ATTACHMENT E



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July 13, 2017

Chair Adhi Nagraj and Members of the Planning Commission City of Oakland 250 Frank H. Ogawa Plaza, Suite 3315 Oakland, CA 94612

> Case File No. PLN16092: 605 9th Street; APN: 001-0211-006-00; Appeal of Re: Zoning Manager Approval

Dear Chair Nagraj and Members of the Planning Commission:

We represent Ninth & Jefferson Associates LLC, the project sponsor for the 25-unit residential development at 605 9th Street ("Project"). On October 25, 2016, the Zoning Manager approved Regular Design Review for the Project; a minor Variance for a side yard setback encroachment on the south side at floors 6, 7, and 8; and, minor Conditional use permits for the elevator penthouse and reduced off-street parking (collectively referred to as the "Entitlements"). On November 4, 2016, Christopher J. Roberts ("Roberts Appeal") and Bryan W. Wenter of Miller Starr Regalia on behalf of Liang Hoi Phua (aka Bill Phua), Linli Lee, Lee Chin Phmah, Lee Chye "Eddie" Phmah, and Wei Keng "Joel" Phmah ("Miller Starr Appeal") filed appeals challenging the Zoning Manager's decision (collectively referred to as the "Appeals" and "Appellants").1

The Appeals raise several claims, all of which are without merit and are not supported by substantial evidence in the record. The Appellants assert that the Project is inconsistent with the General Plan and future Downtown Oakland Specific Plan. The Appellants, however, fail to consider the broad discretion granted to the Zoning Manager in determining General Plan consistency and fail to acknowledge that the Project is not required to comply with each and every General Plan Policy and is certainly not required to comply a draft plan that has yet to be adopted by the City of Oakland ("City").

The Appellants also assert that the Zoning Manager's findings are legally inadequate. Contrary to the Appellants' claims, the Zoning Manager has not only met the legal standard for adopting findings, but has exceeded them by providing Project-specific discussion, analysis and Finally, the Appellants assert that the Zoning Manager's determination under consideration.

¹ It has been over eight (8) months since the Appeals were first filed. Since that time the Project Sponsor has worked diligently with the Appellants to try to resolve their concerns. In early April 2017, when it became clear there would be no resolution, the Project Sponsor requested the Appeals be scheduled for hearing. Unfortunately, due to staffing constraints, an additional four (4) months was needed before the Appeals could be heard.



California Environmental Quality Act ("CEQA") was inappropriate and that unusual circumstances exist that disqualify the Project from using CEQA's streamlining and other exemption provisions. No substantial evidence has been presented to support the Appellant's claim and the "unusual circumstances" alleged are quite typical for development in an urban environment. Attached to this letter, as discussed below, are four (4) technical studies prepared by the Project sponsor that provide substantial evidence in support of the Zoning Manager's determination.

For all these reasons and on behalf of the Project sponsor, we respectfully request that the Appeals be denied and the Zoning Manager's decision be upheld.

I. PROJECT OVERVIEW

The Project is an 8-story, 85-foot, 25-unit residential development at the corner of Jefferson Street and 9th Street. It is a multi-family development consisting of a mix of large 1- and 2-bedroom units that range in size from 795 square feet to 1,300 square feet, a large residential lounge along the ground floor and 23 off-street parking spaces. In response to community comments, a 300-square foot community-serving retail space has been added along Jefferson Street.

The Project is in the Central Business District ("CBD") area of the General Plan and the Central Business District Residential ("CBD-R") zone. The Project complies with the height and density requirements of the Planning Code and General Plan, but requires a Minor Variance from the step-back requirements of Planning Code along the south side, a Minor CUP for an elevator penthouse above 12-feet, and a reduction in one (1) parking space. The Project also requires Design Review.

The Project was determined to qualify for streamlined CEQA review. An in-fill exemption (CEQA Guidelines section 15332) and a community plan/general plan consistency exemption (CEQA Guidelines section 15183) (collectively referred to as "CEQA Exemptions") were prepared for the Project. Following review of the Project and a determination that the necessary findings could be made, the Zoning Manager approved the Project and granted the requested Entitlements on October 26, 2016.

On November 4, 2016, two appeals of the Project were filed. The Miller Starr Appeal was filed on behalf of the owners of the adjacent Flower Mart, a one-story building that wraps around the Project site, and the Roberts Appeal was filed by a neighbor located across Jefferson Street to the north east at 555 10th Street.

The Project Sponsor has engaged in significant public outreach both during the entitlement process and after the submittal of the Appeals. The Project Sponsor participated in two community meetings, met with, talked with and texted interested neighbors, making himself available to anyone interested in the Project. Following the submittal of the Appeals, the Project Sponsor spent over five (5) months trying to work with the Appellants to address their concerns. Despite numerous emails, telephone calls, meetings and offers by the Project Sponsor, no resolution was reached and in early April, the Project Sponsor alerted Planning Department staff that the Appeals would be moving forward.



II. APPEALS

The following is a discussion of the key points raised in the Appeals. As noted, the issues raised in the Appeals are without merit. The decision by the Zoning Manager was consistent with the General Plan and draft Downtown Oakland Specific Plan, was supported by adequate findings and complied with the requirements of CEQA.

A. The Project is Consistent with the General Plan, and Consistency with the Draft Downtown Oakland Specific Plan is not at Issue.

The Appeals claim that the Project is inconsistent with the General Plan and the Draft Downtown Oakland Specific Plan ("Downtown Specific Plan"). According to the Miller Starr Appeal, the Project cannot be approved because it is inconsistent with numerous applicable General Plan policies (11 policies in particular), and would violate applicable provisions of the draft Downtown Oakland Specific Plan, including Key Recommendations A, B, and F for Old Oakland. The Miller Starr Appeal alleges that the Project, at 8-stories, is incompatible with the adjacent one-story building and the neighborhood in general, thereby conflicting with the plain language of various General Plan policies that require new in-fill development respect, or be compatible with, existing development. The Miller Starr Appeal also alleges that the Project is not appropriately scaled or in character with the neighborhood and should be revised so that it is no taller than five-stories. (The Project, however, complies with the height limitation of the Planning Code, which is 85-feet.)

The General Plan is a broad planning document that establishes overall policy goals for a jurisdiction, laying out a framework for development and land use. Not all policies or statements in a General Plan are mandatory. (Sequoyah Hills Homeowners v. City of Oakland (1st Dist. 1993) 23 Cal. App. 4th 704, 719 ("Sequoyah Hills").) Only those policies that are written as "shalls" are mandatory. Other policies are "shoulds" and are statements that express a community's preferences or goals, not rigid directives or mandatory requirements. Contrary to any implied assertion by the Miller Starr Appeal, there is no requirement that the Project comply with each and every General Plan policy and here, none of the policies cited by the Miller Starr Appeal are mandatory.

Also, the City is granted great deference in determining General Plan consistency "to examine the specifics of a proposed project [and] determine whether it would be 'in harmony' with the policies stated in the plan." (Sequoyah Hills, supra, 23 Cal. App. 4th at p. 719.) This deference is granted because the body that adopts a general plan and establishes its policies (i.e., the City) has been determined by the courts to be the most competent to construe those policies and determine whether a project is consistent with such policies. For this reason, the City is granted broad discretion to construe policies in the General Plan based on its purpose. The Zoning Manager evaluated the Project in relation to those policies and included findings that the Project is consistent with the General Plan. This determination was reasonable and is legally valid.

The Downtown Specific Plan is in draft form and is at least a year and half, if not longer, from being formally adopted. Given the proximity of the Project site to regional transit (i.e., BART) and its distance from the historic structures that comprise Old Town Oakland, the likelihood of the Downtown Specific Plan limiting height and density in this location is, in our opinion, low. Regardless, the Downtown Specific Plan recommendations cited by the Miller Starr Appeal are not



mandatory. They are recommendations in a <u>draft plan</u> that has not been adopted and is currently being significantly revised and rewritten.

The Miller Starr Appeal's assertions regarding the Downtown Specific Plan are therefore irrelevant as that document is in draft form and is being significantly revised, and the City is not obligated or required to consider it as part of any Project approval.

For these reasons, the claims raised by the Miller Starr Appeal are without merit and the Zoning Manager's determination regarding the Project's consistency with the General Plan should be upheld.

B. The Zoning Manager's Findings in Support of the Project are Legally Adequate

The Appeals allege that the Zoning Manager's findings are legally inadequate in that they do not adequately address the relationship of the Project in its setting, scale, bulk, and height to the surrounding area. The Miller Starr Appeal further alleges that "the findings required to grant a minor variance have not been and cannot be made; the solution, instead, **is to revise the Project by reducing its height** so that it does not require special treatment relative to surrounding properties." (Emphasis added.) The Miller Starr Appeal also alleges that the Zoning Manager could not make the required findings and instead simply recited the finding language.

Not only is this assertion incorrect, but the courts have made clear that where the statutory requirements for findings are precise, a recital of the statutory language can be sufficient.

In Jacobson v. County of Los Angeles (1977) 69 Cal. App. 3d 374, 389, the court found the County's conditional use permit findings, which were almost verbatim the findings listed in the County ordinance, were adequate because the findings were sufficiently precise and detailed. Here, the findings are similarly precise and detailed, and regardless, the Zoning Manager has presented additional evidence to support them. Nothing about the Zoning Manager's findings is perfunctory. The findings were based upon an extensive review of the Project, including its design and how it relates to the surrounding area, and the Zoning Manager presented evidence as to why, in his professional opinion, the design was well-related to the surrounding area, which is Residential Design Review Finding 1, and would be compatible with abutting properties and the surrounding neighborhood, which is General Use Permit Finding 1. The Zoning Manager also presented evidence as to why, in his professional opinion, strict compliance with the side yard step-back requirement would preclude an effective design solution, which is the criteria for considering minor variances.

The Appellants may disagree with the Zoning Manager's findings and explanations, but the Zoning Manager, a planning professional with years of experience evaluating such criteria, acted within his authority in making the determinations and adopting the findings. The Zoning Manager's findings comply with applicable legal standards and his determination should be upheld.



C. The City's Reliance on CEQA Exemptions for the Project is Legally Adequate and Supported by Substantial Evidence in the Record.

The Appeals assert that the City's use of the CEQA exemptions was legally inadequate because a fair argument exists that the Project will have significant environmental impacts. This assertion is without merit as, contrary to the Appellant's claims, substantial evidence exists in the record to support the City's use of the CEQA exemptions.

In challenging the City's CEQA analysis, the Appellants have the burden of proof to establish, by <u>substantial evidence</u>, that the City's reliance on the exemptions for the Project was legally inadequate. The Appellants, however, have not met this burden and have not presented any substantial evidence to support their claims or counter the analysis prepared by Planning Department staff. The information provided by the Appellants is unsubstantiated opinion, which is not substantial evidence.

Substantial evidence is "reasonable assumptions predicated upon facts, and expert opinion supported by facts. [Citations.] It does not include '[a]rgument, speculation, unsubstantiated opinion or narrative, [or] evidence which is clearly inaccurate or erroneous. . . .' [Citations.]" (North Coast Rivers Alliance v. Kawamura (2015) 243 Cal.App.4th 647. Emphasis added.) Substantial evidence is not unsubstantiated opinion nor is it "[c]omplaints, fears, and suspicions about a projects potential environmental impact... [Citations]" and "in the absence of a specific factual foundation in the record, dire predictions by nonexperts regarding the consequences of a project [also] do not constitute substantial evidence. [Citations.]" (1 Kostka & Zischke, Practice under the Cal. Environmental Quality Act (2d ed. 2015) § 6.42, pp. 6-47-6-48; Gentry v. City of Murrieta (1995) 36 Cal.App.4th 1359, 1417. Emphasis added.)

Based on established case law, the information provided by the Appellants does not meet the legal burden of proof to find the CEQA analysis prepared legally inadequate. The Appeals simply cite the fact that the Project site was a former gas station as evidence that the CEQA exemptions cannot be used. As discussed below, the use of the Project site as a former gas station is not an unusual circumstance and no substantial evidence has been presented to support an assertion that the Project site is contaminated or poses a health risk. The Project is subject to the City's Standard Conditions of Approval related to site contamination, which require, among other things, an Environmental Site Assessment and use of Best Management Practices should site contamination be discovered.

The Miller Starr Appeal also raises concerns regarding air quality, noise and traffic impacts. The concerns raised, however, are general in nature and are not supported by technical analyses or substantial evidence. They also fail to consider the City's Standard Conditions of Approval, which would reduce any potential impacts associated with these issues to less than significant.

Unlike the Appeals, the decision of the Zoning Manager that the Project will not have significant impacts and therefore is exempt pursuant to CEQA Guidelines Section 15332 and Section 15183 is supported by substantial evidence.

