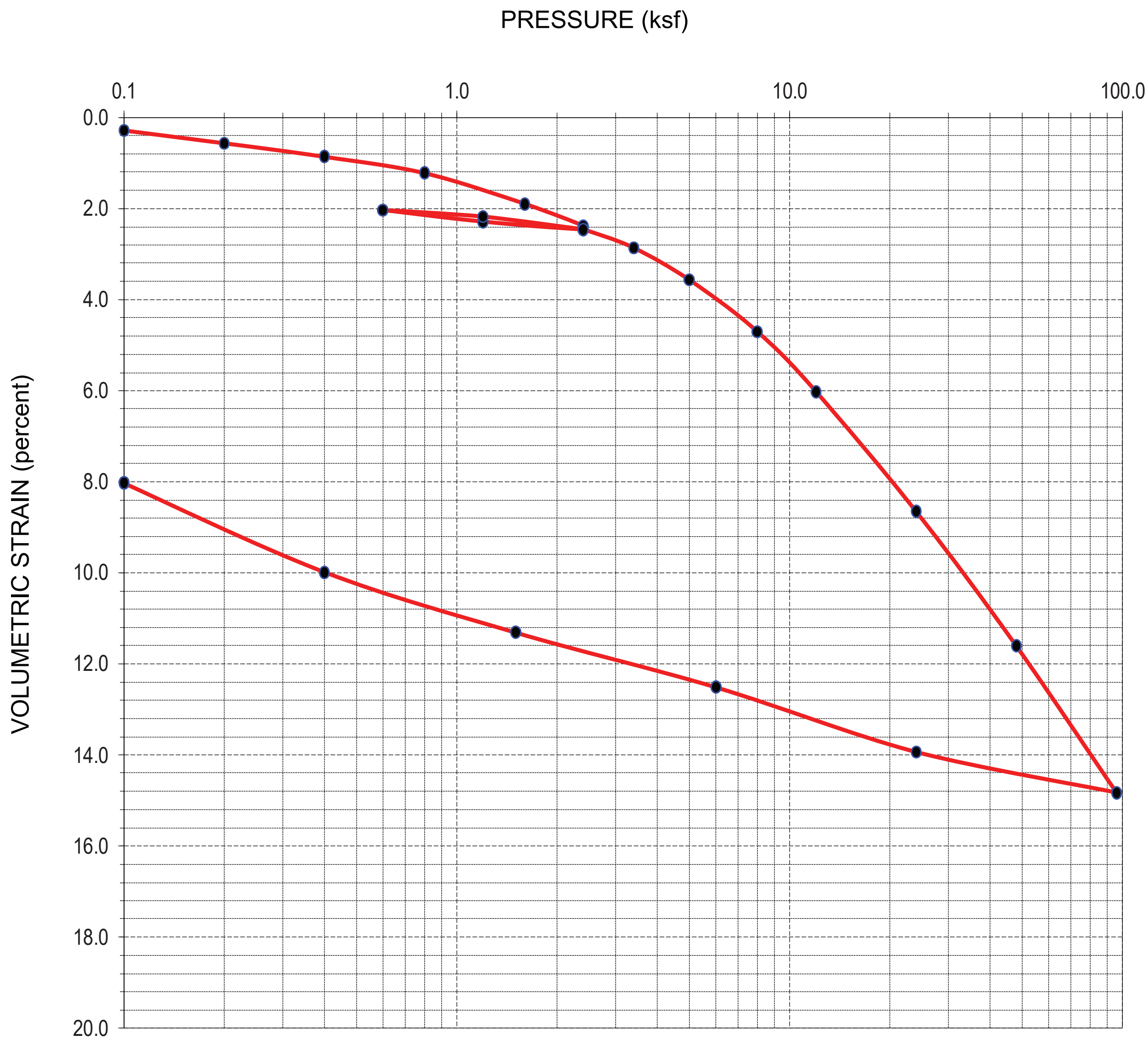
ROCKRIDGE GEOTECHNICAL

PARTICLE SIZE DISTRIBUTION REPORT

Date 11/27/19 | Project No. 19-1769 | Figure B-2



Sampler Type	Sprague and Henwood			Condition		Before test		After test	
Diameter (in) 2.42	Height (in) 0.92			Water Content	w_o	20.9 %		w_f	17.3 %
Overburden Pressure, P_o	1,700 psf			Void Ratio	e_o	0.594		e_f	0.467
Preconsol. Pressure, P_c	7,250 psf			Saturation	S_o	95.0 %		S_f	100 %
Compression Ratio, $C_{\varepsilon c}$	0.10			Dry Density	γ_d	106 pcf		γ_d	115 pcf
Recompression Ratio, $C_{\varepsilon r}$	0.01	LL	--	PL	--	PI	--	G_s	2.75 (assumed)
Description:	CLAY (CL), olive-brown					Source	B-2 at 16 feet		

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Oakland, California

ROCKRIDGE GEOTECHNICAL

CONSOLIDATION TEST REPORT

Date 12/11/19	Project No. 19-1769	Figure B-3

Results Only Soil Testing
for
3801 MLK Way, Oakland

November 19, 2019

Prepared for:
Katie Dickinson
Rockridge Geotechnical, Inc.
270 Grand Ave,
Oakland, CA 94610
ksdickinson@rockridgegeo.com

Project X Job#: S191115D
Client Job or PO#: 19-1769

Respectfully Submitted,

Eduardo Hernandez, M.Sc., P.E.
Sr. Corrosion Consultant
NACE Corrosion Technologist #16592
Professional Engineer
California No. M37102
ehernandez@projectxcorrosion.com

REGISTERED PROFESSIONAL ENGINEER
EDUARDO HERNANDEZ
No. M37102
MECHANICAL
STATE OF CALIFORNIA

Soil Analysis Lab Results

Client: Rockridge Geotechnical, Inc.
Job Name: 3801 MLK Way, Oakland
Client Job Number: 19-1769
Project X Job Number: S191115D
November 19, 2019

	Method	ASTM D4327		ASTM D4327		ASTM G187		ASTM G51	ASTM G200	SM 4500-S2-D	ASTM D4327	ASTM D4327	ASTM D4327	ASTM D4327	ASTM D4327	ASTM D4327	ASTM D4327	ASTM D4327	ASTM D4327
Bore# / Description	**Depth**	**Sulfates** SO_4^{2-}		**Chlorides** Cl^-		**Resistivity** As Rec'd	Minimum	**pH**	**Redox**	**Sulfide** S^{2-}	**Nitrate** NO_3^-	**Ammonium** NH_4^+	**Lithium** Li^+	**Sodium** Na^+	**Potassium** K^+	**Magnesium** Mg^{2+}	**Calcium** Ca^{2+}	**Flouride** F_2^-	**Phosphate** PO_4^{3-}
	(ft)	(mg/kg)	(wt%)	(mg/kg)	(wt%)	(Ohm-cm)	(Ohm-cm)		(mV)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
B-1, 2a	3.5	96.9	0.0097	2.5	0.0002	804	737	8.0	170.0	2.3	18.2	ND	0.1	ND	0.1	47.4	65.3	2.1	0.2
B-2, 2b	4.0	35.2	0.0035	7.0	0.0007	3,216	3,015	8.2	129.0	5.0	1.5	1.0	ND	82.0	0.2	78.0	103.0	9.2	ND

Cations and Anions, except Sulfide and Bicarbonate, tested with Ion Chromatography
mg/kg = milligrams per kilogram (parts per million) of dry soil weight
ND = 0 = Not Detected | NT = Not Tested | Unk = Unknown
Chemical Analysis performed on 1:3 Soil-To-Water extract

29990 Technology Dr., Suite 13, Murrieta, CA 92563 Tel: 213-928-7213 Fax: 951-226-1720
www.projectxcorrosion.com

United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for
Alameda County, California, Western Part

Longfellow Corner

October 21, 2019

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

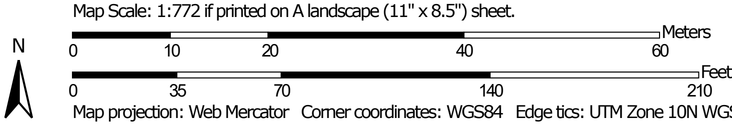
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:772 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Alameda County, California, Western Part
Survey Area Data: Version 16, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 1, 2019—May 31, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
149	Urban land-Danville complex	1.5	100.0%
Totals for Area of Interest		**1.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Alameda County, California, Western Part

149—Urban land-Danville complex

Map Unit Setting

National map unit symbol: hb7b
Elevation: 20 to 1,500 feet
Mean annual precipitation: 12 to 25 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 250 to 320 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 60 percent
Danville and similar soils: 30 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform: Fan terraces, alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Description of Danville

Setting

Landform: Alluvial fans, fan terraces
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 21 inches: clay loam
H2 - 21 to 53 inches: sandy clay
H3 - 53 to 80 inches: silty clay loam

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None

Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Botella

Percent of map unit: 5 percent
Hydric soil rating: No

Tierra

Percent of map unit: 3 percent
Hydric soil rating: No

Clear lake

Percent of map unit: 2 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

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Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the following National Soil Survey Handbook link: “National Soil Survey Handbook.”

ABC soil

A soil having an A, a B, and a C horizon.

Ablation till

Loose, relatively permeable earthy material deposited during the downwasting of nearly static glacial ice, either contained within or accumulated on the surface of the glacier.

AC soil

A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

Aeration, soil

The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil

Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alkali (sodic) soil

A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Alluvial cone

A semiconical type of alluvial fan having very steep slopes. It is higher, narrower, and steeper than a fan and is composed of coarser and thicker layers of material deposited by a combination of alluvial episodes and (to a much lesser degree) landslides (debris flow). The coarsest materials tend to be concentrated at the apex of the cone.

Alluvial fan

A low, outspread mass of loose materials and/or rock material, commonly with gentle slopes. It is shaped like an open fan or a segment of a cone. The material was deposited by a stream at the place where it issues from a narrow mountain valley or upland valley or where a tributary stream is near or at its junction with the main stream. The fan is steepest near its apex, which points upstream, and slopes gently and convexly outward (downstream) with a gradual decrease in gradient.

Alluvium

Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

Alpha,alpha-dipyridyl

A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.

Animal unit month (AUM)

The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions

Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon

A subsoil horizon characterized by an accumulation of illuvial clay.

Arroyo

The flat-floored channel of an ephemeral stream, commonly with very steep to vertical banks cut in unconsolidated material. It is usually dry but can be transformed into a temporary watercourse or short-lived torrent after heavy rain within the watershed.

Aspect

The direction toward which a slope faces. Also called slope aspect.

Association, soil

A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity)

The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low: 0 to 3
Low: 3 to 6
Moderate: 6 to 9
High: 9 to 12
Very high: More than 12

Backslope

The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Backswamp

A flood-plain landform. Extensive, marshy or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

Badland

A landscape that is intricately dissected and characterized by a very fine drainage network with high drainage densities and short, steep slopes and narrow interfluves. Badlands develop on surfaces that have little or no vegetative cover overlying unconsolidated or poorly cemented materials (clays, silts, or sandstones) with, in some cases, soluble minerals, such as gypsum or halite.

Bajada

A broad, gently inclined alluvial piedmont slope extending from the base of a mountain range out into a basin and formed by the lateral coalescence of a series of alluvial fans. Typically, it has a broadly undulating transverse profile, parallel to the mountain front, resulting from the convexities of component fans. The term is generally restricted to constructional slopes of intermontane basins.

Basal area

The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Base saturation

The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Base slope (geomorphology)

A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

Bedding plane

A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology) from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.

Bedding system

A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

Bedrock

The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bedrock-controlled topography

A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

Bench terrace

A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

Bisequum

Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Blowout (map symbol)

A saucer-, cup-, or trough-shaped depression formed by wind erosion on a preexisting dune or other sand deposit, especially in an area of shifting sand or loose soil or where protective vegetation is disturbed or destroyed. The adjoining accumulation of sand derived from the depression, where recognizable, is commonly included. Blowouts are commonly small.

Borrow pit (map symbol)

An open excavation from which soil and underlying material have been removed, usually for construction purposes.

Bottom land

An informal term loosely applied to various portions of a flood plain.

Boulders

Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breaks

A landscape or tract of steep, rough or broken land dissected by ravines and gullies and marking a sudden change in topography.

Breast height

An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Brush management

Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Butte

An isolated, generally flat-topped hill or mountain with relatively steep slopes and talus or precipitous cliffs and characterized by summit width that is less than the height of bounding escarpments; commonly topped by a caprock of resistant material and representing an erosion remnant carved from flat-lying rocks.

Cable yarding

A method of moving felled trees to a nearby central area for transport to a processing facility. Most cable yarding systems involve use of a drum, a pole, and wire cables in an arrangement similar to that of a rod and reel used for fishing. To reduce friction and soil disturbance, felled trees generally are reeled in while one end is lifted or the entire log is suspended.

Calcareous soil

A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Caliche

A general term for a prominent zone of secondary carbonate accumulation in surficial materials in warm, subhumid to arid areas. Caliche is formed by both geologic and pedologic processes. Finely crystalline calcium carbonate forms a nearly continuous surface-coating and void-filling medium in geologic (parent) materials. Cementation ranges from weak in nonindurated forms to very strong in indurated forms. Other minerals (e.g., carbonates, silicate, and sulfate) may occur as accessory cements. Most petrocalcic horizons and some calcic horizons are caliche.

California bearing ratio (CBR)

The load-supporting capacity of a soil as compared to that of standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.

Canopy

The leafy crown of trees or shrubs. (See Crown.)

Canyon

A long, deep, narrow valley with high, precipitous walls in an area of high local relief.

Capillary water

Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena

A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material and under similar climatic conditions but that have different characteristics as a result of differences in relief and drainage.

Cation

An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity

The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Catsteps

See Terracettes.

Cement rock

Shaly limestone used in the manufacture of cement.

Channery soil material

Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment

Control of unwanted vegetation through the use of chemicals.