The Project sponsor has commissioned four (4) studies by technical experts to clearly establish that the Project will not have a potential significant impact on the environment, essentially



confirming what the Zoning Manager determined. Copies of these reports are attached and provided into the record. The first report, a Phase I/Phase II (see Attachment 1), indicates there has been no impact to subsurface soil or groundwater in the area of the former USTs and that there are no elevated levels of any contaminant that could pose a threat to human health or the environment. The second report, a health risk evaluation prepared by First Carbon Solutions (see Attachment 2), indicates that the potential construction impacts from the Project would be substantially less than the City's significant thresholds based on a comparison of the Project's land use intensity to that of three other downtown Oakland projects that also did not have an air quality impact. The third report, a traffic analysis prepared by Fehr & Peers (see Attachment 3), establishes that the Project meets all three screening criteria used by the City to determine whether a project will have a traffic impact; therefore, the Project would not result in substantial additional vehicle miles travelled ("VMT") and any Project impacts with respect to VMT would be less-than-significant. The final report, a noise study prepared by Charles M. Salter Associates, Inc. (see Attachment 4), indicates that with implementation of sound rated façade and windows/doors, any noise impacts to future residents is within acceptable levels, and that construction noise and vibration from the Project would be fully addressed through compliance with the City's established noise ordinance guidelines. While the Miller Starr Appeal also raised concerns regarding shadow, shadow on adjacent properties is not a CEQA impact and further discussion or analysis is not warranted.²

Because substantial evidence supports the City's determination that the Project will not have significant impacts, the City may therefore rely on the CEQA exemptions and the Zoning Manager's environmental determination should be upheld.

D. CEQA Exemptions Apply and There Are No Unusual Circumstances

Finally, the Appellants claim there are unusual circumstances associated with the Project that qualify it for an exception to the CEQA exemptions. According to the Miller Starr Appeal, "[u]nusual circumstances exist here given the Project site's former use as a gas station and given the excess building height proposed at this corner of 9th and Jefferson relative to the existing five-story buildings at that intersection." Similarly, the Roberts Appeal states: "This case is an unusual circumstance because there is a reasonable possibility that activity will have a significant effect on the environment even though it is not on any State list." The Roberts Appeal further states: "[d]ue to the use of underground storage tanks at the east end of the site and auto service and repair activity taking place the west end of the site, there is a reasonable possibility that the ground is still contaminated with gasoline, motor oil, and solvents containing volatile organic compounds (VOCs) used in an auto repair activity and that the underground gasoline tanks are still in place." Not only are these not unusual circumstances, but there is no substantial evidence provided to create the causal link between these statements and a potentially significant environmental impact.

It is agreed that the Project site was formerly used as a gas station. Many other properties in the City, and indeed the entire State, were former gas stations. The fact that the Project site was a former gas station does not in and of itself present an "unusual circumstance" that renders a CEQA exemption inappropriate. No evidence has been presented to indicate that the former use of the Project site as a gas station was any different than any other redeveloped gas

² See City of Oakland, CEQA Thresholds of Significance, which do not include a threshold for shadow impacts.



station, rending the argument that the gas station use is an "unusual circumstance" simply without merit.

Similarly, the assertion that the Project's height is an "unusual circumstance" is also not supported as the Project complies with the height requirements of the Planning Code. The fact that the Project is taller than adjacent buildings does not make it unusual - it makes it new construction in an urban environment where surrounding properties were developed at different times. Varying height cannot be an "unusual circumstance" where the Project complies with the applicable height limit, and even if it did not comply, something that is different does not automatically have an impact without substantial evidence to establish a potential significant environmental impact.

Regardless, none of the Appellants' claims regarding "unusual circumstances" are supported by substantial evidence in the record. Instead, all the substantial evidence in the record supports the determination that no "unusual circumstances" exist and the Project qualifies to use exemptions under CEQA. As such, the Zoning Manager's determination that the Project is exempt under CEQA Guidelines sections 15332 and 15183 should be upheld.

* * * * * *

The Project sponsor understands the concerns of the Appellants and has reached out, met with or talked with them numerous times to try to find a solution. While these efforts were not successful, the Project sponsor has agreed to add a small 300 square foot community retail space along 9th Street.

The issues raised by the Appellants in the Appeals are without merit as evidenced above. For this reason, and because the City needs more housing in transit rich areas such as the Project site, we respectfully request that the Planning Commission deny the Appeals and uphold the Zoning Manager's approval of the Entitlements.

Very Truly Yours,

Alexis Pelosi, Principal Pelosi Law Group

Attachments:

- 1. Phase I and Limited Phase II Environmental Site Assessment, ARS, Inc., September 11, 2015 (report only)
- 2. Health Risk Assessment for the 605 9th Street Residential Project, First Carbon Solutions, July 10, 2017
- 3. VMT Assessment for 605 9th Street Project in Oakland, Fehr & Peers, July 12, 2017
- 4. 605 9th Street Apartments Environmental Noise Study, Charles M. Salter, July 10, 2017

ATTACHMENT E1

Attachment 1

CONFIDENTIAL

PHASE I AND LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

605 9th STREET OAKLAND, CALIFORNIA APN: 001-0211-006-00

Prepared For:

The Hernon Group Inc. 650B Fremont Avenue #375 Los Altos CA 94024-4812

Prepared By:

APPLIED REMEDIAL SERVICES, INC. P.O.BOX 5086 WALNUT CREEK, CA, 94596



Applied Remedial Services, Inc.

September 11, 2015

The Hernon Group Inc. 650B Fremont Avenue #375 Los Altos CA 94024-4812

Subject:

Phase I and Limited Phase II Environmental Site Assessment

605 9th Street, Oakland, California

APN: 001-0211-006-00

Dear Mr. Hernon:

Applied Remedial Services, Inc. (ARS) is pleased to present this Phase I Environmental Site Assessment report for the property located at 605 9th Street, Oakland, California (APN: 001-0211-006-00) ("Property"). The purpose of the Phase I ESA was to identify potential onsite and offsite sources or practices (recognized environmental conditions) that could adversely impact environmental conditions on the Property. This Phase I ESA has been conducted in general conformance with the scope and limitations of ASTM Practice E 1527-13 and with the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (40 CFR Part 312).

Based on the results of the Phase I ESA, which indicated the presence of an auto service station on the Property from the 1930s to the 1950s and the presence of a small above ground oil tank and potentially a small gasoline underground storage tank (UST) on the eastern boundary of the building near Jefferson Street. A limited Phase II ESA was conducted which included a subsurface Physical Anomalies Survey where we looked for buried tanks on the property, and the collection and analysis of four shallow soil gas samples from the immediate vicinity of the former locations of the tanks on the Property. The Phase II ESA was limited because it did not attempt to assess all potential environmental impacts associated with the former gas station, but rather assessed potential vapor intrusion concerns, which would be of primary concern to regulatory agencies should these impacts exist.

Please do not hesitate to call should you have any further questions. In addition to the office, you can reach us at the following phone numbers: Michael (707) 567-2202, Jim (707) 631-1505.

Sincerely Yours,
APPLIED REMEDIAL SERVICES, INC.

Michael F. Kara General Manager REPA (No. 386340) Exp. 5/30/2016 Registered Lead Sampling Technician No. 21985 Jim E. Gribi P.G. (No. 5843) Principal Geologist



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EXECUTIVE SUMMARY

ARS has conducted a Phase I Environmental Site Assessment in conformance with the scope and limitations of *ASTM Standard E 1527-13* for the property located at 605 9th Street, Oakland, California (APN: 001-0211-006-00) ("Property"). Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report.

The purpose of the Phase I ESA has been to identify current and historical potential and actual recognized environmental conditions for the Property. Recognized environmental conditions are defined in ASTM Standard E 1527-13 as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of future release."

Based on the results of the Phase I ESA, which indicated the presence of an auto service station on the Property from the 1930s to the 1950s, a subsurface Physical Anomalies Survey was conducted where we searched for buried tanks on the property using a variety of electronic instrumentations such as a magnetometer, a radar cone penetrating meter, and the collection and analysis of four shallow soil gas samples from the immediate vicinity of the former locations of the tanks on the Property. The Phase II ESA was limited because it did not attempt to assess all potential environmental impacts that could be associated with the former gas station, but rather assessed potential vapor intrusion concerns within the tank areas, which would be of primary concern to regulatory agencies should these impacts exist.

Site Description

The Property is located in a mixed commercial/residential part of southwest Oakland, with primarily high density residential lofts and some single family residential land use along Jefferson Street. The Property is located at an elevation of approximately 35 feet above mean sea level. The Property is located in a mixed commercial and residential area of downtown Oakland. According to the USGS 7.5-Minute Quadrangle, Oakland, West, California Map, the Property lies on a gently west-southwest sloping plan approximately one-half mile north-northeast from Oakland Inner Harbor Channel. Based on topography and location, we would expect groundwater flow in the site area to be to the south-southwest.

The Property includes one 5,000 square foot commercial warehouse cinderblock and cement walls empty clean warehouse. There are few partition walls on the east and west portion of the site that create small 800-1,000 sf spaces. The portioning wall on the east of the warehouse towards Jefferson Street created an empty carpeted space with a small podium to the south of the building; apparently this area was used by a church group. It is at the eastern wall of this room parallel to the sidewalk along Jefferson Street that the 1951 and 1952 Sanborn maps indicated that the "Oil tank and Gasoline Tank" might have been located.

Findings

The Phase I ESA revealed no current uses on the Property that would be expected to have impacted environmental conditions on the Property. The Property is currently un-occupied. During the site inspection, we noted no evidence of any significant hazardous waste storage and handling, and no evidence of unauthorized releases or spills on the Property. Also, we noted no other conditions on the Site which would indicate significant recognized environmental conditions on the Property.

Relative to recognized environmental conditions from current offsite properties and businesses, the Phase I ESA revealed past businesses or activities in the site vicinity which are upgradient (north-northeast) from the Property. The EDR report identified the following listings (1) Douglas N. Salter/901 Jefferson Housing, located approximately 70 feet northeast from the Property at, 901 Jefferson Street, was included on the Cortese, LUST, and County lists; (2) Puddy & Dobler, located approximately 140 feet north-northeast from the Property at 931 Jefferson Street, is included on the EDR Historical Auto Stations list; (3) Smith Geneva, located approximately 80 feet north from the Property at 630 9th Street, was included on the EDR Historical Cleaners list. The Douglas N. Salter/901 Jefferson Housing and Puddy & Dobler sites are located on land that was recently redeveloped as a multi-tenant housing development, 901 Jefferson. Potential environmental concerns related to these upgradient site listings were addressed as part of the redevelopment effort. Alameda County records for this adjacent redevelopment, which are summarized in Section 4.2 of this report, indicate that hazardous waste impacts were relatively low and that these impacts would not be expected to impact environmental conditions on the Property.

The Smith Geneva listing at 630 9th Street, on the EDR Historical Cleaners list is for a laundry in 1925. A review of Sanborn Fire Insurance Maps and the City Directories Abstract indicates no cleaners at this location from at least 1928 to 2013. Given the distant age of this potential cleaner (prior to chlorinated solvent use in dry cleaners) and the fact that its existence was not confirmed from multiple sources, we would consider this potential cleaner to be of no significant risk relative to the Property.

De minimis conditions, which are not RECs, include hazardous substance or petroleum releases or impacts that do not represent a threat to human health or the environment and which would not be subject to enforcement. The Phase I ESA identified *de minimis* conditions relative to the Property.

This Phase I ESA identified potential recognized environmental conditions relative to the Property. Historical records indicated:

That on Sanborn maps in 1951 and 1952 the following notations was observed:

Small building on southeast side of Property labelled "Oil & Gasol.", building along west edge of Property labelled as "Auto Oiling & Washing". A Subsurface Physical Anomalies Survey (SPAS) was conducted at the site on 9, 9, 2015 by Foresite Engineering (Foresite). Foresite specifically targeted buried metallic objects all over the site especially along the historical area which indicated the potential presence of Oil and Gasoline Tanks located near the wall parallel to Jefferson Street to the east of the property. Foresite reported the following:

- 1) No Underground Storage Tanks detected. Only water, sewer and metallic subsurface drains. I used yellow marker crayon on carpet and cement floor.
- 2) The interesting area was in middle section towards the roll up doors, evident of former loading dock. I couldn't get access to outside this area. Former drain and sewer connections.
- 3) Gas runs under stage in the eastern side of building at rear of blue wall into middle section. Lines evident above grade are gas and water with sanitary vent lines.

In addition, four (4) soil gas probes were advanced to five (5) feet beneath the surface within the area of the potential former USTs. The evaluation included a soil gas analyses to evaluate potential risks

from volatile organic compounds such as Total Petroleum Hydrocarbons as Gasoline (TPHg), Benzene (B), Toluene (T), Ethylbenzene (EB) and Xylenes (X).

The purpose of the SVS was to determine whether ("TPHg and BTEX") are present in the soil gas underneath the site at levels that represent an indoor air intrusion concern for future building occupants. This SVS was intended to build on or confirm the potential presence of contaminated media soil and groundwater at the Site in that the data from the soil gas levels will be compared to regulatory agency threshold limits in order to arrive at conclusions and recommendations regarding the subsurface environmental quality.

The results indicated the following:

- 1) No soil gasoline vapors were detected in any sample;
- 2) Soil gas vapors of Benzene were 10 times <u>lower</u> than Regulatory Agency (RWQCB) (soil gas limits) for the highest Benzene vapor level detected;
- 3) Soil gas vapors of Toluene were not detected;
- 4) Soil gas vapors of Ethylbenzene were 89 times <u>lower</u> than (RWQCB) soil gas limits for the highest Ethylbenzene vapor level detected; and
- 5) Soil gas vapors of Xylene(s) were 5,591 times <u>lower</u> than soil gas limits for the highest Xylene(s) vapor level detected.

OPINION

The results clearly indicate that there has been no impact to subsurface soil or groundwater in the area of the former USTs. There were no elevated levels of any contaminant that could pose a threat to human health or the environment. This issue does not require any further investigation since the detected levels were at background residual levels for an industrial area. We recommend no further action in regards to this issue at the site.

1.0 INTRODUCTION

In accordance with our agreement, Applied Remedial Services (ARS) has completed this Phase I and Limited Phase II Environmental Site Assessment (ESA) for the property located at 605 9th Street, Oakland, California (APN: 001-0211-006-00) ("Property") (see Figure 1 and Figure 2). The purpose of the Phase I ESA was to identify potential onsite and offsite hazardous substances or petroleum products sources or practices (recognized environmental conditions) that could adversely impact the Property environment. This Phase I ESA has been prepared for The Hernon Group or their Assigns, as their interest may appear.

Based on the results of the Phase I ESA, which indicated the presence of an auto service station on the Property from the 1930s to the 1950s, a subsurface Physical Anomalies Survey was conducted where we searched for buried tanks on the property using a variety of electronic instrumentations such as a magnetometer, a radar cone penetrating meter, and the collection and analysis of four shallow soil gas samples from the immediate vicinity of the former locations of the tanks on the eastern side of the Property. The Phase II ESA was limited because it did not attempt to assess all potential environmental impacts that could be associated with the former gas station, but rather assessed potential vapor intrusion concerns within the tank areas, which would be the primary concern to regulatory agencies should these impacts exist.

1.1 Purpose

The purpose of the Phase I ESA was to identify potential and actual onsite and offsite hazardous substance or petroleum products sources or practices (recognized environmental conditions, or RECs) that may pose an environmental risk to the Property environment. The Phase I ESA consisted of three distinct tasks: (1) A review of reasonably ascertainable documents and records; (2) A site examination; and (3) Interviews with owners, occupants, and government officials. Conclusions and recommendations within this report are based solely on observed evidence and data collected during the performance of the Scope of Services. The Phase I ESA was conducted in general conformance with *ASTM Standard Practice for Environmental Site Assessments*, *E 1527-13* and with the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (40 CFR Part 312).

1.2 Scope of Services

ARS was contracted by The Hernon Group to conduct a Phase I Environmental Site Assessment (ESA) in accordance with *ASTM Standard Practice for Environmental Site Assessments, E 1527-13*. The Phase I ESA generally included the following scope of work:

- Task 1 Conduct site examination. ARS conducted a detailed site examination, to include: (1) A site inspection; and (2) A site area reconnaissance. The purpose of this task was to identify conditions on the Property and in the site vicinity which could pose a threat to the Property environment.
- Task 2 Conduct records review. ARS reviewed various hazardous waste records and historical records in order to identify known hazardous waste sites or releases in the Property area and to identify past land uses in the site vicinity which could impact the Property environment. The records review generally included: (1) Information provided by the current Property owner relative to past and current Property uses, environmental liens, and past environmental investigations and cleanup activities; (2) Obtaining a radius profile of federal, state, and local hazardous waste site listings from EDR; (3) Reviewing historical aerial

photographs; (4) Reviewing cross telephone directories; (5) Reviewing historical maps, such as historical topographic maps; (6) Conducting regulatory files review; (7) Conducting interviews with the Property owner and Property tenants.

- Task 3 Conducted a Subsurface Physical Anomalies for USTS and advanced four (4) Soil Gas probes in the immediate vicinity of these former UST locations to assess the presence or absence of Total Petroleum Hydrocarbon Compounds as Gasoline (TPHG) and its aromatic components, Benzene (B), Toluene (T), Ethylbenzene (EB) and Xylene(s) (X).
- Task 4 Prepare report of findings. ARS prepared this report summarizing results of Phase I ESA activities, and presenting conclusions regarding potential recognized environmental conditions. This report generally follows the recommended report format contained in ASTM Standard Practice for Environmental Site Assessments, E 1527-13.

1.3 Significant Assumptions

There is a possibility that even with the proper application of these methodologies there might exist on the Property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. ARS believes that the information obtained from the records review and the interviews concerning the site is reliable. However, ARS cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The methodologies of this assessment are not intended to produce all inclusive or comprehensive results, but rather to provide Hernon Group or their Assigns with information relating to the Property.

1.4 Limitations and Exceptions

This report has been prepared for the exclusive use of Hernon Group or their Assigns, as their interests may appear, with specific application to the Property parcel located in Oakland, California. The use of this report, its contents, or any part of it by a party, or its agents, other than the ones for whom this report was prepared, is herewith disallowed.

In part, these findings, conclusions and recommendations are based on the best available information known or made available at the time of the assessment by regulators, other consultants, or other sources. Over time, the surficial evidence of some activities are obscured or obliterated entirely. It is possible that certain adverse conditions could exist at the site, which was not detected in this assessment.

The services provided under this contract as described in this report include professional opinions and judgments based on data collected. These services have been provided according to generally accepted engineering practices. The opinions and conclusions contained in this report are typically based on information obtained from:

- 1. Observations and measurements made by our field staff.
- 2. Discussions with regulatory agencies and others.
- 3. Review of available hazardous substance or solid waste lists.
- 4. Opinions and judgments of ARS, Inc. based on the information available.

This Phase I ESA did not include a formal assessment of possible asbestos containing building materials (ACM), possible lead based paint surfaces, or possible radon gas occurrence.

1.5 Special Terms and Conditions

The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. Subsurface exploratory drilling and sampling was performed under the scope of services. Chemical analyses have been performed during the course of this assessment.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This is subject to the limitations of historical documentation, availability, and accuracy of pertinent records and the personal recollections of those persons contacted.

1.6 Use Reliance

This report has been prepared for the exclusive use of Hernon Group or their Assigns, as their interests may appear, with specific application to the Property parcel located in Oakland, California. The use of this report, its contents, or any part of it by a party, or its agents, other than the ones for whom this report was prepared, is herewith disallowed. In the professional judgment of Applied Remedial Services, Inc., the services performed pursuant to the Scope of Services are an adequate basis to collect data for a preliminary evaluation of the site and upon which to draw the conclusions stated in this report. This report has no other purpose and should not be relied upon by any other person or entity.

2.0 SITE DESCRIPTION

2.1 Location and Legal Description

The Property is located on the southwest corner of 9th Street and Jefferson Street in downtown Oakland, Alameda County, California, 94607 (see Figure 1 and Figure 2). The Property encompasses a rectangular land parcel measuring approximately 100 feet by 50 feet. The Property is located at an elevation of approximately 35 feet above mean sea level. The Property is located at latitude of 37° 48' .8.28" North and longitude of 122° 16' 37.56" West and the assessor's parcel number for the Property is APN: 001-0211-006-00.

2.2 Site and Vicinity General Characteristics

The Property is located in a mixed commercial and residential area of downtown Oakland. According to the USGS 7.5-Minute Quadrangle, Oakland, West, California Map, the Property lies on a gently west-southwest sloping plan approximately one-half mile north-northeast from Oakland Inner Harbor Channel. Based on topography and location, we would expect groundwater flow in the site area to be to the south-southwest.

2.3 Current Use of the Property

The Property is currently unused.

2.4 Description of Property Structures and Improvements

The Property is completely covered with a single story commercial building that is currently unused.

East Bay Municipal Utility District (EBMUD) supplies the drinking water to the site. Gas and electricity are provided to the Property by Pacific Gas & Electric Company (PG&E).

2.5 Current Use of Adjoining Properties

Current land uses surrounding the Property include the following:

North:	building. Immediately north across 9th Street is Carl Pastina Wholesale Florist					
E sil a	(possibly vacant) at 624 9 th Street, Sandis (civil engineering company) at 636 9 th					
af di	Street, and California Wholesale Florist (possibly vacant) at 638 9 th Street.					
South:	Immediately south and west from the Property at 821 Jefferson Street is Oakland					
	Flower Market. Further southwest at 602 8th Street is Quality Construction					
	Supply. Southeast across Jefferson Street is a relatively new multi-tenant					
	residential/commercial building.					
East:	Southeast across Jefferson Street is a relatively new multi-tenant					
1/400.						
F 485 4 5	residential/commercial building. Northeast across 9 th Street and Jefferson Street					
	are multi-tenant residential buildings.					
West	Immediately south and west from the Property at 821 Jefferson Street is Oakland					
	Flower Market. Further west are single family and multi-tenant residential					
and the	properties.					

3.0 USER PROVIDED INFORMATION

Pursuant to ASTM E 1527-13, ARS requested the following site information from Hernon Group or their Assigns and from the Property Owner.

3.1 Title Records

ARS was not provided with a title report for the Property.

3.2 Environmental Liens or Activity and Use Limitation

The Client has reported to ARS no environmental liens encumbering the Property that would provide important information about previous ownership or uses of the Property that may be material to identifying recognized environmental conditions regarding the Property.

This report has been prepared for the exclusive use of Hernon Group and their Assigns, as their interests may appear, with specific application to the Property parcel located in Oakland, California. The use of this report, its contents, or any part of it by a party, or its agents, other than the ones for whom this report was prepared, is herewith disallowed.

In part, these findings, conclusions and recommendations are based on the best available information known or made available at the time of the assessment by regulators, other consultants, or other sources. Over time, the surficial evidence of some activities are obscured or obliterated entirely. It is possible that certain adverse conditions could exist at the site which was not detected in this assessment.

The services provided under this contract as described in this report include professional opinions and judgments based on data collected. These services have been provided according to generally accepted engineering practices. The opinions and conclusions contained in this report are typically based on information obtained from:

- 1. Observations and measurements made by our field staff.
- 2. Discussions with regulatory agencies and others.
- 3. Review of available hazardous substance or solid waste lists.
- 4. Opinions and judgments of ARS, Inc. based on the information available.

This task did not include a formal assessment of possible asbestos containing building materials (ACM), possible lead based paint (LBP) surfaces, or possible radon gas occurrence.

3.3 Specialized Knowledge

The Client has reported to ARS no specialized knowledge for the Property that would provide important information about recognized environmental conditions regarding the Property.

3.4 Commonly Known or Reasonably Ascertainable Information

The Client has reported to ARS no commonly known or reasonably ascertainable information for the Property that would provide important information about recognized environmental conditions regarding the Property.



3.5 Valuation Reduction for Environmental Issues

The Client has reported to ARS no environmental issues for the Property that could result in valuation reduction relative to the Property.

3.6 Information Provided by Owners and Occupant

The Property owners did not provide any information relative to environmental conditions on the Property.

4.0 RECORDS REVIEW

The records review included a review of environmental records, physical setting sources, and historical records. Copies of site photographs taken during the site reconnaissance are included in Appendix B. Copies of historical topographic maps and aerial photos are included in Appendix C and Appendix D, respectively. The EDR hazardous sites radius report is contained in Appendix E.

4.1 Standard Environmental Record Sources

ARS, Inc. reviewed hazardous waste information from the following governmental agency sources: (1) Federal lists; and (2) State and regional lists. The purpose of this review was to provide information about reported hazardous waste sites and incidents in the project site vicinity. In order to facilitate our review of Federal, State and regional lists, ARS, Inc. obtained and reviewed a radius site profile for the project site area from Environmental Data Resources, Inc. (EDR). The EDR report includes a computergenerated listing of the following regulated hazardous waste sites within a specified radius from the project site. The EDR report is contained in Appendix E.

Results of the regulatory lists review are summarized below and are discussed, along with file review information, in the following sections of this report.