Chiseling

Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Cirque

A steep-walled, semicircular or crescent-shaped, half-bowl-like recess or hollow, commonly situated at the head of a glaciated mountain valley or high on the side of a mountain. It was produced by the erosive activity of a mountain glacier. It commonly contains a small round lake (tarn).

Clay

As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions

See Redoximorphic features.

Clay film

A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Clay spot (map symbol)

A spot where the surface texture is silty clay or clay in areas where the surface layer of the soils in the surrounding map unit is sandy loam, loam, silt loam, or coarser.

Claypan

A dense, compact subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. The layer restricts the downward movement of water through the soil. A claypan is commonly hard when dry and plastic and sticky when wet.

Climax plant community

The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse textured soil

Sand or loamy sand.

Cobble (or cobblestone)

A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Cobbly soil material

Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility)

See Linear extensibility.

Colluvium

Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.

Complex slope

Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

Complex, soil

A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions

See Redoximorphic features.

Conglomerate

A coarse grained, clastic sedimentary rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

Conservation cropping system

Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage

A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil

Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Contour stripcropping

Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section

The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Coprogenous earth (sedimentary peat)

A type of limnic layer composed predominantly of fecal material derived from aquatic animals.

Corrosion (geomorphology)

A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.

Corrosion (soil survey interpretations)

Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop

A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Crop residue management

Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cropping system

Growing crops according to a planned system of rotation and management practices.

Cross-slope farming

Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

Crown

The upper part of a tree or shrub, including the living branches and their foliage.

Cryoturbate

A mass of soil or other unconsolidated earthy material moved or disturbed by frost action. It is typically coarser than the underlying material.

Cuesta

An asymmetric ridge capped by resistant rock layers of slight or moderate dip (commonly less than 15 percent slopes); a type of homocline produced by differential erosion of interbedded resistant and weak rocks. A cuesta has a long, gentle slope on one side (dip slope) that roughly parallels the inclined beds; on the other side, it has a relatively short and steep or clifflike slope (scarp) that cuts through the tilted rocks.

Culmination of the mean annual increment (CMAI)

The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Cutbanks cave

The walls of excavations tend to cave in or slough.

Decreasers

The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

Deferred grazing

Postponing grazing or resting grazing land for a prescribed period.

Delta

A body of alluvium having a surface that is fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

Dense layer

A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depression, closed (map symbol)

A shallow, saucer-shaped area that is slightly lower on the landscape than the surrounding area and that does not have a natural outlet for surface drainage.

Depth, soil

Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Desert pavement

A natural, residual concentration or layer of wind-polished, closely packed gravel, boulders, and other rock fragments mantling a desert surface. It forms where wind action and sheetwash have removed all smaller particles or where rock fragments have migrated upward through sediments to the surface. It typically protects the finer grained underlying material from further erosion.

Diatomaceous earth

A geologic deposit of fine, grayish siliceous material composed chiefly or entirely of the remains of diatoms.

Dip slope

A slope of the land surface, roughly determined by and approximately conforming to the dip of the underlying bedrock.

Diversion (or diversion terrace)

A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Divided-slope farming

A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

Drainage class (natural)

Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the “Soil Survey Manual.”

Drainage, surface

Runoff, or surface flow of water, from an area.

Drainageway

A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.

Draw

A small stream valley that generally is shallower and more open than a ravine or gulch and that has a broader bottom. The present stream channel may appear inadequate to have cut the drainageway that it occupies.

Drift

A general term applied to all mineral material (clay, silt, sand, gravel, and boulders) transported by a glacier and deposited directly by or from the ice or transported by running water emanating from a glacier. Drift includes unstratified material (till) that forms moraines and stratified deposits that form outwash plains, eskers, kames, varves, and glaciofluvial sediments. The term is generally applied to Pleistocene glacial deposits in areas that no longer contain glaciers.

Drumlin

A low, smooth, elongated oval hill, mound, or ridge of compact till that has a core of bedrock or drift. It commonly has a blunt nose facing the direction from which the ice approached and a gentler slope tapering in the other direction. The longer axis is parallel to the general direction of glacier flow. Drumlins are products of streamline (laminar) flow of glaciers, which molded the subglacial floor through a combination of erosion and deposition.

Duff

A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

Dune

A low mound, ridge, bank, or hill of loose, windblown granular material (generally sand), either barren and capable of movement from place to place or covered and stabilized with vegetation but retaining its characteristic shape.

Earthy fill

See Mine spoil.

Ecological site

An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

Eluviation

The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation

A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

Eolian deposit

Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

Ephemeral stream

A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

Episaturation

A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Erosion

The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (accelerated)

Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Erosion (geologic)

Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion pavement

A surficial lag concentration or layer of gravel and other rock fragments that remains on the soil surface after sheet or rill erosion or wind has removed the finer soil particles and that tends to protect the underlying soil from further erosion.

Erosion surface

A land surface shaped by the action of erosion, especially by running water.

Escarpment

A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion. Synonym: scarp.

Escarpment, bedrock (map symbol)

A relatively continuous and steep slope or cliff, produced by erosion or faulting, that breaks the general continuity of more gently sloping land surfaces. Exposed material is hard or soft bedrock.

Escarpment, nonbedrock (map symbol)

A relatively continuous and steep slope or cliff, generally produced by erosion but in some places produced by faulting, that breaks the continuity of more gently sloping land surfaces. Exposed earthy material is nonsoil or very shallow soil.

Esker

A long, narrow, sinuous, steep-sided ridge of stratified sand and gravel deposited as the bed of a stream flowing in an ice tunnel within or below the ice (subglacial) or between ice walls on top of the ice of a wasting glacier and left behind as high ground when the ice melted. Eskers range in length from less than a kilometer to more than 160 kilometers and in height from 3 to 30 meters.

Extrusive rock

Igneous rock derived from deep-seated molten matter (magma) deposited and cooled on the earth's surface.

Fallow

Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fan remnant

A general term for landforms that are the remaining parts of older fan landforms, such as alluvial fans, that have been either dissected or partially buried.

Fertility, soil

The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat)

The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity

The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

Fill slope

A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

Fine textured soil

Sandy clay, silty clay, or clay.

Firebreak

An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

First bottom

An obsolete, informal term loosely applied to the lowest flood-plain steps that are subject to regular flooding.

Flaggy soil material

Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone

A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain

The nearly level plain that borders a stream and is subject to flooding unless protected artificially.

Flood-plain landforms

A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

Flood-plain splay

A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.

Flood-plain step

An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.

Fluvial

Of or pertaining to rivers or streams; produced by stream or river action.

Foothills

A region of steeply sloping hills that fringes a mountain range or high-plateau escarpment. The hills have relief of as much as 1,000 feet (300 meters).

Footslope

The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

Forb

Any herbaceous plant not a grass or a sedge.

Forest cover

All trees and other woody plants (underbrush) covering the ground in a forest.

Forest type

A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

Fragipan

A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

Genesis, soil

The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Gilgai

Commonly, a succession of microbasins and microknolls in nearly level areas or of microvalleys and microridges parallel with the slope. Typically, the microrelief of clayey soils that shrink and swell considerably with changes in moisture content.

Glaciofluvial deposits

Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur in the form of outwash plains, valley trains, deltas, kames, eskers, and kame terraces.

Glaciolacustrine deposits

Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are bedded or laminated.

Gleyed soil

Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Graded stripcropping

Growing crops in strips that grade toward a protected waterway.

Grassed waterway

A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel

Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravel pit (map symbol)

An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel.

Gravelly soil material

Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

Gravelly spot (map symbol)

A spot where the surface layer has more than 35 percent, by volume, rock fragments that are mostly less than 3 inches in diameter in an area that has less than 15 percent rock fragments.

Green manure crop (agronomy)

A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground water

Water filling all the unblocked pores of the material below the water table.

Gully (map symbol)

A small, steep-sided channel caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage whereas a rill is of lesser depth and can be smoothed over by ordinary tillage.

Hard bedrock

Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hard to reclaim

Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Hardpan

A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Head slope (geomorphology)

A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

Hemic soil material (mucky peat)

Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

High-residue crops

Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hill

A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.

Hillslope

A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.

Horizon, soil

A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the “Soil Survey Manual.” The major horizons of mineral soil are as follows:

O horizon: An organic layer of fresh and decaying plant residue.

L horizon: A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.

A horizon: The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon: The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon: The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon: The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon: Soft, consolidated bedrock beneath the soil.

R layer: Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

M layer: A root-limiting subsoil layer consisting of nearly continuous, horizontally oriented, human-manufactured materials.

W layer: A layer of water within or beneath the soil.

Humus

The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups

Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties include depth to a seasonal high water table, the infiltration rate, and depth to a layer that significantly restricts the downward movement of water. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock

Rock that was formed by cooling and solidification of magma and that has not been changed appreciably by weathering since its formation. Major varieties include plutonic and volcanic rock (e.g., andesite, basalt, and granite).

Illuviation

The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil

A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Increasers

Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

Infiltration

The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity

The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate

The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate

The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Very low: Less than 0.2

Low: 0.2 to 0.4

Moderately low: 0.4 to 0.75

Moderate: 0.75 to 1.25

Moderately high: 1.25 to 1.75

High: 1.75 to 2.5

Very high: More than 2.5

Interfluve

A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.

Interfluve (geomorphology)

A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

Intermittent stream

A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Invaders

On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

Iron depletions

See Redoximorphic features.

Irrigation

Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin: Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border: Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Controlled flooding: Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Corrugation: Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle): Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow: Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

Sprinkler: Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation: Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Wild flooding: Water, released at high points, is allowed to flow onto an area without controlled distribution.

Kame

A low mound, knob, hummock, or short irregular ridge composed of stratified sand and gravel deposited by a subglacial stream as a fan or delta at the margin of a melting glacier; by a supraglacial stream in a low place or hole on the surface of the glacier; or as a ponded deposit on the surface or at the margin of stagnant ice.

Karst (topography)

A kind of topography that formed in limestone, gypsum, or other soluble rocks by dissolution and that is characterized by closed depressions, sinkholes, caves, and underground drainage.

Knoll

A small, low, rounded hill rising above adjacent landforms.

Ksat

See Saturated hydraulic conductivity.

Lacustrine deposit

Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lake plain

A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

Lake terrace

A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

Landfill (map symbol)

An area of accumulated waste products of human habitation, either above or below natural ground level.

Landslide

A general, encompassing term for most types of mass movement landforms and processes involving the downslope transport and outward deposition of soil and rock materials caused by gravitational forces; the movement may or may not involve saturated materials. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Large stones

Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Lava flow (map symbol)

A solidified, commonly lobate body of rock formed through lateral, surface outpouring of molten lava from a vent or fissure.

Leaching

The removal of soluble material from soil or other material by percolating water.

Levee (map symbol)

An embankment that confines or controls water, especially one built along the banks of a river to prevent overflow onto lowlands.

Linear extensibility

Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^{1}/_{3}$- or $^{1}/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit

The moisture content at which the soil passes from a plastic to a liquid state.

Loam

Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loess

Material transported and deposited by wind and consisting dominantly of silt-sized particles.

Low strength

The soil is not strong enough to support loads.

Low-residue crops

Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Marl

An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal proportions; formed primarily under freshwater lacustrine conditions but also formed in more saline environments.

Marsh or swamp (map symbol)

A water-saturated, very poorly drained area that is intermittently or permanently covered by water. Sedges, cattails, and rushes are the dominant vegetation in marshes, and trees or shrubs are the dominant vegetation in swamps. Not used in map units where the named soils are poorly drained or very poorly drained.

Mass movement

A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.

Masses

See Redoximorphic features.

Meander belt

The zone within which migration of a meandering channel occurs; the flood-plain area included between two imaginary lines drawn tangential to the outer bends of active channel loops.

Meander scar

A crescent-shaped, concave or linear mark on the face of a bluff or valley wall, produced by the lateral erosion of a meandering stream that impinged upon and undercut the bluff.

Meander scroll

One of a series of long, parallel, close-fitting, crescent-shaped ridges and troughs formed along the inner bank of a stream meander as the channel migrated laterally down-valley and toward the outer bank.

Mechanical treatment

Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil

Very fine sandy loam, loam, silt loam, or silt.

Mesa

A broad, nearly flat topped and commonly isolated landmass bounded by steep slopes or precipitous cliffs and capped by layers of resistant, nearly horizontal rocky material. The summit width is characteristically greater than the height of the bounding escarpments.

Metamorphic rock

Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth's crust. Nearly all such rocks are crystalline.

Mine or quarry (map symbol)

An open excavation from which soil and underlying material have been removed and in which bedrock is exposed. Also denotes surface openings to underground mines.

Mine spoil

An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.

Mineral soil

Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage

Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area

A kind of map unit that has little or no natural soil and supports little or no vegetation.

Miscellaneous water (map symbol)

Small, constructed bodies of water that are used for industrial, sanitary, or mining applications and that contain water most of the year.

Moderately coarse textured soil

Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil

Clay loam, sandy clay loam, or silty clay loam.

Mollic epipedon

A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

Moraine

In terms of glacial geology, a mound, ridge, or other topographically distinct accumulation of unsorted, unstratified drift, predominantly till, deposited primarily by the direct action of glacial ice in a variety of landforms. Also, a general term for a landform composed mainly of till (except for kame moraines, which are composed mainly of stratified outwash) that has been deposited by a glacier. Some types of moraines are disintegration, end, ground, kame, lateral, recessional, and terminal.

Morphology, soil

The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil

Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

Mountain

A generic term for an elevated area of the land surface, rising more than 1,000 feet (300 meters) above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range. Mountains are formed primarily by tectonic activity and/or volcanic action but can also be formed by differential erosion.

Muck

Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Mucky peat

See Hemic soil material.

Mudstone

A blocky or massive, fine grained sedimentary rock in which the proportions of clay and silt are approximately equal. Also, a general term for such material as clay, silt, claystone, siltstone, shale, and argillite and that should be used only when the amounts of clay and silt are not known or cannot be precisely identified.

Munsell notation

A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Natric horizon

A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.

Neutral soil

A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules

See Redoximorphic features.

Nose slope (geomorphology)

A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slope-wash sediments (for example, slope alluvium).