SUMMARY OF REGULATORY LISTS REVIEW							
Regulatory List Search Radius Listed Sites of Potential Interest							
Federal Lists							
NPL/Delisted NPL/NPL Liens/CONSENT/ROD	1 mile	0					
CERCLIS/CERCLIS-NFRAP	0.5 mile	0					
RCRA CORRACTS List	1 mile	0					
RCRA TSD Facilities List0.5 mile	0.5 mile	0					
RCRA Large Qty Generators Lists	0.25 mile	0					
RCRA Small Qty Generators Lists	0.25 mile	0					
ERNS List	Site	0					
HMIRS List	Site	0					
US Eng/Inst Controls Lists	0.5 mile	0					
US DOD and FUDS Lists	1 mile	0					
US Brownfield List	0.5 mile	0					
UMTRA List	0.5 mile	0					
ODI List	0.5 mile	0					
TRIS List	Site	0					
TSCA List	Site	0					
FTTS/HIST FTTS Lists	Site	0					



Regulatory List Search Radius Listed Sites of Potential Interest							
SSTS List	Site	0					
RADINFO List	Site	0					
CDL List	Site	0					
ICIS List	Site	0					
LUCIS List	0.5 mile	0					
DOT OPS List	Site	0					
PADS List	Site	0					
MLTS List	Site	0					
MINES List	0.25 mile	0					
FINDS List	Site	0					
RAATS List	Site	0					
(Other EDR Lists)	Various	0					
	Si	tate and Regional Lists					
CALSITES List	1 mile	0					
BEP List	1 mile	0					
SCH List	0.25 mile	0					
Toxic Pits List	1 mile	0					
Landfills List	0.5 mile	0					
CA WDS	Site	0					
WMUDS/SWAT Lists	0.5 mile	0					
Cortese List	0.5 mile	Douglas N. Salter, 901 Jefferson ST., 70 ft. northeast (upgradient) American Ink Products, 630 10 th Street, 350 ft. NNE (upgradient)					
SWRCY List	0.5 mile	0					
LUST List	0.5 mile	Douglas N. Salter, 901 Jefferson ST., 70 ft. northeast (upgradient) American Ink Products, 630 10 th Street, 350 ft. NNE (upgradient)					
FID List	0.25 mile	0					
SLIC List	0.5 mile	0					
UST List	0.25 mile	0					
HIST UST List	0.25 mile	0					
AST List	0.25 mile	0					
County List	0.25 mile	901 Jefferson Housing, 901 Jefferson ST., 70 ft. N=north (upgradient) Douglas N. Salter, 901 Jefferson ST., 70 ft. N=north (upgradient)					
LIENS List	Site	0					
SWEEPS UST List	0.25 mile	0					
CHMIRS List	Site	0					

SUMMARY OF REGULATORY LISTS REVIEW							
Regulatory List Search Radius Listed Sites of Potential Interest 2							
NOTIFY 65 List	1 mile	0					
DEED List	0.5 mile	0					
VCP List	0.5 mile	0					
DRYCLEANERS List	0.25 mile	0					
WIP List	0.25 mile	0					
CDL List	Site	0					
RESPONSE List	1 mile	. 0					
HAZNET List	Site	0					
EMI List	Site	0					
ENVIROSTOR	1 mile	0					
Tribal Lands Lists	1 mile	0					
EDR Historical Auto Stations List	0.25 mile	Erland Gust, 829 Jefferson Street, Property Puddy & Dobler, 931 Jefferson St., 140 ft. north-northeast (upgradient) 590 8 th Street, 350 ft. north-northeast (upgradient)					
EDR Historical Cleaners List	0.25 mile	Smith Geneva, 630 9 th Street, 80 ft. north (upgradient) Yuen, Tom, 1008 Jefferson Street, 350 ft. north-northeast (upgradient)					

Bold results denote project site listings.

4.1.1 Onsite Listings

The EDR report included one Property listing: Erland Gust at 829 Jefferson Street is included on the EDR Historical Auto Stations List. This listing is for a gasoline and oil service station in 1933, apparently owned by J. B. Bertotti.

4.1.2 Offsite Listings

The EDR report identified the following listings in an expected upgradient (north-northeast) groundwater flow direction from the Property: (1) Douglas N. Salter/901 Jefferson Housing, located approximately 70 feet northeast from the Property at, 901 Jefferson Street, was included on the Cortese, LUST, and County lists; (2) Puddy & Dobler, located approximately 140 feet north-northeast from the Property at 931 Jefferson Street, is included on the EDR Historical Auto Stations list; (3) Smith Geneva, located approximately 80 feet north from the Property at 630 9th Street, was included on the EDR Historical Cleaners list; (4) American Ink Products, located approximately 350 feet north from the Property at 630 10th Street, is included on the Cortese, LUST, and County lists; (5) An unnamed listing at 590 10th Street, approximately 350 feet north-northeast from the Property, is included on the EDR Historical Auto Stations list; and (6) Yuen, Tom, located approximately 350 feet north-northeast from the Property at 1008 Jefferson Street, is included on the EDR Historical Cleaners list.

^{1 =} Search radii are those specified pursuant to ASTM standard.

^{2 =} the listed sites are those which may potentially impact the Property, based on distance and direction.

The Douglas N. Salter/901 Jefferson Housing and Puddy & Dobler sites are located on land that was recently redeveloped as a multi-tenant housing development, 901 Jefferson. Potential environmental concerns related to these upgradient site listings were addressed as part of the redevelopment effort. Alameda County records for this adjacent redevelopment, which are summarized in Section 4.2 of this report, indicate that hazardous waste impacts were relatively low and that these impacts would not be expected to impact environmental conditions on the Property.

The Smith Geneva listing at 630 9th Street, on the EDR Historical Cleaners list is for a laundry in 1925. A review of Sanborn Fire Insurance Maps and the City Directories Abstract indicates no cleaners at this location from at least 1928 to 2013. Given the distant age of this potential cleaner (prior to chlorinated solvent use in dry cleaners) and the fact that its existence was not confirmed from multiple sources, we would consider this potential cleaner to be of no significant risk relative to the Property.

The American Ink Products site, the unnamed site at 590 10th Street, and the Yuen Tom site are all located approximately 350 feet away from the Property, and, given this distance, would not be expected to have significantly impacted environmental conditions on the Property.

4.2 Additional Environmental Record Sources

ARS reviewed records on the Alameda County Environmental Health online database, on the State Water Board's Geotracker online database, and on the Department of Toxic Substances Control's EnviroStor online database. Results of these online reviews are summarized below.

Douglas Salter/901 Jefferson Housing

901 Jefferson Street

80 ft. north (upgradient)

A gas station was formerly located on the southwest corner of Jefferson Street and 10th Street (931 Jefferson Street) prior to the 1950s. Four fuel underground storage tanks (USTs) were removed in approximately 1953. Subsequent soil and groundwater investigations were conducted between 1989 and 1994 which showed relatively localized gasoline-range hydrocarbon impacts. In-situ bioremediation was conducted in 1995, and regulatory closure was granted for this UST site by Alameda County Health Care Services Agency in December 1996. Soil and groundwater hydrocarbon impacts were limited to the site itself. Groundwater flow direction ranged from southeast to west.

Several investigation and mitigation measures were conducted at this site between 2004 and 2009 as part of the multi-tenant redevelopment. Investigative activities included detailed soil, groundwater, and soil vapor sampling on the site. These investigations revealed no significant vapor or groundwater impacts, and some elevated concentrations of Lead in shallow fill soils (down to 7 feet in depth) on the site. In order to meet geotechnical standards for the planned redevelopment, approximately 7,000 tons of soil was excavated for offsite disposal. Verification soil samples showed background concentrations of metals and no detectable concentrations of hydrocarbon constituents. Based on these results, regulatory closure was granted by Alameda County Health Care Services Agency in July 2009.

4.3 Historical Records Sources

ARS, Inc. reviewed historical aerial photos, Sanborn maps, and a city directories abstract for the Property and site vicinity.

4.3.1 Historical Aerial Photos Review

Historical aerial photos from 1939, 1946, 1958, 1968, 1974, 1982, 1993, 1998, 2005, 2010, and 2012 were obtained from EDR. Copies of selected aerial photos are contained in Appendix D. Information obtained from the aerial photos review is summarized below.

	Aerial Photos	s Review		
Date and Scale of Photo	Property Features	Site Vicinity Features		
1939 (1" = 500')	Site appears to be paved, with a small building on the east side and larger building on west side of Property.	Residential and commercial businesses surround Property.		
1946 (1" =500')	Generally same as previous.	Generally same as previous.		
1958 (1" =500')	Current building present on Property.	 Generally same as previous. US 880 Freeway present 3 blocks south of Property. 		
1968 (1" =500')	Generally same as previous and current conditions.	Generally same as previous.		
1974 (1" =500')	Generally same as previous and current conditions.	Generally same as previous.		
1982 (1" =500')	Generally same as previous and current conditions.	Generally same as previous.		
1993 (1" =500')	 Generally same as previous and current conditions. 	 Generally same as previous. Increased commercial development in vicinity. 		
1998 (1" =500')	 Generally same as previous and current conditions. 	Generally same as previous.		
2005 (1" =500')	 Generally same as previous and current conditions. 	 Generally same as previous. Increased multi-tenant residential development. 		
2009 (1" =500')	 Generally same as previous and current conditions. 	Generally same as previous and current conditions.		
2010 (1" =500')	 Generally same as previous and current conditions. 	Generally same as previous and current conditions.		
2012 (1" =500')	 Generally same as previous and current conditions. 	Generally same as previous and current conditions.		

4.3.2 Historical Sanborn Maps Review

Historical Sanborn Fire Insurance Maps from 1889, 1902, 1912, 1951, 1952, 1957, 1958, 1961, 1967, and 1970 were obtained from EDR. Copies of selected Sanborn Maps are contained in Appendix D. Information obtained from the aerial photos review is summarized below.

Sanborn Maps Review						
Date of Map	Property Features	Site Vicinity Features				
1889	 Large residential building on Property labelled as "Furnished Rms". 	Property surrounded by residential dwellings.				
1902	Generally same as previous.	Generally same as previous.				
1912	Generally same as previous.	Generally same as previous.				
1951	 Small building on southeast side of Property labelled "Oil & Gasol." Building along west edge of Property labelled as "Auto Oiling & Washing". 	Increased commercial/industrial buildings. Parking lot north across 9 th Street, with small gas station at north end of parking lot (adjacent to 10 th Street).				
1952	Generally same as previous.	Generally same as previous.				



1957	•	Current building present on Property.	•	Generally same as previous. Gas station north of Property, adjacent to 10 th Street, not present.
1958	•	Generally same as previous and current conditions.	•	Generally same as previous.
1961	•	Generally same as previous and current conditions.	•	Generally same as previous.
1967		Generally same as previous and current conditions.	•	Generally same as previous
1970	•	Generally same as previous and current conditions.	+-	Generally same as previous.

4.3.3 City Directories Abstract Review

A City Directory Abstract was obtained from EDR. This abstract includes a listing of tenant names for given street addresses for years ranging from approximately 1920 to 2013 obtained from phone directories and cross city directories.

Property Addresses

- 605 9th Street: Four Star Meat Market, Four Star Market, Four Star Liquors in 1962; Piazza Wholesale Florist in 1967; and Floral Supply Syndicate in 1996.
- 829 Jefferson Street: Julius B. Bertotti Gas Station in 1933; and Four Star Liquors in 1970.

Offsite Addresses

- 901 Jefferson Street: Valentino S. Carmagnola restaurant in 1943; and Jefferson Housing LLC in 2013.
- 931 Jefferson Street: Puddy's Service Station from 1928 to 1945.

5.0 SITE RECONNAISSANCE

The site reconnaissance was conducted on Tuesday, September 8, 2015 and consisted of touring the Property and vicinity, making observations of the environmental conditions and activities, and visually observing the Property and adjacent properties for evidence of hazardous waste practices. The purpose of the site reconnaissance was to identify, through visual observations, potential sources of adverse environmental impact at the Property and in the site vicinity. Site photographs are contained in Appendix B.

5.1 Site Observations

The Property is completely covered with a single story commercial building that is currently unused. The building is of concrete block construction and has concrete slab flooring. The building interior includes reception/showroom/ space on the northeast side of the building and warehouse space throughout the remainder of the building. A small mezzanine office area is present at the northwest end of the Property building. A rollup door providing truck access to the warehouse portion of the building is present northwest side of the building, and three unusable rollup doors are present on the south side of the Property building.

During the Phase I ESA site inspection, no obvious evidence of the following recognized environmental conditions was observed on the Property:

- Unlabeled or unidentified substance containers
- existing or past underground storage tanks or associated piping
- electrical transformers
- stains, corrosion, or stressed vegetation
- unmanaged solid waste and waste water
- wells, or septic systems
- strong, pungent, or noxious odors
- suspicious pools of liquid, pits, ponds, or lagoons

5.2 Site Vicinity Observations

During the site reconnaissance, we conducted a drive-by inspection of areas surrounding the Property. The purpose of the site area reconnaissance was to identify sites in the vicinity that may pose a risk to the Property environment.

The Property is located in a mixed commercial and multi-tenant residential area of downtown Oakland. According to the USGS 7.5-Minute Quadrangle, Oakland, West, California Map, the Property lies on a gently west-southwest sloping plan approximately one-half mile north-northeast from Oakland Inner Harbor Channel. Based on topography and location, we would expect groundwater flow in the site area to be to the south-southwest.



Current land uses surrounding the Property include the following:

North:	Immediately northeast across 9 th Street is a relatively new multi-tenant residential building. Immediately north across 9 th Street is Carl Pastina Wholesale Florist (possibly vacant) at 624 9 th Street, Sandis (civil engineering company) at 636 9 th Street, and California Wholesale Florist (possibly vacant) at 638 9 th Street.
South:	Immediately south and west from the Property at 821 Jefferson Street is Oakland Flower Market. Further southwest at 602 8 th Street is Quality Construction Supply. Southeast across Jefferson Street is a relatively new multi-tenant residential/commercial building.
East:	Southeast across Jefferson Street is a relatively new multi-tenant residential/commercial building. Northeast across 9 th Street and Jefferson Street are multi-tenant residential buildings.
West	Immediately south and west from the Property at 821 Jefferson Street is Oakland Flower Market. Further west are single family and multi-tenant residential properties.