Nutrient, plant

Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter

Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low: Less than 0.5 percent
Low: 0.5 to 1.0 percent
Moderately low: 1.0 to 2.0 percent
Moderate: 2.0 to 4.0 percent
High: 4.0 to 8.0 percent
Very high: More than 8.0 percent

Outwash

Stratified and sorted sediments (chiefly sand and gravel) removed or “washed out” from a glacier by meltwater streams and deposited in front of or beyond the end moraine or the margin of a glacier. The coarser material is deposited nearer to the ice.

Outwash plain

An extensive lowland area of coarse textured glaciofluvial material. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

Paleoterrace

An erosional remnant of a terrace that retains the surface form and alluvial deposits of its origin but was not emplaced by, and commonly does not grade to, a present-day stream or drainage network.

Pan

A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.

Parent material

The unconsolidated organic and mineral material in which soil forms.

Peat

Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped

An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedisediment

A layer of sediment, eroded from the shoulder and backslope of an erosional slope, that lies on and is being (or was) transported across a gently sloping erosional surface at the foot of a receding hill or mountain slope.

Pedon

The smallest volume that can be called “a soil.” A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation

The movement of water through the soil.

Perennial water (map symbol)

Small, natural or constructed lakes, ponds, or pits that contain water most of the year.

Permafrost

Ground, soil, or rock that remains at or below 0 degrees C for at least 2 years. It is defined on the basis of temperature and is not necessarily frozen.

pH value

A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Phase, soil

A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

Piping

Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Pitting

Pits caused by melting around ice. They form on the soil after plant cover is removed.

Plastic limit

The moisture content at which a soil changes from semisolid to plastic.

Plasticity index

The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plateau (geomorphology)

A comparatively flat area of great extent and elevation; specifically, an extensive land region that is considerably elevated (more than 100 meters) above the adjacent lower lying terrain, is commonly limited on at least one side by an abrupt descent, and has a flat or nearly level surface. A comparatively large part of a plateau surface is near summit level.

Playa

The generally dry and nearly level lake plain that occupies the lowest parts of closed depressions, such as those on intermontane basin floors. Temporary flooding occurs primarily in response to precipitation and runoff. Playa deposits are fine grained and may or may not have a high water table and saline conditions.

Plinthite

The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

Plowpan

A compacted layer formed in the soil directly below the plowed layer.

Ponding

Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded

Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Pore linings

See Redoximorphic features.

Potential native plant community

See Climax plant community.

Potential rooting depth (effective rooting depth)

Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning

Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil

The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil

A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use

Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Rangeland

Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Reaction, soil

A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid: Less than 3.5

Extremely acid: 3.5 to 4.4

Very strongly acid: 4.5 to 5.0

Strongly acid: 5.1 to 5.5

Moderately acid: 5.6 to 6.0

Slightly acid: 6.1 to 6.5

Neutral: 6.6 to 7.3

Slightly alkaline: 7.4 to 7.8

Moderately alkaline: 7.9 to 8.4

Strongly alkaline: 8.5 to 9.0

Very strongly alkaline: 9.1 and higher

Red beds

Sedimentary strata that are mainly red and are made up largely of sandstone and shale.

Redoximorphic concentrations

See Redoximorphic features.

Redoximorphic depletions

See Redoximorphic features.

Redoximorphic features

Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:
    A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; *and*
    B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*
    C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.
2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:
    A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; *and*
    B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).
3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

Reduced matrix

See Redoximorphic features.

Regolith

All unconsolidated earth materials above the solid bedrock. It includes material weathered in place from all kinds of bedrock and alluvial, glacial, eolian, lacustrine, and pyroclastic deposits.

Relief

The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

Residuum (residual soil material)

Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

Rill

A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

Riser

The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.

Road cut

A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments

Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Rock outcrop (map symbol)

An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map unit are shallow over bedrock or where “Rock outcrop” is a named component of the map unit.

Root zone

The part of the soil that can be penetrated by plant roots.

Runoff

The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Saline soil

A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

Saline spot (map symbol)

An area where the surface layer has an electrical conductivity of 8 mmhos/cm more than the surface layer of the named soils in the surrounding map unit. The surface layer of the surrounding soils has an electrical conductivity of 2 mmhos/cm or less.

Sand

As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone

Sedimentary rock containing dominantly sand-sized particles.

Sandy spot (map symbol)

A spot where the surface layer is loamy fine sand or coarser in areas where the surface layer of the named soils in the surrounding map unit is very fine sandy loam or finer.

Sapric soil material (muck)

The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saturated hydraulic conductivity (Ksat)

The ease with which pores of a saturated soil transmit water. Formally, the proportionality coefficient that expresses the relationship of the rate of water movement to hydraulic gradient in Darcy's Law, a law that describes the rate of water movement through porous media. Commonly abbreviated as "Ksat." Terms describing saturated hydraulic conductivity are:

Very high: 100 or more micrometers per second (14.17 or more inches per hour)

High: 10 to 100 micrometers per second (1.417 to 14.17 inches per hour)

Moderately high: 1 to 10 micrometers per second (0.1417 inch to 1.417 inches per hour)

Moderately low: 0.1 to 1 micrometer per second (0.01417 to 0.1417 inch per hour)

Low: 0.01 to 0.1 micrometer per second (0.001417 to 0.01417 inch per hour)

Very low: Less than 0.01 micrometer per second (less than 0.001417 inch per hour).

To convert inches per hour to micrometers per second, multiply inches per hour by 7.0572. To convert micrometers per second to inches per hour, multiply micrometers per second by 0.1417.

Saturation

Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Scarification

The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

Sedimentary rock

A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.

Sequum

A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil

A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Severely eroded spot (map symbol)

An area where, on the average, 75 percent or more of the original surface layer has been lost because of accelerated erosion. Not used in map units in which “severely eroded,” “very severely eroded,” or “gullied” is part of the map unit name.

Shale

Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.

Sheet erosion

The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Short, steep slope (map symbol)

A narrow area of soil having slopes that are at least two slope classes steeper than the slope class of the surrounding map unit.

Shoulder

The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.

Shrink-swell

The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Shrub-coppice dune

A small, streamlined dune that forms around brush and clump vegetation.

Side slope (geomorphology)

A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

Silica

A combination of silicon and oxygen. The mineral form is called quartz.

Silica-sesquioxide ratio

The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

Silt

As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone

An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.

Similar soils

Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Sinkhole (map symbol)

A closed, circular or elliptical depression, commonly funnel shaped, characterized by subsurface drainage and formed either by dissolution of the surface of underlying bedrock (e.g., limestone, gypsum, or salt) or by collapse of underlying caves within bedrock. Complexes of sinkholes in carbonate-rock terrain are the main components of karst topography.

Site index

A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Slickensides (pedogenic)

Grooved, striated, and/or glossy (shiny) slip faces on structural peds, such as wedges; produced by shrink-swell processes, most commonly in soils that have a high content of expansive clays.

Slide or slip (map symbol)

A prominent landform scar or ridge caused by fairly recent mass movement or descent of earthy material resulting from failure of earth or rock under shear stress along one or several surfaces.

Slope

The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.

Slope alluvium

Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long slopes. In a profile sequence, sediments may be distinguished by differences in size and/or specific gravity of rock fragments and may be separated by stone lines. Burnished peds and sorting of rounded or subrounded pebbles or cobbles distinguish these materials from unsorted colluvial deposits.

Slow refill

The slow filling of ponds, resulting from restricted water transmission in the soil.

Slow water movement

Restricted downward movement of water through the soil. See Saturated hydraulic conductivity.

Sodic (alkali) soil

A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Sodic spot (map symbol)

An area where the surface layer has a sodium adsorption ratio that is at least 10 more than that of the surface layer of the named soils in the surrounding map unit. The surface layer of the surrounding soils has a sodium adsorption ratio of 5 or less.

Sodicity

The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of Na^{+} to Ca^{++} + Mg^{++}. The degrees of sodicity and their respective ratios are:

Slight: Less than 13:1

Moderate: 13-30:1

Strong: More than 30:1

Sodium adsorption ratio (SAR)

A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

Soft bedrock

Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil

A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

Soil separates

Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand: 2.0 to 1.0

Coarse sand: 1.0 to 0.5

Medium sand: 0.5 to 0.25

Fine sand: 0.25 to 0.10

Very fine sand: 0.10 to 0.05

Silt: 0.05 to 0.002

Clay: Less than 0.002

Solum

The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Spoil area (map symbol)

A pile of earthy materials, either smoothed or uneven, resulting from human activity.

Stone line

In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.

Stones

Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony

Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Stony spot (map symbol)

A spot where 0.01 to 0.1 percent of the soil surface is covered by rock fragments that are more than 10 inches in diameter in areas where the surrounding soil has no surface stones.

Strath terrace

A type of stream terrace; formed as an erosional surface cut on bedrock and thinly mantled with stream deposits (alluvium).

Stream terrace

One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.

Stripcropping

Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil

The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are:

Platy: Flat and laminated
Prismatic: Vertically elongated and having flat tops
Columnar: Vertically elongated and having rounded tops
Angular blocky: Having faces that intersect at sharp angles (planes)
Subangular blocky: Having subrounded and planar faces (no sharp angles)
Granular: Small structural units with curved or very irregular faces

Structureless soil horizons are defined as follows:

Single grained: Entirely noncoherent (each grain by itself), as in loose sand
Massive: Occurring as a coherent mass

Stubble mulch

Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil

Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling

Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum

The part of the soil below the solum.

Subsurface layer

Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summer fallow

The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

Summit

The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

Surface layer

The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the “plow layer,” or the “Ap horizon.”

Surface soil

The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Talus

Rock fragments of any size or shape (commonly coarse and angular) derived from and lying at the base of a cliff or very steep rock slope. The accumulated mass of such loose broken rock formed chiefly by falling, rolling, or sliding.

Taxadjuncts

Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terminal moraine

An end moraine that marks the farthest advance of a glacier. It typically has the form of a massive arcuate or concentric ridge, or complex of ridges, and is underlain by till and other types of drift.

Terrace (conservation)

An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geomorphology)

A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

Terracettes

Small, irregular steplike forms on steep hillslopes, especially in pasture, formed by creep or erosion of surficial materials that may be induced or enhanced by trampling of livestock, such as sheep or cattle.

Texture, soil

The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying “coarse,” “fine,” or “very fine.”

Thin layer

Otherwise suitable soil material that is too thin for the specified use.

Till

Dominantly unsorted and nonstratified drift, generally unconsolidated and deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are embedded within a finer matrix that can range from clay to sandy loam.

Till plain

An extensive area of level to gently undulating soils underlain predominantly by till and bounded at the distal end by subordinate recessional or end moraines.

Tilth, soil

The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope

The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

Topsoil

The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements

Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Tread

The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

Tuff

A generic term for any consolidated or cemented deposit that is 50 percent or more volcanic ash.

Upland

An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

Valley fill

The unconsolidated sediment deposited by any agent (water, wind, ice, or mass wasting) so as to fill or partly fill a valley.

Variegation

Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Varve

A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

Very stony spot (map symbol)

A spot where 0.1 to 3.0 percent of the soil surface is covered by rock fragments that are more than 10 inches in diameter in areas where the surface of the surrounding soil is covered by less than 0.01 percent stones.

Water bars

Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Weathering

All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

Well graded

Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wet spot (map symbol)

A somewhat poorly drained to very poorly drained area that is at least two drainage classes wetter than the named soils in the surrounding map unit.

Wilting point (or permanent wilting point)

The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow

The uprooting and tipping over of trees by the wind.

CITY OF OAKLAND

DALZIEL BUILDING • 250 FRANK H. OGAWA PLAZA • SUITE 3315 • OAKLAND, CALIFORNIA 94612

Planning and Building Department
Bureau of Planning

(510) 238-3941
FAX (510) 238-6538
TDD (510) 238-3254

RECEIVED
SEP 1 3 2019
HKIT ARCHITECTS

September 11, 2019

HKIT Architects
Mr. Paul McElwee
538 Ninth Street Suite# 240
Oakland, CA 94607

RE: Case File No. PLN19-104; 3801-3829 Martin Luther King Jr. Way. APN: 012-0964-004 & 012-0964-005 & 012-0964-006 & 012-0964-007

Dear Mr. McElwee:

Your application, as described below, has been **APPROVED** for the reasons stated in Attachment A, which contains the findings required to support this decision. Attachment **B** contains the Conditions of Approval for the project. This decision is effective ten (10) days after the date of this letter unless appealed as explained below.

The following table summarizes the proposed project:

Proposal:	The proposal is to merge four parcels into one parcel for a total of 21,274 square foot and demolish two existing two-story detached structures (commercial and residential). The development includes the construction of a six-story mixed use building with 2,052 square feet of ground-floor retail spaces; 77 affordable apartment units above for a total of 93,558 square feet. The project includes amenities /office for residential units located at ground floor; 39 surface parking stalls and bike parking spaces, by providing driveway access off Macarthur Blvd. The project will be 100% affordable.
Planning Permits Required:	Regular Design Review to demolish or removal of two structures and construct a 6-story mixed-use building; Parcel Map Waiver to merge four parcels into one parcel.
General Plan:	Neighborhood Center Mixed Use and Urban Residential
Zoning:	CN-3
Environmental Determination:	15332- In fill Development; and 15183- Project Consistent with a Community Plan or Zoning
Historic Status:	OCH:X(c)
City Council District:	1

If you, or any interested party, seeks to challenge this decision, an appeal **must** be filed by no later than ten calendar (10) days from the date of this letter, by **4:00 pm on September 23 2019**. An appeal shall be on a form provided by the Bureau of Planning of the Planning and Building Department, and submitted to the same at 250 Frank H. Ogawa Plaza, Suite 2114, to the attention of **Jason Madani Planner III**. The appeal shall state specifically wherein it is claimed there was error or abuse of discretion by the Zoning Manager or wherein his/her decision is not supported by substantial evidence and must include payment of **$ 1,622.57** in accordance with the City of Oakland Master Fee Schedule. Failure to timely appeal will preclude you, or any interested party, from challenging the City's decision in court. The appeal itself must raise each and every issue that is contested, along with all the arguments and evidence in the record which supports the basis of the appeal; failure to do so may preclude you, or any interested party, from raising such issues during the appeal and/or in court. However, the appeal will be limited to issues and/or evidence presented to the Zoning Manager prior to the close of the previously noticed public comment period on the matter.