6.0 INTERVIEWS

ARS staff interviewed Mr. Joe Hernon, future owner of the Property. Mr. Hernon is in the process of closing on the property. Mr. Hernon stated that he is unaware of any chemical storage or spills on the Property and that there have been no environmental cleanups or issues relative to the Property.

7.0 FINDINGS AND CONCLUSIONS

ARS, Inc. has conducted a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard E 1527-13 and with the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (40 CFR Part 312) for the commercial property located at 605 9th Street, Oakland, California (APN: 001-0211-006-00) (Property). The purpose of the Phase I ESA has been to identify current and historical potential and actual recognized environmental conditions for the Property. Recognized environmental conditions are defined in *ASTM Standard E 1527-13* as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of future release."

This assessment has revealed evidence of recognized environmental conditions relative to the Property.

7.1 Recognized Environmental Conditions from Current Activities

The Phase I ESA revealed no current uses on the Property that would be expected to have impacted environmental conditions on the Property. The Property is completely covered with a concrete block commercial building, constructed in the mid-1950s, which is currently vacant and unused. During the site inspection, we noted no evidence of significant hazardous waste storage and handling, and no evidence of unauthorized releases or spills on the Property. Also, we noted no other conditions on the Property which would indicate recognized environmental conditions.

Relative to recognized environmental conditions (RECs) from current offsite properties and businesses, the Phase I ESA revealed no businesses or activities in the site vicinity which would be expected to have significantly impacted environmental conditions on the Property. Immediately northeast across 9th Street and Jefferson Street, in an expected upgradient groundwater flow direction, from the Property are relatively newly-constructed multi-tenant residential buildings. During the site reconnaissance, we noted no businesses or activities relative to these or other offsite properties which would be expected to have significantly impacted environmental conditions on the Property.

7.2 Recognized Environmental Conditions from Historical Activities

Results of the Phase I ESA identified one potential recognized environmental condition (RECs) relative to past activities on the Property. Historical Sanborn Maps and city directories indicate the presence of a gas station on the Property from at least 1933 until the mid-1950s. Sanborn Maps from 1951 and 1952 show a small building on southeast side of Property labelled "Oil & Gasol.", and city directories list Julius B. Bertotti Gas Station on the Property in 1933. Potential fuel releases from this former gas station could have impacted soil and/or groundwater beneath the Property. Results of the Phase I ESA indicate no other actual or potential RECs relative to historical activities on the Property.

Results of the Phase I ESA indicate no recognized environmental conditions from historical offsite properties and businesses. The Phase I ESA identified the following upgradient (north-northeast) sites of



potential concern: (1) Douglas N. Salter/901 Jefferson Housing, located approximately 70 feet northeast from the Property at, 901 Jefferson Street;

- (2) Puddy & Dobler, located approximately 140 feet north-northeast from the Property at 931 Jefferson Street;
- (3) Smith Geneva, located approximately 80 feet north from the Property at 630 9th Street:
- (4) American Ink Products, located approximately 350 feet north from the Property at 630 10th Street:
- (5) An unnamed listing at 590 10th Street, approximately 350 feet north-northeast from the Property; and
- (6) Yuen, Tom, located approximately 350 feet north-northeast from the Property at 1008 Jefferson Street. The Douglas N. Salter/901 Jefferson Housing and Puddy & Dobler sites are located on land that was recently redeveloped at a multi-tenant housing development. Potential environmental concerns related to these upgradient sites were addressed as part of the redevelopment effort, and investigative results indicate that hazardous waste impacts were relatively low and that these impacts would not be expected to impact environmental conditions on the Property. The Smith Geneva site at 630 9th Street is a laundry business listing prior to 1928; the distant age of this potential cleaners (prior to chlorinated solvent use in dry cleaners) would tend to minimize its potential risk to the Property. The American Ink Products site, the unnamed site at 590 0th Street, and the Yuen, Tom site are all located approximately 350 feet away from the Property, and, given this distance, would not be expected to have significantly impacted environmental conditions on the Property.

No other historical businesses or activities were identified in the site vicinity which would be expected to have impacted environmental conditions on the Property.

7.3 Controlled Recognized Environmental Conditions and De Minimis Conditions

A Controlled Recognized Environmental Condition (CREC) is an REC which has been addressed to the satisfaction of the overseeing regulatory agency, but where hazardous substances or petroleum hydrocarbons are allowed to remain in place subject to implementation of some controls (use restrictions, institutional controls, or engineering controls). There are no CRECs relative to the Property or relative to nearby upgradient (east-northeast) properties.

De minimis conditions, which are not RECs, include hazardous substance or petroleum releases or impacts that do not represent a threat to human health or the environment and which would not be subject to enforcement. The Phase I ESA identified *de minimis* conditions relative to the Property.

8.0 OPINIONS

This Phase I ESA identified potential recognized environmental conditions relative to the Property. Historical records indicate the operation of a gas station on the Property from at least 1933 to the mid-1950s. Thus, we recommended conducting a Phase II ESA to include the collection of shallow soil gas samples to assess potential environmental impacts relative to the former gas station on the Property.

9.0 <u>DEVIATIONS AND ADDITIONAL SERVICES</u>

This assessment did not include any deletions or deviations from ASTM Standard E 1527-13. This assessment did not include formal assessments of asbestos-containing materials (ACM), lead-based paint (LBP), or radon. However, based on the relatively new Property development, we would not expect significant ACM, LBP, or radon concerns relative to the Property.

A Subsurface Physical Anomalies Survey (SPAS) was conducted at the site on 9, 9, 2015 by Foresite Engineering (Foresite). Foresite specifically targeted buried metallic objects all over the site especially along the historical area which indicated the potential presence of an Oil and Gasoline Tanks located near the wall parallel to Jefferson Street to the east of the property. Foresite reported the following:

- 1) No Underground Storage Tanks detected. Only water, sewer and metallic subsurface drains. I used yellow marker crayon on carpet and cement floor.
- 2) The interesting area was in middle section towards the roll up doors, evident of former loading dock. I couldn't get access to outside this area. Former drain and sewer connections.
- 3) Gas runs under stage in the eastern side of building at rear of blue wall into middle section. Lines evident above grade are gas and water with sanitary vent lines.

Four (4) soil gas probes were advanced to five (5) feet beneath the surface within the area of the former USTs. The evaluation included a soil gas analyses to evaluate potential risks from volatile organic compounds such as Total Petroleum Hydrocarbons as Gasoline (TPHg), Benzene (B), Toluene (T), Ethylbenzene (EB) and Xylenes (X) vapor intrusion ARS performed this assessment in general conformance with the American Society for Testing and Materials (ASTM) 2600-10, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions.

The purpose of the SVS was to determine whether ("TPHg and BTEX") are present in the soil gas underneath the site at levels that represent an indoor air intrusion concern for future building occupants. This SVS is intended to compare the data from the soil gas levels to regulatory agency threshold limits in order to arrive at conclusions and recommendations regarding the subsurface environmental quality.

The soil vapor probe locations were selected in close proximity to the former USTs to assess spatial distribution of volatile constituents in soil vapor. Soil vapor probes were installed with vapor screens set at a depth of 5 feet bgs. All soil gas sampling activities was conducted in accordance with Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (DTSC, Final, October 2011) and Advisory - Active Soil Gas Investigations (DTSC, April 2012). Four (4) temporary soil gas sampling wells, SG-1 through SG-4, were installed by ARS, Inc. The vapor well borings will be drilled to approximately 5 feet in depth using hand auger equipment and were constructed using a porous vapor tip attached to 1/4-inch diameter Teflon tubing. The wells were constructed as follows:

(1) Filter sand was placed around the vapor tip and tubing to approximately six inches above the vapor tip (set at approximately 5 feet below ground surface);



- (2) A one foot bentonite seal, consisting of six inches of dry granular bentonite followed by six inches of prehydrated granular or pellet bentonite, was placed above the filter sand; and
- (3) The remaining annulus was filled with hydrated pellet bentonite.

Each of the temporary soil gas wells was sampled using the following procedures:

- 1) A "T" valve was placed in line at the ground surface to allow for system purging and for pressure testing of the above ground portion of the sampling train. The sampling tubing will was attached to a 200-milliliter per minute maximum flow controller, then a one liter laboratory-supplied Summa CanisterTM (evacuated to 29 inches mercury vacuum) with vacuum pressure valve.
- 2) After allowing the vapor wells to equilibrate for at least two hours, the wells will be purged and sampled. A laboratory supplied purge/pressure test Summa CanisterTM (evacuated to 29 inches mercury) was then used to test vacuum pressure in the above ground portion of the sampling train. Sampling train vacuum pressure was maintained for at least 10 minutes.
- 3) The vapor well will then be purged of approximately three purge volumes using a dedicated Summa Canister.
- 4) The vapor sample was collected by opening the Summa canister and allowing the vapor to fill the canister until the vacuum pressure in the canister reaches 10 to 20 percent of initial (approximately 2 to 6 inches of mercury). The flow controller insures that the Summa Canister filled slowly (at 200 ml per minute or less) to insure a representative soil vapor sample. Prior to, at start time, and during sampling, periodic vacuum measurements were recorded on a field data sheet, and initial and final vacuum pressures was noted on chain-of-custody records.
- 5) All coring and sampling equipment was thoroughly cleaned and decontaminated between each sample collection, and after completion, the borings were backfilled and resurfaced to match existing grade.
- 6) gases from the probes collected into pre-certified Summa canisters from the laboratory were analyzed for:
- a) Total Petroleum Hydrocarbons as Gasoline via TO-14
- b) Volatile Organic Compounds (VOCs) via TO-14

All analyses was conducted at McCampbell Analytical, Inc. of Pittsburg, CA a State-certified chemical testing laboratory, DHS ELAP License # 1644, NELAP License # 12283CA with rush 2 day turnaround on results.

The results are tabulated below, and presented in Figure 2 at the end of the report all results are in ug/m³:

Sample ID	TPHg	Benzene	Toluene	Ethylbenzene	Xylene(s)
SG-1	ND<720	2.4	ND<2.2	4.2	9.3
SG-2	ND<720	4.4	ND<2.2	5.5	ND<6.6
SG-3	ND<720	ND<1.6	ND<2.2	2.2	ND<6.6
SG-4	ND<720	1.9	ND<2.2	2.3	ND<6.6
Soil Gas ESLs	5.0E+04	42	1.6E+05	490	5.2E+04

The results indicated the following:

- 1) No soil gasoline vapors were detected in any sample;
- 2) Soil gas vapors of Benzene were 10 times <u>lower</u> than Regulatory Agency (RWQCB) (soil gas limits) for the highest Benzene vapor level detected;
- 3) Soil gas vapors of Toluene were not detected;
- 4) Soil gas vapors of Ethylbenzene were 89 times <u>lower</u> than (RWQCB) soil gas limits for the highest Ethylbenzene vapor level detected; and
- 5) Soil gas vapors of Xylene(s) were 5,591 times <u>lower</u> than soil gas limits for the highest Xylene(s) vapor level detected.

The results clearly indicate that there has been no impact to subsurface soil or groundwater in the area of the former USTs. There were no elevated levels of any contaminant that could pose a threat to human health or the environment. This issue does not require any further investigation since the detected levels were at background residual levels for an industrial area. We recommend no further action in regards to this issue at the site.

10.0 REFERENCES

During the preparation of this report, a number of sources were contacted, many individuals interviewed, and various local and state agencies and databases consulted. Documentation applicable to the Property was requested and obtained from these agencies and sources where reasonably ascertainable, as detailed in *ASTM Standard E 1527-05*.

References for site-specific information, hydrologic information, technical data, historical research data, environmental reports, and other records are identified throughout the report in corresponding sections.

11.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

I declare that, to the best of my professional knowledge and belief, I meet the definition for Environmental Professional as specified in *ASTM Standard E 1527-13*. I have the specific qualifications, based on education, training, and experience, to assess a property of the nature, history, and setting of the Property. To the best of my professional knowledge and belief, this Phase I ESA has been conducted in conformance with *ASTM Standard E 1527-13*.

James E. Gribi

Professional Geologist *California No. 5843*

Allonia A

Michael F. Kara General Manager REPA (No. 386340) Exp. 5/30/2016 Registered Lead Sampling Technician No. 21985

12.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

JAMES GRIBI, P.G.

EDUCATION

B.S., Geology, San Diego State University, 1979 Groundwater remediation and contaminant fate and transport modeling courses, University of California, Berkeley Extension Program, 1990 and 1992

REGISTRATION AND CERTIFICATION

Registered Geologist, California and Oregon Health and safety training (40 hours)

EXPERIENCE OVERVIEW

Mr. Gribi has more than twenty years of experience applying his geological expertise to the investigation, evaluation, and remediation of soil and groundwater contamination. Projects have included soil boring investigations, groundwater investigations, aquifer testing, and geophysical testing, and use of the state-of-the-art remediation technologies.

Soil and Groundwater Remediation: Mr. Gribi has managed and/or supervised the design, construction, and implementation of numerous remediation pilot tests and full-scale projects throughout the Bay Area and the West. Remediation methods have included excavation and either onsite treatment or offsite disposal, soil vapor extraction, air sparging, groundwater extraction, in-situ bioremediation, in-situ application of electron acceptors, and passive and active free product removal.