A signed Notice of Exemption (NOE) is enclosed certifying that the project has been found to be exempt from CEQA review. It is your responsibility to record the NOE and the Environmental Declaration at the Alameda County Clerk's office at 1106 Madison Street, Oakland, CA 94612, at a cost of $50.00 made payable to the Alameda County Clerk. Please bring the original NOE related documents and five copies to the Alameda County Clerk, and return one date stamped copy to the Bureau of Planning, to the attention of **Jason Madani Planner III**. Pursuant to Section 15062(d) of the California Environmental Quality Act (CEQA) Guidelines, recordation of the NOE starts a 35-day statute of limitations on court challenges to the approval under CEQA.

If you have any questions, please contact the case planner, **Jason Madani, Planner III** at **(510) 238-4790** or jmadani@oaklandnet.com, however, this does not substitute for filing of an appeal as described above.

Very Truly Yours,

ROBERT D. MERKAMP
Zoning Manager

cc: Mrs. Sara Erickson, Longfellow Corner LP/ Resources for Community Development, 2220 Oxford Street, Berkeley, CA 94702
Mr. Everett Cleveland Jr.: City of Oakland -Housing & Community & Development
250 Frank H. Ogawa Plaza Suite# 5313, Oakland, CA 94612
Ms. Christia Katz Mulvey: City of Oakland -Housing & Community & Development
250 Frank H. Ogawa Plaza Suite# 5313, Oakland, CA 94612
Raymond R. Hebert, PLS: City Surveyor- Department of Transportation

Attachments:

A. Findings for Design Review, Parcel Map Waiver, CEQA
B. Conditions of Approval, including Standard Conditions of Approvals

ATTACHMENT A: FINDINGS

This proposal meets all the required findings under the Regular Design Review Criteria of the Oakland Planning_Code (OMC Sec. 17.136.050(A&D) and Lot Design Standards Subdivisions of the State Subdivision Map Act, Sections 16.04.010 &16.24.020 (OMC Title 16) as set forth below and which are required to approve your application. Required findings are shown in **bold** type; reasons your proposal satisfies them are shown in normal type.

17.136.050 A and D - RESIDENTIAL DESIGN REVIEW CRITERIA:

1. **The proposed design will create a building or set of buildings that are well related to the surrounding area in their setting, scale, bulk, height, materials, and textures.**

   The subject site is located at 3801-3829 Martin Luther King Jr. Way between W. Macarthur Blvd. and Apgar Street. The site currently contains a two-story mixed-use fire damaged building and a two-story single-family residential building. The proposed site is bounded by a three-story mixed-use building and two-story residential buildings, and one and two-story commercial and residential buildings across street. There is no consistent setting, bulk, height, and exhibit a variety of architectural styles and materials.

   The proposal is to merge four parcels into one parcel and demolish the existing buildings. The development includes the construction of a six-story mixed-use building with 2,613 square feet of ground-floor retail spaces and amenity/office spaces and 77 affordable apartment units above. The proposed building roof height is 64' tall and 73' at the parapet wall within an allowed 60' height limit in CN-3 Zone. The proposed project complies with the floor area ratio of 3.0 in CN-3 Zone. The project will include a 4,609 sq. ft. of private open space located on the podium level, where 11,550 sq. ft. is required by Planning Code. The project includes 39 parking stalls located at-grade garage and will be accessed off W. Macarthur Blvd. The project will be 100% affordable.

   The project qualifies under the affordable Housing State Law for concessions/waivers from otherwise applicable development standards. The project will use concessions/waivers to make this project feasible as discussed in the Finding 5 below.

   Staff has worked with the architect to achieve a building composition that provides visual interest to better relate to the surrounding area in their setting, scale, height, materials and textures. The vertical offset at the podium level and up to the roof serves to lighten the building mass, as well as to articulate the building elevations. The proposal includes a 14' tall ground floor commercial space which should attract patrons to the business as well as retail and general food sales businesses in the area. Ground floor commercial activities will create a vibrant commercial ground floor at the corner of M.L. king Jr Way and W. Macarthur Blvd.

   The ground floor exterior features a dark stucco finish with aluminum storefront windows and doors. The exterior of level 2 to level 5 features cement plaster, horizontal plank fiber cement siding, stucco siding, and cor-ten vertical standing seam metal siding. The residential windows are vinyl, providing 2" recessed from exterior walls.

   The project will provide additional affordable housing for the City of Oakland at large and will enhance the public safety, security and appearance of this neighborhood. This area of the M. L. King Jr. Way and W. Macarthur Blvd. neighborhood has a mix of multi-family dwelling and commercial buildings consisting of two to three stories with new development expected to be much higher, thus this proposed project will be compatible with existing and future development. The project is well related in materials and texture and adequately reduces the mass and bulk as mentioned above. The building will be different in height than the adjacent surrounding structures. However, the Planning Code and General Plan envision larger structures with ground floor commercial spaces along Macarthur Boulevard and M. L. King Jr. Way. Therefore, the proposed design will relate well with the surrounding land uses in terms of setting, scale, bulk, height, materials, and textures.

2. **The proposed design will protect, preserve, or enhance desirable neighborhood characteristics.**

As discussed above, the area has no consistent setting, height, bulk, materials, or architectural style. The area contains commercial, residential and civic uses. As such, the proposed mixed-use building, with affordable units, which will replace the existing dilapidated buildings and will enhance the neighborhood's desirable characteristics. The proposal's ground floor commercial space should attract patrons to the business as well as retail and general food sales businesses on M. L. King Jr. Way and W. Macarthur Boulevard. The proposed exterior will blend in well with the surrounding buildings and relate to the recent approved new mixed-use project by providing a strong visual element on M. L. King Jr. Way and W. Macarthur Blvd between Apgar Street and 37th Street as seen from the street.

3. The proposed design will be sensitive to the topography and landscape.

The proposed mixed-use development is located on a flat lot and as such there is no topography. Grading would include surface preparation, utility connections and excavation for the foundation, footings and utility services.

There are three trees within the buildable area to be removed. The project proposes new street trees within the side walk on M.L. King Jr. Way and W. Macarthur Boulevard (see conditions of approval). Therefore, the proposed design is sensitive to the topography and landscape.

4. If situated on a hill, the design and massing of the proposed building relates to the grade of the hill.

The proposed mixed-use development is located on a flat lot and so this finding is not applicable.

5. The proposed design conforms in all significant respects with the Oakland General Plan and with any applicable design review guidelines or criteria, district plan or development control map which has been adopted by the Planning Commission or City Council.

The subject site is in the Neighborhood Center Mixed Use classification of the Land Use and Transportation Element (LUTE) of the General Plan. This classification is intended to create, maintain, and enhance mixed use neighborhood commercial centers. These centers are typically characterized by smaller scale pedestrian-oriented, continuous street frontage with a mix of retail, housing, office, active open space, eating, and drinking places, personal and business services, and smaller scale educational, cultural, or entertainment uses. Neighborhood Center Mixed Use area permits one unit for every 375 square feet of lot area and would allow a maximum of 57 residential units for the subject 21,250 square foot parcel. The proposed project is requesting a 35% bonus density in exchange for 100% affordable housing units to increase maximum density to 77 residential units.

The project will be 100% affordable housing and qualifies under the State law (Government Code Section 65915) for a density bonus due to occupancy by low-income households. These Planning Code and State law provisions are intended to encourage construction of affordable housing by offering incentives and/or concessions/waivers to a developer of a housing development that constructs a specified percentage of affordable units. Pursuant to Section 17.107.090, the Project qualifies for three (3) waivers. Specifically, the Project includes the following incentive/concession/waivers:

a) To increase the maximum permitted building height from 60 feet, to a roof height of 64' and 73' tall at the parapet wall. (OMC Section 17.107.080.A.3, Gov't Code Section 65915(d)(1)(C)(2).) This increased height is necessary to accommodate the full range of affordable housing and mixed-use program proposed.

This concession includes modifications to requirements of the Oakland Planning Code that would otherwise be required. Based on substantial evidence in the record, the height concession would result in identifiable, actual cost reductions to provide for affordable housing (Gov't Code Section 65915(d)(1)(A)). Specifically, the building height, if not increased, would otherwise physically preclude construction of the 77 units as the units could not physically fit into a building with a 60' height limit. (Gov't Code Section 65915(e)(1)). The maximum allowed building height will be exceeded by approximately 4' at building roof height and 13' at the parapet wall. The concession and development standard reduction are consistent with and enabled under the City's Planning Code and the State Law to encourage and facilitate the construction of affordable housing.

b) To waive require group open space on ground floor and provide most of open space requirement on the roof/podium. Approximately 4,600 square feet of group open space is proposed on the roof deck, where 11,550 sq. ft. of group open space is required by Planning Code Section 17.126.030.B.Roof top open space is limited to 25% of the total required. As designed 75% of open space is provided on the roof/podium. A waiver is needed to have more than 25% of the required open space located on the roof deck.

The project would physically prelude the development at the bonus density given the need to include ground floor parking area and commercial retail space. These development standard reductions are consistent with and enabled under the City's Planning Code and the State Law to encourage and facilitate the construction of affordable housing.

c) To waive the required rear setback transition height when located adjacent to the RM-2 Zone. The project will include a portion of the building adjacent to the RM-2 Zone which is limited to 30' in building height by Planning Code Section 17.33.04.2. and where 64' tall at the roof line and 73' to the parapet wall is proposed. (OMC Section 17.107.080.A.3, Gov't Code Section 65915(d)(1)(C)(2).) This increased height is necessary to accommodate the full range of affordable housing and mixed-use program proposed.

The project would physically prelude the development at the bonus density if the required rear yard setback from property line is met. These development standard reductions are consistent with and enabled under the City's Planning Code and the State Law to encourage and facilitate the construction of affordable housing.

The proposed project is therefore consistent with the intent of the General Plan as well as the following objectives and policies:

Policy N1.1 Concentrating Commercial Development. Commercial development in the neighborhoods should be concentrated in areas that are economically viable and provide opportunities for smaller scale, neighborhood-oriented retail.

Policy N1.8 Making Compatible Development. The height and bulk of commercial development in "Neighborhood Mixed-Use Center" areas should be compatible with that which is allowed for residential development.

Policy N3.1 – Facilitating Housing Construction – Facilitating the construction of housing units should be considered a high priority for the City of Oakland.

Policy N3.2 – Encourage In-fill Development – In order to facilitate the construction of needed housing units, in-fill development that is consistent with the General Plan should take place throughout the City of Oakland.

Objective N3- To encourage the construction, conservation, and enhancement of housing resources in order to meet the current and future needs of the Oakland community. The proposal provides 77 affordable residential units and one commercial units for the Oakland community.

Objective N6- Encourage a mix of housing costs, unit sizes, types and ownership structures. The proposal provides a mix of one, two bed rooms residential units and affordable units.

For Potential Designated Historic Properties that are not Local Register Properties: That for additions or alterations,

1. **The design matches or is compatible with, but not necessarily identical to, the property's existing or historical design; or**

The proposal will remove the existing Potentially Designated Historic Property (PDHP) rated C to construct a new 77-unit affordable mixed-use residential development on a 21,250 sq. ft. parcel. The scale and massing of the proposed design addresses the neighboring context. The open space area at the podium level facing onto the residential building on W. Macarthur Blvd. and the vertical offset at the podium level and upper floors serves to lighten the building mass, as well as to articulate the building elevations which will provide an eased transition to the neighboring building. As a result, the proposed replacement project is equal with respect to the quality of the existing building design and is compatible with the character of the neighborhood

2. **The proposed design comprehensively modifies and is at least equal in quality to the existing design and is compatible with the character of the neighborhood; or**

See above Finding #1.

3. **The existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.**
Staff has made Finding #1.

<u>16.24.020 – PARCEL MAP - WAIVER OF REQUIREMENT</u> (Pursuant also to California Government Code §66412(d) (Chapter 4, Subdivision Map Act)

Required findings are shown in bold type; explanations as to why these findings can be made are in normal type.

A local agency or advisory agency shall limit its review and approval to a determination of whether or not the parcels resulting from the lot line adjustment will conform to:

A. The local General Plan

The subject site is in the Neighborhood Center Mixed Use classification of the Land Use and Transportation Element (LUTE) of the General Plan. This classification is intended to create, maintain, and enhance mixed use neighborhood commercial centers. These centers are typically characterized by smaller scale pedestrian-oriented, continuous street frontage with a mix of retail, housing, office, active open space, eating, and drinking places, personal and business services, and smaller scale educational, cultural, or entertainment uses. Neighborhood Center Mixed Use zone permits one unit for every 375 square feet of lot area and would allow a maximum of 57 residential units for the subject 21,250 square feet parcel. The proposed project is requesting a 35% bonus density in exchange for 100% affordable housing units to increase maximum density to 77 residential units.
Therefore, the proposed Parcel Map Waiver to merge four lots into one parcel conforms to the General Plan.

B. Any applicable coastal plan.

The parcels are not located along the estuary or a coast line, and therefore, this finding is not applicable.

C. Zoning and Building Ordinances

The zoning of the site is in the Neighborhood Center Mixed Use -3 Zone (CN-3). The CN-3 zoning regulations state that every lot shall have a minimum lot area of four thousand (4,000) square feet and a minimum lot width and frontage of 25 feet. The subject property is 21,250 square feet. The lot is flat. The proposed lot width would be 170' which exceed minimum lot width requirement in CN-3 Zone. The purpose of the lot merger is to combine four parcels into one parcel to construct a mixed-use affordable housing project and meet building code requirements. Therefore, the Parcel Map Waiver to merge four parcels into one parcel meets with the intent of the zoning requirements for lot size and lot width in respect to impact on the adjacent neighbors and health and safety.