Soil Boring Investigations: Mr. Gribi has managed and/or supervised numerous soil boring investigations on a wide variety of sites throughout the Bay Area and the West. Drilling methods have included hand auger, direct-push coring, solid stem auger, hollow stem auger, Cone Penetrometer (CPT), and air and mud rotary. Several investigations have been conducted in unusual or difficult locations, such as inside active industrial buildings, in basements, or on busy city streets.

Groundwater Investigations: Mr. Gribi has managed and/or supervised the installation of numerous groundwater monitoring wells of all types on hundreds of sites throughout the Bay Area and the West. Drilling methods used have included hand auger, direct push, hollow stem auger, air rotary, and mud rotary. Well depths have ranged from near surface to over one thousand feet, and well types have included not only standard slotted PVC wells, but also welded steel piped wells and pre-packed horizontal wells. Groundwater sampling methods have included all varieties, from hand bailing to micro purging to submersible pumping.

Aquifer Testing: Mr. Gribi has conducted numerous aquifer tests, including single well and multiple-well pump tests, laboratory evaluations of porosity and water content, percolation tests, and tracer tests. Pump test methods have ranged from single well slug tests (Bouwer and Rice method) to multiple-well pumping tests (Jacob distance drawdown method, Cooper and Jacob time drawdown method). Field measurements have included both simple hand measurements to more sophisticated pressure transducers and data loggers, and data evaluations have been conducted by both analogue and digital methods.

Geophysical Testing: Mr. Gribi has directed several projects where geophysical data was collected and evaluated to assess subsurface conditions. Geophysical projects have involved the use of ground penetrating radar (GPR) and other electromagnetic tools to locate varied structures, such as tanks or drums. More sophisticated geophysical surveys have been conducted using resistivity, gamma ray, and neutron radiation tools in open borings to assess subsurface geologic and hydrologic conditions.

REPRESENTATIVE PROJECTS AND RESPONSIBILITIES

The following are brief summaries for several projects that Mr. Gribi has directed or for which he has had lead responsibility.

Soil and Groundwater Remediation; Union City, California. At this private-sector client' site, Mr. Gribi conducted a pilot-scale soil vapor extraction test and developed criteria that he used to design, construct, and operate the full-scale unit. He prepared reports on the pilot test and the proposed design and submitted them to the regulatory agencies in support of applications for permits. He secured all equipment and performed initial system shakedown and optimization and subsequent system monitoring and performance evaluation (which are ongoing). Mr. Gribi is also monitoring the performance of the insitu bioremediation system being used at the site.

UST Site Characterization, Feasibility Studies, and Remediation, Lafayette, California. Conducted a comprehensive soil and ground water investigation that delineated a gasoline-impacted soil and ground water plume that had migrated beneath an adjacent building at shallow depths. Based on these results, we conducted a two-week vapor extraction pilot test that indicated that vapor extraction was the most viable remedial option for shallow soils beneath the site. Installed a 170-foot long horizontal vapor extraction at four feet in depth beneath the adjacent building. Conducted remediation and confirmation groundwater monitoring at the site, and site closure is expected in the near future.

UST Site Characterization and Remediation, Mountain View, California. Mr. Gribi conducted site characterization that included soil boring investigations, installation and sampling of groundwater monitoring wells, and completion of groundwater aquifer (pump) testing. Also completed a short-term dual-phase extraction pilot test for this MTBE-impacted site. Based on these results, dual-phase (groundwater and vapor) extraction remediation was conducted over a two-month period in 2001. Hydrocarbon mass removal estimates indicated removal of over 90 percent of recoverable hydrocarbon plume mass. Mr. Gribi is currently conducting confirmation groundwater monitoring, and regulatory closure is expected in 2002.

Groundwater Assessment and Remediation, Commercial Building, San Francisco, California. Conducted a remedial investigation at a diesel UST site located in a basement parking garage in downtown San Francisco. The remedial investigation revealed the presence of approximately one foot of diesel product floating on the ground water surface. Negotiated closure requirements with regulatory agencies to include removal of free product and monitoring of downgradient ground water quality. Installed, operated, and maintained a free product recovery system in the basement parking garage. Regulatory site closure is pending.

Site Investigation Oversight, Santa Rosa, California. Mr. Gribi provided third-party oversight of a field investigation that was being conducted by a property owner who was accusing one of its former tenants of responsibility for alleged soil and groundwater contamination. The property owner was directing the investigation. Representing the accused tenant, Mr. Gribi documented field activities and provided an independent assessment of the data and the findings. He prepared an oversight report and provided critical review comments on the site investigation report prepared by the environmental consultant serving the property owner.

Phase I & II ESA and UST Site Closure Activities, Emeryville, California. Mr. Gribi conducted a Phase I ESA for this former sugar products facility that spanned three city blocks in Emeryville. Reviewed Phase II ESA results conducted by other consultants, and, for one of the parcels, conducted extensive soil and groundwater characterization relative to chlorinated solvents in groundwater. Also conducted soil and groundwater investigations relative to former leaking USTs on another of the parcels, and negotiated regulatory closure requirements for this UST site. Conducted risk assessment activities for three separate site parcels, and obtained regulatory closure for two of the parcels. Also assisted in negotiations relative to regulatory approval for planned residential development of one of the site parcels.

Stormwater Management Issues, Wood Treatment Facility, Jasper, Oregon. Mr. Gribi prepared a Spill Prevention Control and Countermeasure Plan (SPCCP) and a Stormwater Pollution Control Plan (SWPCP) for this facility. Also conducted a Preliminary Groundwater Assessment (PGA), and based on results of the PGA, conducted



a Hydrologic Characterization for the facility. The Hydrologic Investigation included the drilling and sampling of eight investigative borings, collection of wetlands benthic sediment samples, and collection of stormwater channel soil samples. Results from these investigative activities indicated no significant impacts from CCA (copper, chromium, and arsenic) treatment activities.

Cleaning Products Facility Investigation and Remediation, Oakland, California. Conducted a CPT/hydropunch investigation at this former cleaning products facility where tetrachloroethene (PCE) had been handled in bulk. Results indicated significant soil impacts, but only local shallow groundwater impacts. Conducted soil excavation in PCE source areas installed shallow, intermediate, and deep groundwater monitoring wells. Also conducted detailed groundwater aquifer testing to assess groundwater flow capabilities in the deep sand aquifer. Based on results of these activities, it appears that regulatory closure will be possible after one to two years of quarterly groundwater monitoring.

Soil Bioremediation Project, Eugene, Oregon. Conducted soil sampling and laboratory analysis of a 1,800-cubic yard hydrocarbon-impacted soil stockpile. Laboratory results showed that: (1) the soil was impacted with dieselrange hydrocarbons only; and (2) approximately 90% of the soil was below the DEQ Level 2 Soil Matrix Cleanup Level. Mr. Gribi negotiated with DEQ to allow onsite burial and covering of the "clean" 90% of soil, and continued onsite treatment of the remaining 10% of "dirty" soil.

UST Site Remediation, Former ARCO Gas Station, Oakland, California. Directed the removal and overexcavation of underground storage tanks (USTs) and hydraulic lift areas so that client could obtain Alameda County approval that no additional soil remediation would be required. This was necessary so client could sell the property to a large chain retail store with plans to build a new store at the site. Subsurface soils were sampled at strategic locations to prove that the overexcavation activities were effective. After submitting a report of findings, Alameda County issued a partial closure letter, which allowed the sale of the property to close escrow. After conducting five quarters of ground water monitoring, Alameda County granted final site closure.

UST Soil Remediation and Closure, Trucking Distributor, Carpinteria, California. Coordinated removal and documentation of one gasoline/diesel UST. Subsequent overexcavation and soil boring investigation activities revealed that gasoline and diesel constituents had been remediated, but that motor oil-range hydrocarbons were still present in subsurface soils. Utilized historical records and chromatographic evidence to prove that the motor oil-range hydrocarbons resulted from the importation of hydrocarbon-tainted soils from a nearby roadcut which contained tar seeps. Based on these results, Santa Barbara County granted regulatory site closure.

Phase I ESA, Solvent Recycling Facility, Whittier, California. Reviewed Cal-EPA files and Los Angeles County files to assess environmental liability associated with operation of a solvent and oil recycling and storage facility. The Phase I ESA revealed significant levels of chlorinated hydrocarbons in soil and ground water beneath the site. In addition, file reviews and interviews revealed that civil and possible criminal penalties were pending against the TSD operator for numerous violations of state and federal hazardous waste statutes. Based on these results, our client decided not to foreclose on this property.

Phase I and Phase II ESA, Metal Recycling Facility, Oakland, California. A Phase I Environmental Site Assessment of a metal recycling facility was conducted for a lending institution. The results of the Phase I ESA indicated that past and present uses of the project site have not had an adverse impact on the project site environment. However, potential offsite environmental risks included: (1) An underground fuel storage tank located in the sidewalk adjacent to the project site; and (2) The presence of a commercial laundry on a contiguous parcel in the 1930s and 1940s. Based on these results, a Phase II ESA was conducted, which consisted of drilling and sampling two soil borings on the project site. Laboratory analysis of soil and ground water samples indicated that naphtha, a cleaning solvent commonly used in the dry cleaning business in the past had impacted soil and ground water beneath the project site. These results were useful to the client in limiting their liability pursuant to a delinquent loan on the property.



MICHAEL F. KARA, REPA

Principal Toxicologist Registered Environmental Property Assessor No.386340 Class I Registered Environmental Assessor No.07137 Registered Lead Sampling Technician #21985 Phone: (925) 943-7742 Fax: (925) 943-7714 Cell: (707) 567- 2202 Email: mmkara707@aol.com

EDUCATION

University of California, San Francisco, Post-Graduate Research Toxicology & Pharmacology, 1983-1986. San Jose State University, San Jose, CA Graduate Program Toxicology, 1982-1984. (Cum Laude) Saint George School of Medicine, WI, Completed 1st year of Medical School studies San Francisco State University, San Francisco, B.A. Biochemistry, 1981. (Cum Laude)

PROFESSIONAL HISTORY

Applied Remedial Services Inc., Walnut Creek, CA General Manager, 1991-Present

Administration of an environmental consulting firm, including field operations oversight, project management, staffing, business development and technical quality control review. Duties include preparation of plan specifications for projects and direction of field operations for medium to large size projects. Conducted and reviewed Phase I & Phase II Environmental Site Assessments involving hazardous site record searches, site history investigation, soil & groundwater sampling and groundwater monitoring.

Prepared complex documents for submittal to relevant regulatory agencies for their review and approval which included Remedial Investigations & Feasibility Studies, Preliminary Endangerment Assessments and Health Risk Assessments.

Developed and implemented remedial action plans for projects ranging in size from one-half acre to fifty acres. Prepared plans for air monitoring and drafted extensive site safety plans for field remedial activities. Conducted multi-dimensional waste identification, packaging, labeling, and disposal projects for the Environmental Protection Agency, California State Department of Health Services, and numerous counties and cities in Northern California. Drafted site-specific work plans and safety plans, and implemented numerous large-scale cleanup operations, which included sites for the EPA Superfund in Region IX.

Diverse background in projects with complex chemical waste treatment systems, detoxification, packaging, labeling and disposal. Management of significant number of projects over the past thirteen years that involved decontamination, remediation, chemical waste processing, packaging, transport and disposal of highly reactive, corrosive, toxic and pyrophoric chemicals. Examples of some of the chemicals included organic solvents, acids, heavy metals, polychlorinated biphenyls, mercurials, asbestos, chlorinated hydrocarbons and pesticides.

Bay Area Environmental, Inc., General Manager, Jan 1990-Dec 1991

As a General Manager for First Environmental Group's BAE Facility, Mr. Kara managed a team of twenty highly skilled and qualified personnel with extensive experience in the environmental field. Duties included training and supervision of staff for a transfer storage and disposal (TSD) facility for hazardous waste.

Prepared chemical characterization acceptance criteria for waste being shipped into the facility and was directly involved in the certification of BAE's environmental analytical laboratory by the Department of Toxic Substances Control Division Analytical Laboratory Section. Trained and supervised field chemists involved in lab packaging of chemicals and arranged for movement of drums and bulk quantities of chemical waste into and out of BAE's TSD Facility.

Riedel Environmental Services, Chemical Packaging Manager, 1989-1990 Crosby & Overton, Inc., Hazardous Substances Group Manager, 1986-1989

As a group leader of the chemical packaging division between 1986 and 1990, Mr. Kara assisted various governmental agencies involved in toxic and environmental matters including the District Attorney's offices of Napa, Solano, and Alameda Counties, and the Department of Health Services' Office of Emergency Services.



Assisted the Department of Justice and the Drug Enforcement Agency with the cleanup, identification, packaging, transport and disposal of clandestine drug laboratory chemical toxic waste throughout California. Conducted emergency cleanup response for federal, state, and local agencies.