CITY OF OAKLAND
CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
CLASS 32 (IN-FILL DEVELOPMENT) EXEMPTION FINDINGS

CEQA, or the California Environmental Quality Act, is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. Categorical exemptions are descriptions of types of projects which the Secretary of the Resources Agency of the State of California has determined do not have a significant effect on the environment, and therefore, are not subject to further environmental review under CEQA.

The Class 32 exemption (Section 15332 of the State CEQA Guidelines) is intended to promote infill development within urbanized areas. The class consists of environmentally benign in-fill projects which are consistent with local general plan and zoning requirements. This class is not intended to be applied to projects which would result in any significant traffic, noise, air quality, or water quality effects. In order to qualify for this exemption, projects must comply with all of the following findings.

Please indicate the way in which the proposal meets the following required criteria.

1. The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations:

Objective N3 of the Oakland General Plan Land Use and Transportation Element states: "Encourage the construction, conservation, and enhancement of housing resources in order to meet the current and future needs of the Oakland community". The proposal is to demolish the existing two-story mixed used fire damaged building and a two-story single-family building and construct a new 77-unit affordable mixed-use residential development on a 21,250 sq. ft. parcel. The proposal meets the above objective of constructing housing.

Objective N3.2, Encouraging Infill Development: In order to facilitate the construction of needed housing units, infill development that is consistent with the General Plan should take place throughout the City of Oakland. The project is an infill development on an underutilized site located within proximity to transit bus lines and has adequate public infrastructure to serve the development.

The proposed new development will not detract from the character of the Neighborhood Center Mixed Use General Plan designation and meets the development standards and the required findings applicable for this project.

2. The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses:

The proposed development occurs within City limits on a project site of 21,250 square feet.

3. The project site has no value as habitat for endangered, rare or threatened species:

The project site has no known value as habitat for endangered, rare or threatened species.

4. Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality:

The project involves construction of a 77 affordable, mixed use project which is not anticipated to result in any significant effects relating to traffic, noise, air quality, or water quality for the following reasons:

The proposed project will include 4,609 sq. ft. of open space area as a courtyard along the western portion of the building, on second floor at the podium level. The courtyard is surrounded by the proposed building to the north, east and south, and include a play structure, dining and seating areas, Receptors utilizing the podium courtyard would be shielded from traffic noise by the building itself, and future noise levels are calculated to be less than 65 DBA. (see Noise assessment report dated August 8, 2019). The project will involve both construction noise and post-construction noise consistent with the typical noise associated with developments of this type in an urban location. Standard conditions of approval and uniformly applied development standards associated with construction noise and the City's Noise Ordinance will reduce noise impacts to less than significant levels.

Considering the projected less-than-significant traffic impacts associated with the building and the availability of nearby transit and the fact that the project population (affordable housing) is less likely to own vehicles, the impacts to traffic would be less than significant (See attached Traffic Report dated August 7, 2019). Implementation of Standard Conditions of Approval involving Dust Control and Construction Emissions would further reduce air quality impacts to less than significant levels. Implementation of the City's standard conditions of approval, which includes, but is not limited to, specific site design measures for post-construction stormwater pollution management, would reduce impacts to water quality to less than significant levels.

ATTACHMENT B: CONDITIONS OF APPROVAL

The proposal is hereby approved subject to the following Conditions of Approval:

1. Approved Use

The project shall be constructed and operated in accordance with the authorized use as described in the approved application materials, and the approved plans dated **July 17, 2019,** as amended by the following conditions of approval and mitigation measures, if applicable ("Conditions of Approval" or "Conditions").

2. Effective Date, Expiration, Extensions and Extinguishment

This Approval shall become effective immediately, unless the Approval is appealable, in which case the Approval shall become effective in ten calendar days unless an appeal is filed. Unless a different termination date is prescribed, this Approval shall expire **two years** from the Approval date, or from the date of the final decision in the event of an appeal, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this Approval, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit or other construction-related permit for this project may invalidate this Approval if said Approval has also expired. If litigation is filed challenging this Approval, or its implementation, then the time period stated above for obtaining necessary permits for construction or alteration and/or commencement of authorized activities is automatically extended for the duration of the litigation.

3. Compliance with Other Requirements

The project applicant shall comply with all other applicable federal, state, regional, and local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Bureau of Building, Fire Marshal, and Public Works Department. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition #4.

4. Minor and Major Changes

Minor changes to the approved project, plans, Conditions, facilities, or use may be approved administratively by the Director of City Planning Major changes to the approved project, plans, Conditions, facilities, or use shall be reviewed by the Director of City Planning to determine whether such changes require submittal and approval of a revision to the Approval by the original approving body or a new independent permit/approval. Major revisions shall be reviewed in accordance with the procedures required for the original permit/approval. A new independent permit/approval shall be reviewed in accordance with the procedures required for the new permit/approval.

5. Compliance with Conditions of Approval

a. The project applicant and property owner, including successors, (collectively referred to hereafter as the "project applicant" or "applicant") shall be responsible for compliance with all the Conditions of Approval and any recommendations contained in any submitted and approved technical report at his/her sole cost and expense, subject to review and approval by the City of Oakland.

b. The City of Oakland reserves the right at any time during construction to require certification by a licensed professional at the project applicant's expense that the as-built project conforms to all applicable requirements, including but not limited to, approved maximum heights and minimum setbacks. Failure to construct the project in accordance with the Approval may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension, or other corrective action.

c. Violation of any term, Condition, or project description relating to the Approval is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approval or alter these Conditions if it is found that there is violation of any of the Conditions or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Approval or Conditions.

6. Signed Copy of the Approval/Conditions

A copy of the Approval letter and Conditions shall be signed by the project applicant, attached to each set of permit plans submitted to the appropriate City agency for the project, and made available for review at the project job site at all times.

7. Blight/Nuisances

The project site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60 days of approval, unless an earlier date is specified elsewhere.

8. Indemnification

a. To the maximum extent permitted by law, the project applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the Oakland Redevelopment Successor Agency, the Oakland City Planning Commission, and their respective agents, officers, employees, and volunteers (hereafter collectively called "City") from any liability, damages, claim, judgment, loss (direct or indirect), action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul this Approval or implementation of this Approval. The City may elect, in its sole discretion, to participate in the defense of said Action and the project applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.

a. Within ten (10) calendar days of the filing of any Action as specified in subsection (a) above, the project applicant shall execute a Joint Defense Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Joint Defense Letter of Agreement shall survive termination, extinguishment, or invalidation of the Approval. Failure to timely execute the Letter of Agreement does not relieve the project applicant of any of the obligations contained in this Condition or other requirements or Conditions of Approval that may be imposed by the City.

9. Severability

The Approval would not have been granted but for the applicability and validity of each and every one of the specified Conditions, and if one or more of such Conditions is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid Conditions consistent with achieving the same purpose and intent of such Approval.

10. Special Inspector/Inspections, Independent Technical Review, Project Coordination and Monitoring

The project applicant may be required to cover the full costs of independent third-party technical review and City monitoring and inspection, including without limitation, special inspector(s)/inspection(s) during times of extensive or specialized plan-check review or construction, and inspections of potential violations of the Conditions of Approval. The project applicant shall establish a deposit with the Bureau of Building, if directed by the Building Official, Director of City Planning, or designee, prior to the issuance of a construction-related permit and on an ongoing as-needed basis.

11. Public Improvements

The project applicant shall obtain all necessary permits/approvals, such as encroachment permits, obstruction permits, curb/gutter/sidewalk permits, and public improvement ("p-job") permits from the City for work in the public right-of-way, including but not limited to, streets, curbs, gutters, sidewalks, utilities, and fire hydrants. Prior to any work in the public right-of-way, the applicant shall submit plans for review and approval by the Bureau of Planning, the Bureau of Building, and other City departments as required. Public improvements shall be designed and installed to the satisfaction of the City.

12. Trash and Blight Removal

Requirement: The project applicant and his/her successors shall maintain the property free of blight, as defined in chapter 8.24 of the Oakland Municipal Code. For nonresidential and multifamily residential projects, the project applicant shall install and maintain trash receptacles near public entryways as needed to provide sufficient capacity for building users.
When Required: Ongoing
Initial Approval: N/A
Monitoring/Inspection: Bureau of Building

13. Compliance Matrix

The project applicant shall submit a Compliance Matrix, in both written and electronic form, for review and approval by the Bureau of Planning and the Bureau of Building that lists each Condition of Approval (including each mitigation measure if applicable) in a sortable spreadsheet. The Compliance Matrix shall contain, at a minimum, each required Condition of Approval, when compliance with the Condition is required, and the status of compliance with each Condition. For multi-phased projects, the Compliance Matrix shall indicate which Condition applies to each phase. The project applicant shall submit the initial Compliance Matrix prior to the issuance of the first construction-related permit and shall submit an updated matrix upon request by the City.

14. Construction Management Plan

Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan (CMP) for review and approval by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department, Department of Transportation, and the Public Works Department as directed. The CMP shall contain measures to minimize potential construction impacts including measures to comply with all construction-related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control, waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The CMP shall provide project-specific information including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project.

15. Graffiti Control

Requirement:

a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation:
   i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces.
   ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces.
   iii. Use of paint with anti-graffiti coating.
   iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED).
   v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement.

b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following:
   i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system.
   ii. Covering with new paint to match the color of the surrounding surface.
   iii. Replacing with new surfacing (with City permits if required).

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

16. Landscape Plan

a. Landscape Plan Required

Requirement: The project applicant shall submit a final Landscape Plan for City review and approval that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: N/A

b. Landscape Installation

Requirement: The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of $2,500 or the estimated cost of implementing the Landscape Plan based on a licensed contractor's bid.

When Required: Prior to building permit final

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

c. Landscape Maintenance

Requirement: All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

17. Lighting

Requirement: Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties.

When Required: Prior to building permit final

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

18. Dust Controls – Construction Related

Requirement: The project applicant shall implement all of the following applicable dust control measures during construction of the project:

a) Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible.

b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).

c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d) Limit vehicle speeds on unpaved roads to 15 miles per hour.

e) All demolition activities (if any) shall be suspended when average wind speeds exceed 20 mph.

f) All trucks and equipment, including tires, shall be washed off prior to leaving the site.

g) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.

When Required: During construction
Initial Approval: N/A
Monitoring/Inspection: Bureau of Building

19. Criteria Air Pollutant Controls - Construction Related

Requirement: The project applicant shall implement all of the following applicable basic control measures for criteria air pollutants during construction of the project as applicable:

a) Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points.

b) Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations ("California Air Resources Board Off- Road Diesel Regulations").

c) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. Equipment check documentation should be kept at the construction site and be available for review by the City and the Bay Area Air Quality District as needed.

d) Portable equipment shall be powered by grid electricity if available. If electricity is not available, propane or natural gas generators shall be used if feasible. Diesel engines shall only be used if grid electricity is not available and propane or natural gas generators cannot meet the electrical demand.

e) Low VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings.

f) All equipment to be used on the construction site shall comply with the requirements of Title 13, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") and upon request by the City (and the Air District if specifically requested), the project applicant shall provide written documentation that fleet requirements have been met.

When Required: During construction
Initial Approval: N/A
Monitoring/Inspection: Bureau of Building

20. Tree Removal During Bird Breeding Season

Requirement: To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.

When Required: Prior to removal of trees

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

21. Asbestos in Structures

Requirement: The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request.
When Required: Prior to approval of construction-related permit
Initial Approval: Applicable regulatory agency with jurisdiction
Monitoring/Inspection: Applicable regulatory agency with jurisdiction

22. Tree Permit

a. Tree Permit Required

Requirement: Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit.

When Required: Prior to approval of construction-related permit

Initial Approval: Permit approval by Public Works Department, Tree Division; evidence of approval submitted to Bureau of Building

Monitoring/Inspection: Bureau of Building

b. Tree Protection During Construction

Requirement: Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist:

i. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.

ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree.

iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.

iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.

v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.

vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.

When Required: During construction

Initial Approval: Public Works Department, Tree Division

Monitoring/Inspection: Bureau of Building

c. Tree Replacement Plantings

Requirement: Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria:

i. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.

ii. Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye), Umbellularia californica (California Bay Laurel), or other tree species acceptable to the Tree Division.

iii. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.

iv. Minimum planting areas must be available on site as follows:

- For Sequoia sempervirens, three hundred fifteen (315) square feet per tree;
- For other species listed, seven hundred (700) square feet per tree.

v. In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee in accordance with the City's Master Fee Schedule may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians.

vi. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to become established within one year of planting shall be replanted at the project applicant's expense.

When Required: Prior to building permit final

Initial Approval: Public Works Department, Tree Division

Monitoring/Inspection: Bureau of Building

23. Archaeological and Paleontological Resources – Discovery During Construction

Requirement: Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented.

In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense.

In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

24. Human Remains – Discovery During Construction

Requirement: Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

25. Construction-Related Permit(s)

Requirement: The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

26. Seismic Hazards Zone (Landslide/Liquefaction)

Requirement: The project applicant shall submit a site-specific geotechnical report, consistent with California Geological Survey Special Publication 117 (as amended), prepared by a registered geotechnical engineer for City review and approval containing at a minimum a description of the geological and geotechnical conditions at the site, an evaluation of site-specific seismic hazards based on geological and geotechnical conditions, and recommended measures to reduce potential impacts related to liquefaction and/or slope stability hazards. The project applicant shall implement the recommendations contained in the approved report during project design and construction.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

27. Hazardous Materials Related to Construction

Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following:

a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction;

b. Avoid overtopping construction equipment fuel gas tanks;

c. During routine maintenance of construction equipment, properly contain and remove grease and oils;

d. Properly dispose of discarded containers of fuels and other chemicals;

e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and

f. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

28. Erosion and Sedimentation Control Measures for Construction

Requirement: The project applicant shall implement Best Management Practices (BMPs) to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable. At a minimum, the project applicant shall provide filter materials deemed acceptable to the City at nearby catch basins to prevent any debris and dirt from flowing into the City's storm drain system and creeks.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

29. NPDES C.3 Stormwater Requirements for Regulated Projects

a. Post-Construction Stormwater Management Plan Required

Requirement: The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following:

i. Location and size of new and replaced impervious surface;

ii. Directional surface flow of stormwater runoff;

iii. Location of proposed on-site storm drain lines;

iv. Site design measures to reduce the amount of impervious surface area;

v. Source control measures to limit stormwater pollution;

vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and

vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning; Bureau of Building

Monitoring/Inspection: Bureau of Building

b. Maintenance Agreement Required

Requirement: The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following:

i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and

ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary.

The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.

When Required: Prior to building permit final

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

30. Construction Days/Hours

Requirement: The project applicant shall comply with the following restrictions concerning construction days and hours:

a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m.

b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday.

c. No construction is allowed on Sunday or federal holidays.

Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.

Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

31. Construction Noise

Requirement: The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following:

a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible.

b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.

c. Applicant shall use temporary power poles instead of generators where feasible.

d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.

e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

32. Extreme Construction Noise

a. Construction Noise Management Plan Required

Requirement: Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following:

i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;
ii. Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;
iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;
iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and
v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

b. Public Notification Required

Requirement: The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.

When Required: During construction

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

33. Project-Specific Construction Noise Reduction Measures

Requirement: The project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site specific
noise attenuation measures to further reduce construction noise impacts on nearby residential properties. The project applicant shall implement the approved Plan during construction.
When Required: Prior to approval of construction-related permit
Initial Approval: Bureau of Building
Monitoring/Inspection: Bureau of Building

34. Operational Noise

Requirement: Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

35. Construction Activity in the Public Right-of-Way

a. Obstruction Permit Required

Requirement: The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets and sidewalks.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

b. Traffic Control Plan Required

Requirement: In the event of obstructions to vehicle or bicycle travel lanes, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian detours, including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The project applicant shall implement the approved Plan during construction.

When Required: Prior to approval of construction-related permit

Initial Approval Public Works Department, Transportation Services Division

Monitoring/Inspection: Bureau of Building

c. Repair of City Streets

Requirement: The project applicant shall repair any damage to the public right-of way, including streets and sidewalks caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.

When Required: Prior to building permit final

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

36. Bicycle Parking

Requirement: The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

37. Construction and Demolition Waste Reduction and Recycling

Requirement: The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.

When Required: Prior to approval of construction-related permit

Initial Approval: Public Works Department, Environmental Services Division

Monitoring/Inspection: Public Works Department, Environmental Services Division

38. Underground Utilities

Requirement: The project applicant shall place underground all new utilities serving the project and under the control of the project applicant and the City, including all new gas, electric, cable, and telephone facilities, fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities. The new facilities shall be placed underground along the project's street frontage and from the project structures to the point of service. Utilities under the control of other agencies, such as PG&E, shall be placed underground if feasible. All utilities shall be installed in accordance with standard specifications of the serving utilities.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

39. Recycling Collection and Storage Space

Requirement: The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

40. Green Building Requirements

a. Compliance with Green Building Requirements During Plan-Check

Requirement: The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code).

i. The following information shall be submitted to the City for review and approval with the application for a building permit:
   - Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards.
   - Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit.
   - Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit.
   - Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below.
   - Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance.
   - Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit.
   - Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

ii. The set of plans in subsection (i) shall demonstrate compliance with the following:
- CALGreen mandatory measures.
- All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable Hardship Exemption granted during the review of the Planning and Zoning permit.
- per the appropriate checklist approved during the Planning entitlement process.
- All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted.
- The required green building point minimums in the appropriate credit categories.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

b. Compliance with Green Building Requirements During Construction

Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project.

The following information shall be submitted to the City for review and approval:

i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit.

ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance.

iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

c. Compliance with Green Building Requirements After Construction

Requirement: Within sixty (60) days of the final inspection of the building permit for the project, the Green Building Certifier shall submit the appropriate documentation to Green Building Certification Institute and attain the minimum required certification/point level. Within one year of the final inspection of the building permit for the project, the applicant shall submit to the Bureau of Planning the Certificate from the organization listed above demonstrating certification and compliance with the minimum point/certification level noted above.

When Required: After project completion as specified

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

d. Compliance with Green Building Requirements During Construction

Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Green Building Ordinance during construction.

The following information shall be submitted to the City for review and approval:

i. Completed copy of the green building checklists approved during review of the Planning and Zoning permit and during the review of the Building permit.

ii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

41. Sanitary Sewer System

Requirement: The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system.
When Required: Prior to approval of construction-related permit
Initial Approval: Public Works Department, Department of Engineering and Construction
Monitoring/Inspection: N/A

42. Storm Drain System

Requirement: The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.
When Required: Prior to approval of construction-related permit
Initial Approval: Bureau of Building
Monitoring/Inspection: Bureau of Building

43. Water Efficient Landscape Ordinance (WELO)

Requirement: The project applicant shall comply with California's Water Efficient Landscape Ordinance (WELO) in order to reduce landscape water usage. For any landscape project with an aggregate (total noncontiguous) landscape area equal to 2,500 sq. ft. or less. The project applicant may implement either the Prescriptive Measures or the Performance Measures, of, and in accordance with the California's Model Water Efficient Landscape Ordinance. For any landscape project with an aggregate (total noncontiguous) landscape area over 2,500 sq. ft., the project applicant shall implement the Performance Measures in accordance with the WELO.
Prescriptive Measures: Prior to construction, the project applicant shall submit documentation showing compliance with Appendix D of California's Model Water Efficient Landscape Ordinance (see website below starting on page 23):
http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%2
0-%20Official%20CCR%20pages.pdf
Performance Measures: Prior to construction, the project applicant shall prepare and submit a Landscape Documentation Package for review and approval, which includes the following
a. Project Information:
i. Date,
ii. Applicant and property owner name,
iii. Project address,
iv. Total landscape area,
v. Project type (new, rehabilitated, cemetery, or home owner installed),
vi. Water supply type and water purveyor,
vii. Checklist of documents in the package, and
viii. Applicant signature and date with the statement: "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package."
b. Water Efficient Landscape Worksheet
i. Hydrozone Information Table
ii. Water Budget Calculations with Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use
c. Soil Management Report

d. Landscape Design Plan
e. Irrigation Design Plan, and
f. Grading Plan
Upon installation of the landscaping and irrigation systems, the Project applicant shall submit a Certificate of Completion and landscape and irrigation maintenance schedule for review and approval by the City. The Certificate of Compliance shall also be submitted to the local water purveyor and property owner or his or her designee. For the specific requirements within the Water Efficient Landscape Worksheet, Soil Management Report, Landscape Design Plan, Irrigation Design Plan and Grading Plan, see the link below.
http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%20-%20Official%20CCR%20pages.pdf
When Required: Prior to approval of construction-related permit
Initial Approval: Bureau of Planning
Monitoring/Inspection: Bureau of Building

42. Capital Improvements Impact Fee

Requirement: The project applicant shall comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).

When Required: Prior to issuance of building permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

43. Transportation Impact Fee

Requirement: The project applicant shall comply with the requirements of the City of Oakland Transportation Impact Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).

When Required: Prior to issuance of building permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

44. Plug-In Electric Vehicle (PEV) Charging Infrastructure

a. PEV-Ready Parking Spaces

Requirement: The applicant shall submit, for review and approval of the Building Official and the Zoning Manager, plans that show the location of parking spaces equipped with full electrical circuits designated for future PEV charging (i.e. "PEV-Ready) per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-Ready parking spaces.

When Required: Prior to Issuance of Building Permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

b. PEV-Capable Parking Spaces

Requirement: The applicant shall submit, for review and approval of the Building Official, plans that show the location of inaccessible conduit to supply PEV-capable parking spaces per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-capable parking spaces.

When Required: Prior to Issuance of Building Permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

c. ADA-Accessible Spaces

Requirement: The applicant shall submit, for review and approval of the Building Official, plans that show the location of future accessible EV parking spaces as required under Title 24 Chapter 11B Table 11B-228.3.2.1, and specify plans to construct all future accessible EV parking spaces with appropriate grade, vertical clearance, and accessible path of travel to allow installation of accessible EV charging station(s).

When Required: Prior to Issuance of Building Permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

45. Employee Rights

Requirement: The project applicant and business owners in the project shall comply with all state and federal laws regarding employees' right to organize and bargain collectively with employers and shall comply with the City of Oakland Minimum Wage Ordinance (chapter 5.92 of the Oakland Municipal Code).

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: N/A

Specific Conditions of Approval

46. Parcel Map Waiver Map Recordation.

The applicant shall record the Parcel Map Waiver to merge four parcels into one parcel (see attached Exclusive Negotiation Agreement between City of Oakland and Longfellow Corner, LP.) a written legal description of the reconfigured parcels as part of the deed with the Alameda County Recorder's Office and proof of such recordation shall be provided to the Planning Department prior to issuance of Building Permits.

47. Affordable Residential Rental Units - Agreement and Monitoring

Requirement #1: Pursuant to Section 17.107 of the Oakland Planning Code and the State Density Bonus Law California Government Code Section 65915 et seq. ("State Density Bonus Law"), the proposed project shall provide a minimum of [1] target dwelling units available at very low/ low/ moderate income (as [5%/10%] of the units) for receiving a density bonus, concession and/or waiver of development standards.

Requirement #2: The approved residential affordable units that are part of this approval shall remain and continue to be affordable at the specified level in accordance with California Health and Safety Code Section 50053 and its implementing regulations for a term of not less than 55 years or a longer period of time if required by the construction or mortgage finance assistance program, mortgage insurance program, or rental subsidy program. This Condition of Approval must also be in compliance with Section 65915(c)(1) of the State Density Bonus Law specifically, as well as all other applicable provisions of the State Density Bonus Law.

Requirement #3: Prior to submittal of a construction-related permit, the applicant shall contact the Housing and Community Development Department (Housing Development Services Division) to enter into a Regulatory Agreement based on the City's model documents, as may be amended from time to time, governing the target dwelling units. The Agreement shall contain restrictive covenants to ensure the continued affordability of the target dwelling units at the specified rent levels for a period of not less than fifty-five (55) years pursuant Section 65915 (c)(1) of the State Density Bonus Law, and restrict the occupancy of those units only to residents who satisfy the affordability requirement as approved for this project. Only households meeting the eligibility standards for the target dwelling units shall be eligible to occupy the target dwelling units.

If the property has an approved condominium map and the developer chooses to rent the affordable units at initial occupancy, the units cannot convert to ownership during the term of the Agreement, even if the market rate units in the development convert to ownership.
The Regulatory Agreement shall be recorded with the Alameda County Recorder's Office as an encumbrance against the property, and a copy of the recorded agreement shall be provided to and retained by the City. The Regulatory Agreement may not be subordinated in priority to any other lien interest in the property.

Requirement #4: Rental target dwelling units shall be managed / operated by the developer or developer's agent or the developer's successor. The developer of rental target dwelling units shall submit for review and approval by the Housing and Community Development Department and any other relevant City departments, an annual report identifying which units are target dwelling units, the monthly rent, vacancy information, monthly income for tenants of each target rental dwelling unit throughout the prior year, and other information required by the City. Said agreement shall maintain the tenants' privacy. The applicant shall pay to the Housing and Community Development Department an annual monitoring fee pursuant to the Master Fee Schedule (updated annually and available from the Budget Office of the City Oakland's Finance Department: https://www.oaklandca.gov/departments/finance-department) for City monitoring of target dwelling units.

Requirement #5: The floor area, number of bedrooms, and amenities (such as fixtures, appliances, location and utilities) of the affordable units shall be shall be substantially equal in size and quality to those of the market rate units. Further, the proportion of unit types (i.e. three-bedroom and four-bedroom, etc.) of the affordable units shall be roughly the same as the project's market rate units.

Requirement #6: Tenant households in affordable units must have equal access to the project's services and facilities as tenant households in all other units within the project.

Requirement #7: Affordable units must be evenly distributed throughout the project.

Requirement #8: Applicant shall comply with the requirements of Section 65915(c)(3)(A) of the State Density Bonus Law requiring, without limitation, replacement units in those circumstances where the parcel subject to the density bonus requests contains or contained affordable units within the last five years.

Requirement #9: Applicants shall comply with all applicable provisions of State Density Bonus Law and all provisions of the City's density bonus law that are not preempted by state law.

Requirement #10: Affordable units shall be constructed concurrent with the construction of the market rate units in each phase of the project.

Requirement #11: The City will not issue final certificates of occupancy for more than fifty percent (50%) of the market rate units in any phase of development until final certificates of occupancy are issued for all of the affordable units in that phase.

When Required: First Construction-Related Permit Application and Ongoing
Initial Approval: Housing and Community Development Department – Housing Development Services Division
Ongoing Monitoring/Inspections: Housing Development Services Division

48. <u>Public Transit incentive</u>

The Applicant shall discuss the possibility of providing Public Transportation Clipper passes for all new residences. The Applicant shall provide a copy of the final outcome of these discussions to Bureau of Planning staff.

49. <u>Ground Floor Building Materials Graffiti-Resistant</u>

The project applicant shall ensure that materials used on the ground floor are graffiti-resistant and exterior façade will stand the test of time by ensuring that dust and roadway grim are easily cleanable

50. Tree Removal Permit (T19-00045):

Prior to issuance of building permits

A Tree Removal/Preservation permit application shall be approved by the Tree Services Division for removal or construction within ten feet of all protected trees on the site and adjacent properties.

51. Street Trees

Prior to issuance of building permit.

The Applicant shall provide one tree per 20' of street frontage in front of the building located on Macarthur Blvd and M L King Jr Way with review and approval of species, size at time of planting, and placement in the right-of-way, subject to review and approval by the Planning and Building Department unless determined infeasible by the RWQB.

52. Final Design Review

a. Prior to issuance of building permit.

As the design of the building is further detailed, the design elements listed below shall be revised and shall be submitted for review and approval by the Planning Director or designee prior to issuance of the building permit. Only high-quality materials will be approved. The Planning Director or designee may exercise his/her standard authority to refer the design revisions to the DRC or to the Planning Commission.

a. Final review of all exterior materials and colors.
b. More information regarding window details and installation specifications (framing material, glass, and mullions) and also of the window system and assembly, to confirm adequate thickness of components, overall quality, and recess from the outside wall. Window mullions shall be a minimum of 2" thick and the window surfaces shall be recessed a minimum of 1 ¾ to 2" from the building façade.
c. The proposed white color vinyl windows shall be revised to dark color.
d. The Project applicant shall ensure that the lighting fixtures within the garage are shielded to a point below the light bulb and reflector consistent with the lighting condition.