Performed environmental audits for large chemical refineries and chemical manufacturing plants (TOSCO Refinery and DOW Chemical), prepared reports on compliance with RCRA, CAC 26 DHS, and 29 CFR OSHA. Conducted environmental audits, which included an evaluation of hazardous material handling and storage procedures, hazardous waste documentation, disposal procedures, emergency response plans and a review of regulatory agency permits. Drafted reports on air dispersion modeling of numerous toxins and assessed the magnitude of potential health hazards posed by exposure.

University of California, San Francisco, Research Associate, 1983-1986

For over three years, Mr. Kara was involved in studying cytochrome P-450, a protein that was later shown to be a universal toxin biodegradative enzyme involved in the catabolism of xenobiotics as well as naturally occurring substrates. Assessed the molecular mechanism by which this enzyme degraded pharmaceuticals. Designed experiments and performed various chemical and biochemical assays which were later utilized in the design of a major anti-seizure medication Depakote for Abbott Laboratories.

Attachment 2





Date:

July 10, 2017

To:

Joe Hernon, The Hernon Group, Inc.

From:

Jason M. Brandman, FirstCarbon Solutions, Vice President

Subject:

Health Risk Assessment for the 605 9th Street Residential Project

Purpose

The purpose of this report is to provide a qualitative health risk assessment to determine whether toxic air contaminant (TAC) emissions from the construction of the 605 9th Street Residential Project (Project) would exceed health risk thresholds of significance adopted by the City of Oakland. This report relied upon the guidance and tools developed by the Bay Area Air Quality Management District (BAAQMD) to assist in performing such health risk assessments and the results of health risk impact assessments performed for other land use projects located in the downtown Oakland area.

Project Location and Description

The Project site is located at the intersection of 9th Street and Jefferson Street. The Project applicant is proposing to demolish an existing one-story commercial building. New construction will consist of an eight-story residential building containing a ground floor lobby/parking area with seven stories (25 units) of residential above.

Toxics Air Contaminants of Concern

TACs are air pollutants present in miniscule amounts in the air that, if a person is exposed to them, could increase the chances of experiencing health problems. Exposures to TAC emissions can have both chronic long-term (over a year or longer) and acute short-term (over a period of hours) health impacts. The TACs of greatest concern are those that cause serious health problems or affect many people. Health problems can include cancer, respiratory irritation, nervous system problems, and birth defects. Some health problems occur very soon after a person inhales a TAC. These immediate effects may be minor, such as watery eyes, or they may be serious, such as life-threatening lung damage. Other health problems may not appear until many months or years after a person's first exposure to the TAC. Cancer is one example of a delayed health problem.

This assessment focuses on particulate pollution, which is a mixture of microscopic solids and liquid droplets suspended in air. This type of air pollution, also known as fine particulate matter, is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, soil or dust particles, and allergens (such as fragments of pollen or mold spores).

Fine particle pollution or $PM_{2.5}$ describes particulate matter that is 2.5 micrometers in diameter and smaller—one-thirtieth the diameter of a human hair. Fine particle pollution can be emitted directly or formed secondarily in the atmosphere. $PM_{2.5}$ health impacts are important because their size can be deposited deeply in the lungs causing respiratory effects.

For purposes of this study, exhaust emissions of PM_{2.5} are represented as diesel particulate matter (DPM), a major component of PM_{2.5}. Studies indicate that DPM poses the greatest health risk among airborne TACs. A 10-year research program (ARB 1998)¹ demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic long-term health risk. DPM differs from other TACs in that it is not a single substance but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The California Air Resources Board (ARB) has made preliminary concentration estimates based on a DPM exposure method. This method uses the ARB emissions inventory's PM₁₀ database, ambient PM_{2.5} monitoring data, and the results from several studies to estimate concentrations of DPM.

Sources of DPM (as exhaust $PM_{2.5}$ emissions) from the project include DPM emissions from the operation of off-road equipment and vehicle travel during construction.

Standard Conditions of Approval Applicable to the Project

The City's Conditions of Approval and Uniformly Applied Development Standards Imposed as Conditions of Approval, referred hereinafter "Standard Conditions of Approval" (SCAs) are incorporated into projects as conditions of approval regardless of a project's environmental determination. As applicable, the SCAs are adopted as requirements of an individual project when it is approved by the City and are designed to, and will, substantially mitigate environmental effects. In reviewing project applications, the City determines which SCAs are applied, based upon the zoning district, community plan, and the type(s) of permit(s)/approval(s) required for the project. The City has adopted SCAs specific to air quality-related impacts from the development of a project. Because SCAs are mandatory City requirements, the impact analysis assumes that these will be imposed and implemented by a project.

Specifically, concerning subsections SCA19 (w) and (x) of the SCAs, Construction-Related Air Pollution Controls (Dust and Equipment Emissions) that require construction equipment and diesel trucks to be

ARB. 1998. The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines. Website: www.arb.ca.gov/toxics/dieseltac/factsht1.pdf.

equipped with Best Available Control Technology and meet the ARB's most recent certification standard, the project must deploy construction equipment meeting Tier 4 emission standards that represent the most recent certification standard. Therefore, this construction health risk assessment assumed the deployment of construction equipment that meets Tier 4 emission standards during Project construction.

With regard to use of construction equipment meeting Tier IV emission standards, a major construction contractor was surveyed to assess the availability of Tier IV construction equipment for use in constructing another mixed use project in Downtown Oakland, the 24th Street and Harrison Street Project. This survey, provided as Attachment A, provided information that indicated that such equipment is available and can be applied to construction projects in the San Francisco Bay area.

This health risk assessment also addresses SCA 20, Exposure to Air Pollution (Toxic Air Contaminants) that requires a project applicant incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. Further, this health risk assessment addresses the need to prepare a Health Risk Assessment (HRA) in accordance with ARB and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants.

Health Risk Significance Thresholds

The City of Oakland CEQA Thresholds of Significance provide quantitative thresholds for project-level impacts. The health risk thresholds of significance applicable for this assessment are provided in Table 1 for an individual, project-level TAC emission source impact.

Table 1: City of Oakland Health Risk Thresholds of Significance

Metric	Individual Source Impact		
Cancer Risk	10 in one million		
Non-Cancer Hazard Index	1.0		
Annual PM _{2.5}	0.3 μg/m ³		

Note:

μg/m³ = microgram per cubic meter

Source: City of Oakland CEQA Thresholds of Significance Guidelines, October 2013. Website: http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak051200.pdf.

Health Risk Assessment

The potential health risks resulting from the construction of the project were estimated by reviewing the construction health impacts from several residential/mixed use projects approved in the downtown

Oakland area and relating these projects to the current Project. These downtown Oakland projects are listed in Table 2.

Table 2: Projects in the Downtown Oakland Area

Downtown Oakland Project	Description				
3000 Broadway ⁽¹⁾ (Broadway and 30 th Street)	6-story mixed-use; 183,000 gross square feet; 127 rental units; 8,000 square feet of commercial space; 35,000 square feet of parking				
W12 Mixed Use Project ⁽²⁾ (12 th Street and Harrison Street)	Two 7-story buildings with 416 residential units; 25,000 square feet of commercial space				
Webster Street ⁽³⁾ (Webster Street and 23 rd Street)	24-story building with 224,000 square feet of mixed use space; 130 dwelling units; 3,000 square feet of retail space				
24 th and Harrison Street ⁽⁴⁾	18-story mixed-use; 730,000 square feet; 448 residential units; 65,000 square feet of commercial space				
Current Project	Description				
605 9 th Street	8-story building; 25 residential units				

Notes

- Refined Level Construction Health Risk Assessment for the 3000 Broadway Project, Oakland,
 California; Memo prepared for Ms. Alexis Pelosi, August 16, 2016
- (2) Construction Health Risk Assessment for the W12 Mixed Use Project, Oakland, CA; prepared for Ms. Jennifer Renk, November 11, 2016
- (3) 2305 Webster Street Health Risks Assessment, First Carbon Solutions, November 29, 2016.
- Screening Level Construction Health Risk Assessment for the 24th Street and Harrison Street Project, Oakland, CA; prepared for Ms. Alexis Pelosi, July 28, 2016

As noted in Table 2, these downtown Oakland projects are substantially larger than the 9th Street residential Project. Table 3 summarizes the estimated health risks associated with the construction of these downtown Oakland projects after complying with the City of Oakland's SCAs that are also applicable to the project. These impacts are noted for the maximum impacted sensitive receptor surrounding the individual project. The distances from the respective project ranged from 25 feet to 82 feet. The closest sensitive receptor to the project is 80 feet. Therefore, the distances to the maximum impacted sensitive receptor are comparable to the receptor distance from the project. Note that these health risk impacts were estimated using methods consistent with ARB and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. In this regard, the relevant SCA applied in minimizing construction emissions requires that construction equipment be equipped with Best Available Control Technology and meet the ARB's most recent certification standard. The ARB's most recent certification standard requires the use of construction equipment meeting Tier IV engine standards. Therefore, it is

assumed that the Project would also deploy construction equipment that meets Tier 4 emission standards during construction.

Conclusion

As noted from Table 3, the construction health impacts from several projects located within the downtown Oakland area would not exceed the City of Oakland's health significance thresholds after application of SCAs. By extension, since the Project's land use intensity is substantially smaller than and the distances to the maximum impacted sensitive receptors are similar to the downtown Oakland projects shown in Table 3, the potential construction impacts from the Project would also be expected to result in construction impacts that are substantially less than the significance thresholds. In addition to the fact that the project is smaller than other comparable projects in the vicinity, there is nothing unusual or peculiar about the site that would cause the project to result in more substantial impacts.

Table 3: Construction Health Impacts of Downtown Oakland Projects (After Implementation of SCAs)

Downtown Oakland Project	Cancer Risk (risk/million)	Non-Cancer Hazard Index	Annual PM _{2.5} (µg/m³)	Distance to Maximum Impacted Sensitive Receptor ⁽¹⁾
3000 Broadway (Broadway and 30 th Street)	0.09	0.01	0.02	55 feet
W12 Mixed Use Project (12 th Street and Harrison Street)	1.6	0.002	0.01	82 feet
Webster Street (Webster Street and 23 rd Street)	4.2	0.003	0.02	25 feet
24 th and Harrison Street	6.0	0.01	0.05	60 feet
City of Oakland Health Significance Thresholds	10	1	0.30	

Note:

(1) The distance to the nearest sensitive receptor from the project is 80 feet.



Attachment A Survey of Construction Contractors Regarding the Availability of Tier IV Construction Equipment

Mr. Brian McKim
Director of Construction
Holland Partner Group
4301 Hacienda Drive, Ste. 250
Pleasanton, CA 94588

Re: <u>Use of Tier 4 Rated Emissions Certifications for Equipment at 24th & Harrison Street Project</u>

Dear Mr. McKim:

I write in response to your request for information on the equipment scheduled for use at Holland Partner Group 24th Street and Harrison Street project in Oakland, California. As requested, below is a list of emission generating equipment that will be used for construction:

List of Equipment Requiring Tier 4 Certification Subcontractor will be using onsite: Examples (Concrete/Industrial Saws, Rubber Tired Dozers, Tractors/Loaders/Backhoes, Excavators, Drill Rig, Graders, Mobile Cranes, Forklifts, Generator Sets, Welders, Cement and Mortar Mixers, Concrete Pumps, Pavers, Paving Equipment, Rollers, Air Compressors.....)

- 1. 14131 2015 Tier 4F Line Pump
 - 2. 14128 2016 Tier 4F Line Pump
- 3. 16144 2016 Case 580 Backhoe
- 4. 16459 2015 JLG Forklift
- 5. 16436 2014 Genie Forklift

It is our understanding that all of the equipment listed above must meet Tier 4 emission standards as required under Standard Condition of Approval (SCA) AIR-1. All equipment listed above, except for excavators, will come from our existing fleet, which meets the Tier 4 emissions standards. A copy of our Air Resources Board DOORS fleet showing the equipment listed above and its compliance with Tier 4 is attached. Also attached is a statement of compliance from the Air Resources Board for our fleet. Currently, our fleet of cranes does not meet Tier 4 emissions standards.

We understand the requirement to use Tier 4 construction equipment and will comply with this requirement. If you have any questions, please let me know.

Sincerely,



"Clearing the way for the future" TM

Mr. Brian McKim Director of Construction Holland Partner Group 4301 Hacienda Drive, Ste. 250 Pleasanton, CA 94588

September 29, 2016

Re: <u>Use of Tier 4 Rated Emissions Certifications for Equipment at 24th & Harrison Street Project</u>

Dear Mr. McKim:

I write in response to your request for information on the equipment scheduled for use at Holland Partner Group 24th Street and Harrison Street project in Oakland, California. As requested, below is a list of emission generating equipment that will be used for construction:

List of Equipment Requiring Tier 4 Certification Subcontractor will be using onsite: Examples (Concrete/Industrial Saws, Rubber Tired Dozers, Tractors/Loaders/Backhoes, Excavators, Drill Rig, Graders, Mobile Cranes, Forklifts, Generator Sets, Welders, Cement and Mortar Mixers, Concrete Pumps, Pavers, Paving Equipment, Rollers, Air Compressors.....)

1. CAT 336 Excavator

2. Volvo 350 Excavator

3. CAT 246D loader

4. GIPO portable crusher

5.