53. PG&E Transformers and EBMUD dissipaters

Prior to issuance of a building permit

The Project applicant shall coordinate with PG&E regarding the placement of transformers and meters. These utilities shall be located within the proposed building or underground and not within or in view of the public right of way or sidewalk. Dissapators shall be on-site and screened.

Applicant Statement

I have read and accept responsibility for the Conditions of Approval. I agree to abide by and conform to the Conditions of Approval, as well as to all provisions of the Oakland Planning Code and Oakland Municipal Code pertaining to the project.

____

Signature of Project Applicant

____

Name of Project Applicant

____

Date

Bureau of Planning
250 Frank H. Ogawa Plaza, Suite 2114
Oakland, CA 94612

NOTICE OF EXEMPTION

TO: Alameda County Clerk
1106 Madison Street
Oakland, CA 94612

Project Title: PLN19-104

Project Applicant: HKIT Architects Mr. Paul McElwee

Project Location: 3801 Martin L. L. King Jr. Way. APN: 012-0964-004 & 012-0964-005 & 012-0964-006 & 012-0964-07

Project Description: The proposal is to merge four parcels into one parcel for a total of 21,274 square foot and demolish two existing two-story detached structures (commercial and residential). The development includes the construction of a six-story mixed use building with 2,052 square feet of ground-floor retail spaces; 77 affordable apartment units above for a total of 93,558 square feet.

Exempt Status:

Statutory Exemptions

[ ] Ministerial {Sec.15268}
[ ] Feasibility/Planning Study {Sec.15262}
[ ] Emergency Project {Sec.15269}
[ ] Other: {Sec.________}

Categorical Exemptions

[ ] Existing Facilities {Sec.15301}
[ ] Replacement or Reconstruction {Sec.15302}
[ ] Small Structures {Sec.15303}
[ ] Minor Alterations {Sec.15304}
[x] In-fill Development {Sec. 15332}
[ ] General Rule {Sec.15061(b)(3)}

Other
[x] Projects consistent with a community plan, general plan or zoning {Sec. 15183(f)}
[ ] ____________________ **(Sec. ______)**

Reasons why project is exempt: The proposal is to merge four parcels into one parcel demolish two existing two-story detached structures (commercial and residential) and construct a six-story mixed use building with 2,052 square feet of ground-floor retail spaces; 77 affordable apartment units above for a total of 93,558 square feet. The project will not result in a significant impact on the environment and is exempt from environmental review

Lead Agency: City of Oakland, Planning and Building Department, Bureau of Planning, 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, CA 94612

Ed Manasse, Interim Deputy Director, Environmental Review Officer City of Oakland, Bureau of Planning

Department/Contact Person: Jason Madani, Planner III **Phone: 510-238-4790**

Signature (Robert D. Merkamp Zoning Manager) Date: 9/11/19

Pursuant to Section 711.4(d)(1) of the Fish and Game Code, statutory and categorical exemptions are also exempt from Department of Fish and Game filing fees.

*ENVIRONMENTAL DECLARATION

(CALIFORNIA FISH AND GAME CODE SECTION 711.4)

LEAD AGENCY NAME AND ADDRESS	FOR COUNTY CLERK USE ONLY
City of Oakland – Bureau of Planning 250 Frank H. Ogawa Plaza, Suite 3315 Oakland, CA 94612 Contact: Jason Madani Planner III	FILE NO: ______________________

CLASSIFICATION OF ENVIRONMENTAL DOCUMENT:

(PLEASE MARK ONLY ONE CLASSIFICATION)

1. NOTICE OF EXEMPTION / STATEMENT OF EXEMPTION

[X] A - STATUTORILY OR CATEGORICALLY EXEMPT

$ 50.00 - COUNTY CLERK HANDLING FEE

2. NOTICE OF DETERMINATION (NOD)

[ ] A - NEGATIVE DECLARATION (OR MITIGATED NEG. DEC.)

$ 2,280.75 - STATE FILING FEE

$ 50.00 - COUNTY CLERK HANDLING FEE

[ ] B - ENVIRONMENTAL IMPACT REPORT (EIR)

$ 3,168.25 - STATE FILING FEE

$ 50.00 - COUNTY CLERK HANDLING FEE

3. OTHER: ______________________

*****A COPY OF THIS FORM MUST BE COMPLETED AND SUBMITTED WITH EACH COPY OF AN ENVIRONMENTAL DECLARATION BEING FILED WITH THE ALAMEDA COUNTY CLERK.*****

BY MAIL FILINGS:

PLEASE INCLUDE FIVE (5) COPIES OF ALL NECESSARY DOCUMENTS AND TWO (2) SELF-ADDRESSED ENVELOPES.

IN PERSON FILINGS:

PLEASE INCLUDE FIVE (5) COPIES OF ALL NECESSARY DOCUMENTS AND ONE (1) SELF-ADDRESSED ENVELOPES.

ALL APPLICABLE FEES MUST BE PAID AT THE TIME OF FILING.

FEES ARE EFFECTIVE JANUARY 1, 2018

MAKE CHECKS PAYABLE TO: ALAMEDA COUNTY CLERK

Recording requested by:
CITY OF OAKLAND

When recorded mail to:

City of Oakland
DP&B – Bureau of Planning
250 Frank H Ogawa Plaza – 2nd Fl
Oakland, CA 94612
Attn: Zoning Manager

-----space above for Recorder's use only-----

CERTIFICATION FOR PARCEL MAP WAIVER
CASE NO. PLN19-180

EFFECTIVE, September __11__, 2019

WHEREAS, the undersigned, are the record owners of all that certain real property;

WHEREAS, it is necessary to merge four lots into one lot associated with **APN's: 012-0964-004 & 012-0964-005 & 012-0964-006 & 012-0964-007**; **(SEE PLOT PLAN ATTACHED HERETO AND MADE A PART HEREOF)**

NOW, THEREFORE, said lot lines are hereby approved, pursuant to Section 66412(d) of the Government Code. Said approval authorizes the lot lines as shown on the plot plan and in the legal descriptions attached hereto and made apart hereof.

____
Owner of Record, APN: 012-0964-004
APN: 012-0964-005

____
Owner of Record, APN: 012-0964-006
APN: 012-0964-007

APPROVED:
CITY OF OAKLAND

ROBERT D. MERKAMP
Zoning Manager

Attachments: Approved Parcel Map Waiver Map, dated September, 2019
Legal descriptions for reconfigured parcels

SYMBOLS & LEGEND

EXISTING

- BENCHMARK
- FOUND CITY OF OAKLAND MONUMENT
- FOUND CURB SCRIBE, AS NOTED
- VALVE (AS NOTED)
- FIRE HYDRANT
- SIGN
- STREET LIGHT(UNLESS NOTED OTHERWISE)
- LIGHT POLE(UNLESS NOTED OTHERWISE)
- GUY ANCHOR
- UTILITY POLE
- TREE
- SUBJECT PROPERTY LINE
- LOT LINE TO BE REMOVED
- CENTER LINE
- SURVEY TIE
- FENCE
- STORM DRAIN
- SANITARY SEWER
- OVERHEAD UTILITY LINE
- CONCRETE
- DETECTABLE WARNING

ABBREVIATIONS

AC	ASPHALT CONCRETE
BLDG	BUILDING
BLRD	BOLLARD
CB	CATCH BASIN
CD	CURB DRAIN
CL	CENTERLINE
COM	COMMUNICATIONS
DOC	DOCUMENT
DWY	DRIVEWAY
DYL	DOUBLE YELLOW LINE
E	ELECTRIC
GV	GAS VALVE
INV	BOTTOM INSIDE OF PIPE
M	MONUMENT
OH	OVERHEAD UTILITY LINE
OVHG	OVERHANG
R/W	RIGHT OF WAY
SD	STORM DRAIN
SS	SANITARY SEWER
TEL	TELECOMMUNICATION
TS	TRAFFIC SIGNAL
TYP	TYPICAL
UB	UTILITY BOX
VLT	VAULT
WV	WATER VALVE
WL	WHITE LINE

REFERENCES

R1 MAP OF THE APGAR TRACT FILED MAY 10, 1884, IN BOOK 7 OF MAPS AT PAGE 66

R2 SURVEY PLAT BY E.C. PRATHER, SURVEY NO. 21577 & 21578, DATED MAY 3, 1918, ON FILE AT THE ALAMEDA COUNTY PUBLIC WORKS DEPARTMENT

R3 CITY OF OAKLAND MONUMENT MAPS 268-285

R4 CALTRANS MONUMENT MAP, ALA-5-OAK

R5 CORNER RECORD, CR6007, FILED OCTOBER 29, 2014, IN BOOK 62 AT PAGE 84

R6 GRANT DEED RECORDED JANUARY 13, 2017, AS DOCUMENT NUMBER 2017010287

BASIS OF BEARINGS

THE BEARING OF SOUTH 73°20'00" EAST AS SHOWN ON THE MAP ENTITLED "MAP OF APGAR TRACT, PORTION OF PLOT NO. 37 OF KELLERSBERGER'S SUBDIVISION OF THE V. & D. PERALTA RANCHOS," FILED MAY 10, 1884, IN BOOK 7 OF MAPS AT PAGE 66, ALAMEDA COUNTY RECORDS, BETWEEN FOUND CITY OF OAKLAND MONUMENTS ON 36TH STREET, WAS TAKEN AS THE BASIS OF BEARINGS FOR THIS SURVEY.

BENCHMARK

THE ELEVATIONS SHOWN HEREON ARE BASED ON A FOUND CITY OF OAKLAND BENCHMARK, DESIGNATION 7/B MONUMENT RECORD SHEET 7/B QUAD 8 FOLDER. ELEVATION 49.482 FEET (DATUM = CITY OF OAKLAND).

NOTES

1. TOPOGRAPHY SHOWN HEREON WAS COMPILED BY FIELD SURVEYS PERFORMED IN JANUARY OF 2019.
2. THE EFFECT OF AN EASEMENT FOR BROADBAND COMMUNICATIONS RECORDED NOVEMBER 1, 2007, AS DOCUMENT NUMBER 2007382890, EXISTS OVER THE PARCELS SHOWN AS PARCELS ONE AND TWO AS DESCRIBED IN THE GRANT DEEDS RECORDED FEBRUARY 9, 2018, AS DOCUMENT 2018030898, OF WHICH THE EXACT LOCATION IS NOT DESCRIBED.
3. ALL UNITS ARE IN US SURVEY FEET AND DECIMALS THEREOF.
4. ALL TIES ARE PERPENDICULAR UNLESS NOTED OTHERWISE.

UTILITY NOTE

THE UTILITY LINES SHOWN ON THIS PLAN ARE DERIVED FROM RECORD INFORMATION AND SURFACE OBSERVATION. ACTUAL LOCATION AND SIZE, TOGETHER WITH THE PRESENCE OF ANY ADDITIONAL UTILITY LINES NOT SHOWN ON THIS PLAN SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

STATEMENT OF PURPOSE:

THIS PARCEL MAP WAIVER HAS BEEN PREPARED TO EFFECTUATE A LOT MERGER OF FOUR CONTIGUOUS PARCELS.

SURVEYOR'S STATEMENT:

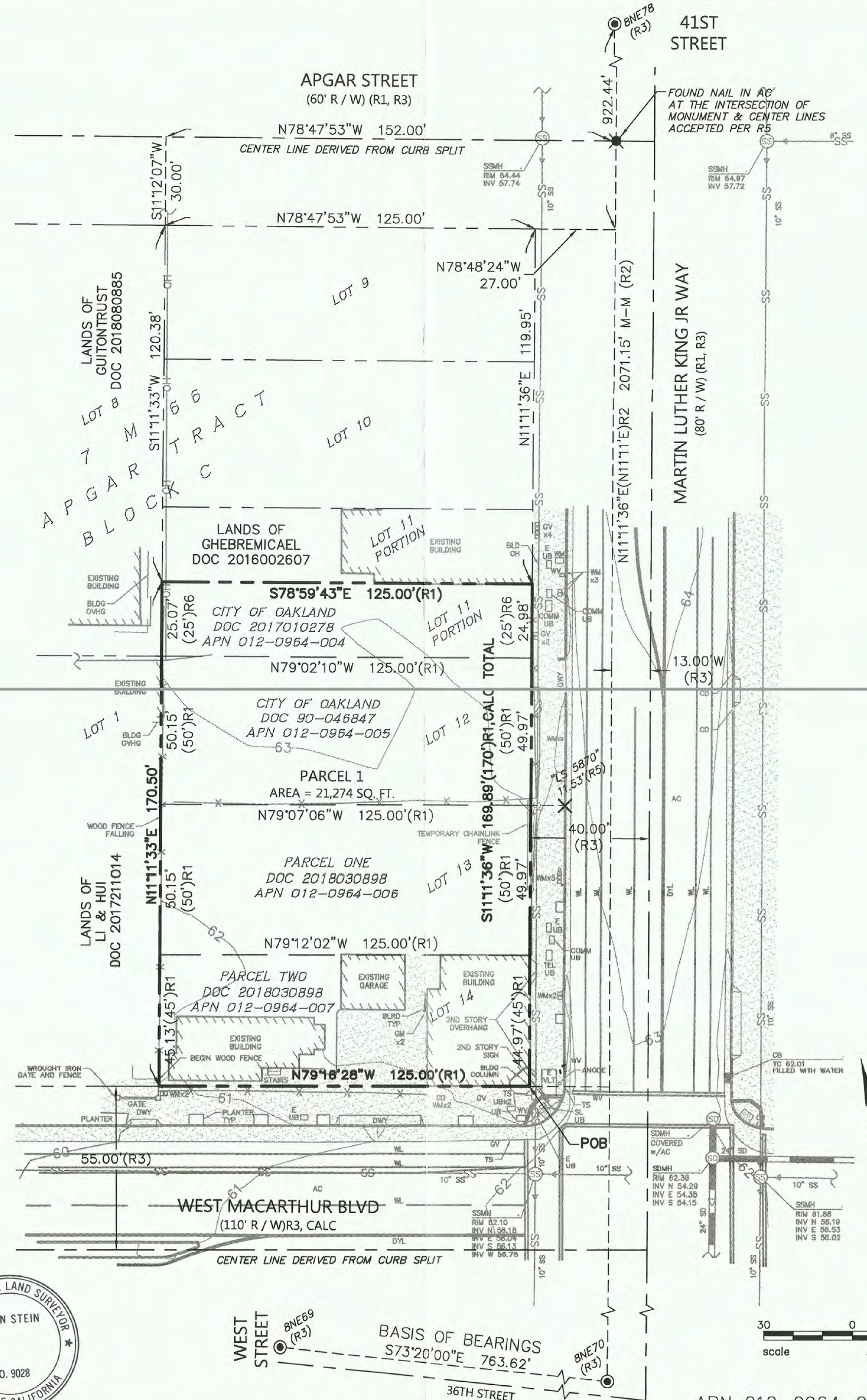
THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT.

KEVIN STEIN, P.L.S. 9028

7/8/19

DATED

PROFESSIONAL LAND SURVEYOR
KEVIN STEIN
NO. 9028
STATE OF CALIFORNIA



APPLICATION TO WAIVE PARCEL MAP

Parcel No. 012-0964-006 012-0964-007

I certify that I am the applicant named herein and that the information given on any submission herewith is in all respects true and accurate to the best of my knowledge and belief. I further certify that I am the owner or purchaser (option holder) of the property involved in this application.

I understand that any maps or exhibits filed become a permanent part of the file and may not be returned to me.

Signature ______ I am the: X Property Owner

Address 3801 and 3807 MARTIN LUTHER KING JR WAY, OAKLAND CA 94609 ____ Purchaser (include copy of contract)

Telephone No. 510-841-4410

Owner's Name LONGFELLOW CORNER, LP (DAN SAWISLAK, AUTHORIZED SIGNATORY) (if other than applicant)

Owner's Address 2220 OXFORD ST. BERKELEY, CA 94704 Telephone No. 510-841-4410

APPLICATION TO WAIVE PARCEL MAP

Parcel No. 012-0964-005 012-0964-004

I certify that I am the applicant named herein and that the information given on any submission herewith is in all respects true and accurate to the best of my knowledge and belief. I further certify that I am the owner or purchaser (option holder) of the property involved in this application.

I understand that any maps or exhibits filed become a permanent part of the file and may not be returned to me.

Signature ______ I am the: X Property Owner

Address 3823 and 3829 ____ Purchaser (include copy of contract)

Martin Luther King Jr Way, Oakland CA 94609

Telephone No. 510-238-6543

Owner's Name City of Oakland (if other than applicant)

Owner's Address 250 Frank H. Telephone No. 510-238-6543

Ogawa Plaza, Ste 5313, Oakland CA 94612

OWNER:

CITY OF OAKLAND
APN 012-0964-004
DOC 2017010287

OWNER:

CITY OF OAKLAND
APN 012-0964-005
DOC 90-046847

OWNER:

LONGFELLOW CORNER LP
APN 012-0964-006 & 007
DOC 2018030898

EXISTING AREAS:

APN 012-0964-004	3219 SQUARE FEET ±
APN 012-0964-005	6257 SQUARE FEET ±
APN 012-0964-006	6257 SQUARE FEET ±
APN 012-0964-007	5631 SQUARE FEET ±

NEW AREA:

21,274 SQUARE FEET ±

PARCEL MAP WAIVER

FOR LOT MERGER

THE LANDS OF CITY OF OAKLAND
A MUNICIPAL CORPORATION
****
AS DESCRIBED IN THE FOLLOWING GRANT DEEDS:
RECORDED JANUARY 13, 2017, AS DOCUMENT 2017-010287;
RECORDED FEBRUARY 16, 1990, AS DOCUMENT 90-046847;
RECORDED MONTH DAY YEAR , AS DOCUMENT #########
ALL OFFICIAL RECORDS OF ALAMEDA COUNTY
****
CITY OF OAKLAND, ALAMEDA COUNTY, CALIFORNIA
JUNE 2019

BKF 100+ YEARS
ENGINEERS . SURVEYORS . PLANNERS
1646 NORTH CALIFORNIA BOULEVARD, SUITE 400
WALNUT CREEK, CA 94596

APN 012-0964-004, 005, 006 & 007 JOB# 20181870-10 SHEET 1 OF 1

EJSCREEN Report (Version 2019)

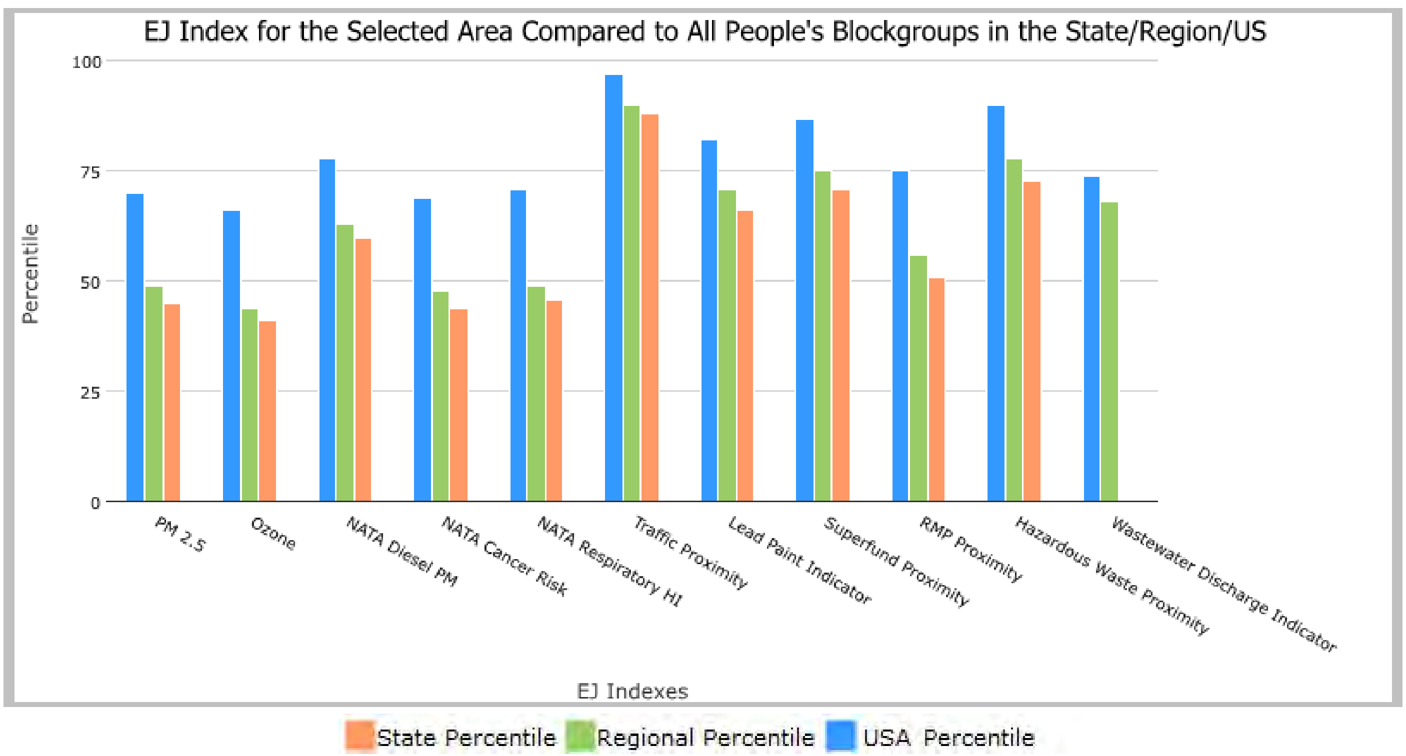
1 miles Ring Centered at 37.827559,-122.269429, CALIFORNIA, EPA Region 9

Approximate Population: 40,610

Input Area (sq. miles): 3.14

Longfellow Corner

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	45	49	70
EJ Index for Ozone	41	44	66
EJ Index for NATA* Diesel PM	60	63	78
EJ Index for NATA* Air Toxics Cancer Risk	44	48	69
EJ Index for NATA* Respiratory Hazard Index	46	49	71
EJ Index for Traffic Proximity and Volume	88	90	97
EJ Index for Lead Paint Indicator	66	71	82
EJ Index for Superfund Proximity	71	75	87
EJ Index for RMP Proximity	51	56	75
EJ Index for Hazardous Waste Proximity	73	78	90
EJ Index for Wastewater Discharge Indicator	N/A	68	74



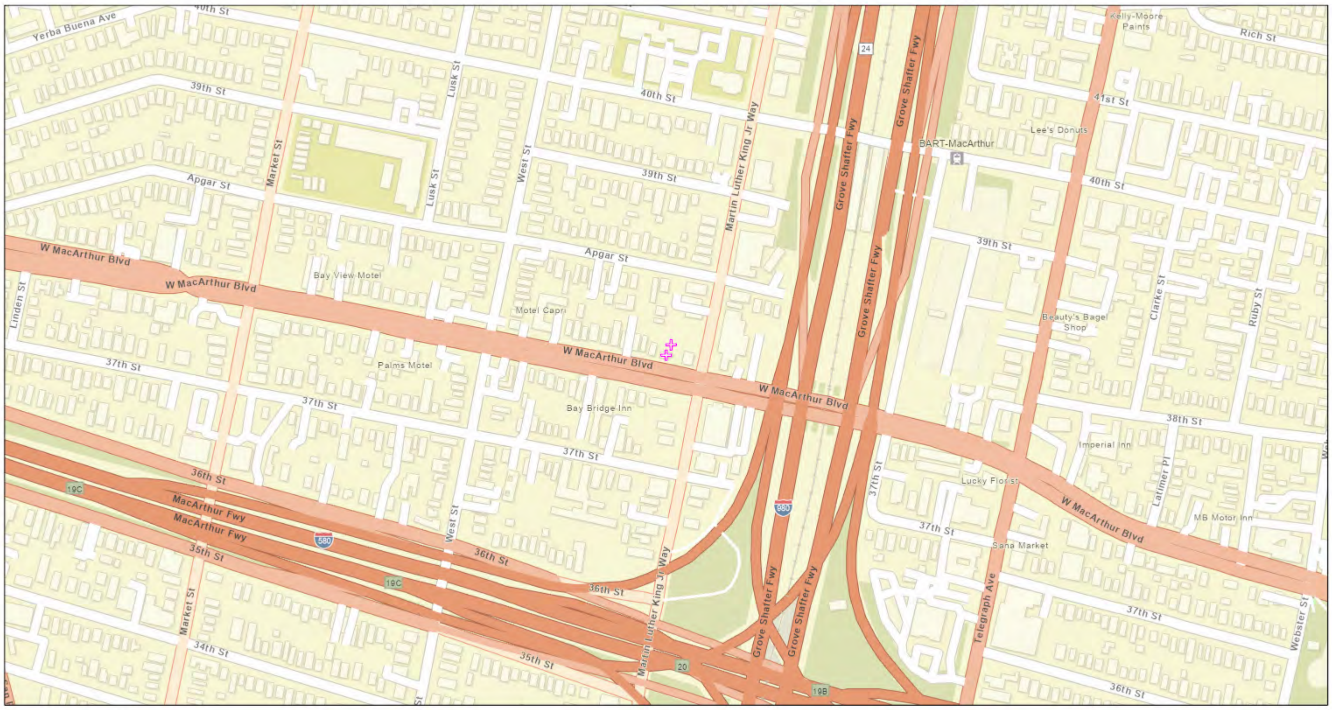
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

1 miles Ring Centered at 37.827559,-122.269429, CALIFORNIA, EPA Region 9

Approximate Population: 40,610

Input Area (sq. miles): 3.14

Longfellow Corner



September 16, 2020

Longfellow Corner

Search Result (point)

1:4,514

0 0.04 0.09 0.18 mi

0 0.05 0.1 0.2 km

Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	4

EJSCREEN Report (Version 2019)

1 miles Ring Centered at 37.827559,-122.269429, CALIFORNIA, EPA Region 9

Approximate Population: 40,610

Input Area (sq. miles): 3.14

Longfellow Corner

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m^3)	8.33	9.78	32	9.21	44	8.3	49
Ozone (ppb)	27.9	48.2	3	48.9	2	43	0
NATA* Diesel PM (µg/m^3)	0.889	0.468	93	0.479	90-95th	0.479	90-95th
NATA* Cancer Risk (lifetime risk per million)	29	36	22	35	<50th	32	<50th
NATA* Respiratory Hazard Index	0.49	0.55	36	0.53	<50th	0.44	60-70th
Traffic Proximity and Volume (daily traffic count/distance to road)	10000	2000	97	1700	97	750	99
Lead Paint Indicator (% Pre-1960 Housing)	0.6	0.29	81	0.24	85	0.28	82
Superfund Proximity (site count/km distance)	0.29	0.18	89	0.15	91	0.13	91
RMP Proximity (facility count/km distance)	0.54	1.1	47	0.99	53	0.74	62
Hazardous Waste Proximity (facility count/km distance)	9.3	3.4	90	2.9	92	4	95
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0	17	N/A	31	54	14	37
Demographic Indicators							
Demographic Index	48%	48%	51	47%	53	36%	72
Minority Population	60%	62%	45	59%	49	39%	73
Low Income Population	36%	34%	59	34%	59	33%	61
Linguistically Isolated Population	8%	9%	56	8%	60	4%	80
Population With Less Than High School Education	11%	18%	42	17%	45	13%	54
Population Under 5 years of age	4%	6%	28	6%	28	6%	30
Population over 64 years of age	12%	13%	51	14%	50	15%	40

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

For additional information, see: www.epa.gov/environmentaljustice