It is our understanding that all of the equipment listed above must meet Tier 4 emission standards as required under Standard Condition of Approval (SCA) AIR-1. All equipment listed above will come from our existing fleet, which meets the Tier 4 emissions standards. A copy of our Air Resources Board DOORS fleet showing the equipment listed above and its compliance with Tier 4 is attached. Also attached is a statement of compliance from the Air Resources Board for our fleet. Currently, our fleet of Portable Debris Shredders do not meet Tier 4 emissions standards. We have arranged to rent Tier 4 excavators which are readily available, for the Project, in case our fleet is busy by the time construction begins on the Project. Below is a list of companies where Tier 4 equipment is available for rent:

Peterson Tractor Company, San Leandro, CA

CRESCO Rental, Oakland, CA

We understand the requirement to use Tier 4 construction equipment and will comply with this requirement. If you have any questions, please let me know.

Sincerely,

Name:

Tim Ruff

Date: 9-29-16

Title:

Chief Estimator

Company: Ferma Corporation

Name: Name: Vict President

Company: Conco Companies

Date: 9/28/16



100

Air Resources Board

Certificate of Reported Compliance
Truck and Bus Regulation
Conco Companies/Réliable Trucking
Motor Carrier: CA-054089
168 Vehicles Reported

SOP

705

all relevant vehicles in the fleet required to show compliance. ARB hereby finds that the fleet listed above has reported compliance with title 13, California Code of Regulations, section 2025 of the Truck and Bus Regulation. If ARB subsequently finds that the statements and information that have been provided are This certificate confirms that the fleet owner has attested under penalty of perjury that the statements and information they provided to the Air Resources Board (ARB) are true, accurate, and complete regarding not true, accurate, and complete, this certificate shall be effectively revoked and the fleet subject to noncompliance penalties.

This certificate is valid until December 31, 2016

.

Erik White
Division Chief, Mobile Source Control Division
California Air Resources Board

To verify the authenticity of this certificate, visit www.arb.ca.gov/msprog/onrdiesel/tblookup.php

Fruck and Bus 43646 dentification

202

See.

California Environmental Protection Agency Om Air Resources Board	 EXECUTIVE ORDER U-R-013-0514 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	ENGINE FAMILY DISPLACEMENT (liters)				USEFUL LIFE (hours)
2016	GDZXL15.9058	15.874	Diesel	8000		
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION			
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Diesel Oxidation Catalyst, Selective Catalytic Reduction-Urea (2)			Offroad Crane, Dozer, Loader, Pu Equipmen	imp and Other Industrial		

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER	EMISSION STANDARD		EXHAUST (g/kw-hr)					OPACITY (%)		
CLASS	CATEGORY		NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.02	0.34		0.02	0.01			_

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this ______ day of March 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

California Environmental Protection Agency California Environmental Protection Agency California Environmental Protection Agency

CATERPILLAR INC.

EXECUTIVE ORDER U-R-001-0501 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2015	FCPXL18.1HTF	18.1	Diesel	8000		
	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Cooler, (Exhaust	c Direct Injection, Turboo Oxidation Catalyst, Engin Gas Recirculation, Peric Catalytic Reduction-Urea Catalyst	ne Control Module, odic Trap Oxidizer.	Loader, Trace	or		

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER	EMISSION		EXHAUST (g/kw-hr)					OPACITY (%)		
CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
130 ≤ KW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		FEL	N/A	N/A		N/A	0.01	N/A	N/A	N/A
		CERT	0.04	0.11		0.01	0.01	_		

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this

___ day of September 2014.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

We understand the requirement to use Tier 4 construction equipment and will comply with this requirement. If you have any questions, please let me know.

Sincerely,

Name:

Tim Ruff

Date: 9-29-16

Title:

Chief Estimator

Company: Ferma Corporation



OVERVIEW

Over 30 years' experience

Education

- Master's Degree, Meteorology, Pennsylvania State University
- Bachelor's Degree, Meteorology Florida State University

Professional Affiliations

- Air and Waste Management Association
- American Meteorological Society

Vincent Mirabella, MS offers considerable experience consisting of diverse public and private-sector scientific experience, spanning over three decades. This includes the design and management of major air quality research projects dealing with air quality model development application and analysis and the preparation of technical studies in support of CEQA documents. These projects have included the application of a comprehensive urban photochemical grid model to examine the impacts of power plant emissions in the South Coast Air Basin, characterization of emission dispersion in complex terrain, identification, quantification of visibility impairment in the Grand Canyon, and the application of various emission inventory and dispersion models in health risk and traffic impact assessments. His experience also involves development of emission inventories and meteorological data necessary to drive dispersion models, legislative review, regulatory peer review, CEQA compliance determinations, and expert testimony.

RELATED EXPERIENCE AND CLIENT SUMMARY

Air Quality and Health Risk Studies in Support of CEQA Documents

Emission Inventory Development

As Senior Air Quality Scientist, Mr. Mirabella applies various emission estimation tools to derive criteria, toxic air contaminant, and greenhouse gas emissions for short-term construction and long-term operations for use in air dispersion models. These estimation tools include the CARB URBEMIS and EMFAC models, the SCAQMD CalEEMod model, and the USEPA AP42 methods. Sources of emissions include mobile source gasoline and diesel powered vehicles, standby emergency generators, gasoline dispensing stations, parking lots, dry cleaning establishments, restaurants, and rail lines. The types of projects requiring such information have included large warehouses, gas turbine peaker facilities, large industrial projects, mixed use residential-commercial, large retail outlets, and residential projects.

Air Dispersion and Health Risk Model Applications

As Senior Air Quality Scientist, Mr. Mirabella applies a wide variety of air quality models in developing assessments for both criteria pollutants and toxic air contaminants. Such models include the Industrial



Source Complex Model, AERMOD Model, HARP air toxic model for health risk assessments, and the CALINE4 traffic intersection model. The results from these air dispersion models are then compared to the significance thresholds and ambient air quality standards established by various regulatory agencies to assess the significance of project impacts. Such applications involve a close relationship with the staffs of the regulatory agencies to insure that the applications are most appropriate to the specific project.

CEQA Analyses

As Senior Air Quality Scientist, Mr. Mirabella applies the results of the emission inventory and air dispersion model technical studies in determining compliance with the CEQA checklist for air quality and in particular the various significance threshold levels. Such compliance determinations require the identification of potential mitigation measures to minimize project construction and operational emissions as part of the CEQA compliance process.

Recent Projects

- More than 1 million- square-foot warehouse projects in Perris, Banning, Barstow, San Bernardino, San Jose, Fremont, Riverside, Chino, Manteca, Suisun, and Moreno Valley, CA
- Big-box commercial retail centers in Bakersfield, Wildomar, Oakley, Paradise, Highland, Wasco, Rocklin, Fresno, Visalia, Selma, Yucaipa, Murrieta, Del Norte, Suisun, and Clovis, CA
- Industrial projects in Colton, West Sacramento, Fresno, Volta, CA
- Mixed-use residential and commercial projects in Riverside, San Jacinto, Rialto, Corona, CA
- Residential projects in Fontana, Big Bear, Redlands, San Bernardino, Orange, Martinez, Richmond, San Ramon, Pleasanton, CA

Air Quality Model Development

Wind Field Modeling Techniques

Mr. Mirabella developed a number of modeling techniques used to generate three-dimensional windfields that were used to drive photochemical airshed grid models and point source models in both urban and complex terrain mountain environments. These same wind models have been used to derive the optimum placement of wind energy systems in such areas as Palm Springs.

Lagrangian Models

Mr. Mirabella developed one of precursor point source photochemical lagrangian models used to quantify the impacts of NOx and ROG emissions from point sources on ozone and fine particulate matter concentrations in the atmosphere.

Photochemical Airshed Application

Mr. Mirabella coordinated the first urban photochemical airshed application to examine the impacts of emissions from power plants in the South Coast Air Basin on ambient ozone and NO2 levels.

Aerosol and Acid Rain Models

Mr. Mirabella coordinated a number of basic research studies involving the development of aerosol and acid rain models and enhancing the accuracy of numerical techniques used in grid modeling.



Nested Grid Models

Mr. Mirabella developed one of the first "nested" grid models which allowed a detailed examination of individual large emission sources within the context of an urban grid scale model application Gaussian Dispersion Models. He also developed several methods for applying Gaussian dispersion models in the siting of power plants in the Western United States.

City of Melbourne Urban Air Quality Study, Australia

Mr. Mirabella was responsible for the on-site management of a million dollar multi-year urban air quality project. The study involved the generation of a comprehensive multispecies emission inventory for the entire metropolitan area of three million people including point sources and area sources, the design of a comprehensive monitoring network to measure various air pollutant constituents across the metropolitan area, development of models for forecasting ozone levels in the metropolitan area, model applications to calculate three-dimensional wind fields for air quality model usage, conducted a tracer study to document the impact of large emission source in the metropolitan area, development of a photochemical trajectory model to examine sources of pollution in the metropolitan area, report preparation and every day interfacing with the State of Victoria Environment Protection Agency.

South Coast Air Basin Photochemical Airshed Model

Mr. Mirabella was responsible for the application of a photochemical airshed model to the South Coast Air Basin to examine the effects of large scale changes in albedo (i.e. "whitening" roofs to reduce the urban heat island and slow down the atmospheric chemistry of ozone).

Metal Shredding Project Air Quality Impact Assessment

Mr. Mirabella as the Senior Air Quality Scientist was responsible for the numerous applications of Gaussian dispersion models for air quality impact and health risk assessments for CEQA applications including comprehensive assessment of a large two million-square-foot warehouse and development of emission inventories using URBEMIS and EMFAC emission models and ISC model for calculating air quality impacts and increased cancer risks from the diesel truck traffic associated with the operation of the project.

A comprehensive assessment of the health risks associated with a construction and operation of a large metal shredding project located near a number of sensitive receptors was performed. This involved emission inventory development and model applications. Applied the CALINE4 traffic intersection model to assess the impacts of added traffic on potential CO hotspots.

Air Quality Data Analysis

Ozone, Carbon Monoxide (CO) and Nitrogen Dioxide (NO2) Pattern Study

Mr. Mirabella conducted one of the first studies to examine the weekday-weekend patterns of ozone, CO, and NO2 in the South Coast Air Basin and attribute emission source contributions using emission and ambient pollutant concentration ratios.

Grand Canyon Visibility Impairment

Mr. Mirabella performed a comprehensive evaluation of aerosol and visibility data to assess the relative



influences of emission sources on the visibility impairment at the Grand Canyon.

Professional Publications, Presentations, and Awards

- Management Achievement Award: Southern California Edison
- Technology Transfer Achievement Award: Electric Power Research Institute
- Relating Summer Ambient Particulate Sulfur, Sulfur Dioxide, and Light Scattering to Gaseous Tracer Emissions from the Mohave Power Project, Atmospheric Environment. 2000 V.A. Mirabella and R. Farber
- Attribution of Particulate Sulfur in the Grand Canyon to a Specific Point Source Using Tracer Aerosol Gradient Interpretive Technique (TAGIT) 1999 H. Kuhns, M. Green, M. Pitchford., L. Vasconcelos, W. White, and V.A. Mirabella.
- Tracking Regional Background in a Haze Attribution Experiment, 1999 W. White., R. Farber, M. Green, E. Macias, V. Mirabella, M. Pitchford, and L. Vasconcelas, AWMA.
- Meteorological and Photochemical Modeling of Large-Scale Albedo Changes in the South Coast Air Basin, 1998 K.T. Tran, and V.A. Mirabella, presented at the 1998 annual meeting of the Air and Waste Management Association, San Diego, CA.
- Relating Summer Ambient Particulate Sulfur, Sulfur Dioxide, and Light Scattering to Gaseous Tracer Emissions from the Mohave Power Project, Proceedings, Visual Air Quality, Aerosols & Global Radiation Balance, 1997 V. Mirabella and R. Farber, AWMA
- Overview of the Variable-Grid Urban Airshed Model (UAM-V) 1992 R. Morris, M. Yocke, T. Meyers and V. Mirabella, presented at the 85th annual meeting of the Air and Waste Management Association, Kansas City, Mo.
- Adaption of the ISCST Model for Local Fugitive PM10 Modeling With Application to the Riverside/Rubidoux Area, 1992 I. Wang, R. Countess, T. Umenhofer, R. Farber, and V. Mirabella
- Development of a Nested Grid Urban Airshed Model and Application to Southern California, 1991
 R. Morris, T. Myers, S. Douglas, M. Yocke, and V. Mirabella, presented at the 84th annual meeting of the Air and Waste Management Association, Vancouver, B.C.
- Performance Evaluation of an Improved Urban Airshed Model, 1991 K. Tran, and V. Mirabella, presented at the 84th annual meeting of the Air and Waste Management Association, Vancouver, B. C.
- A Comparison of Advection Schemes in Existing Photochemical Grid Models, 1991 K. Tran and V. Mirabella, presented at the 84th annual meeting of the Air and Waste Management Association, Vancouver, B. C.
- Field Measurements Used to Evaluate Implementation Programs for Multiple Standard Violations, 1990 R. Farber, V. Mirabella, J. Baas, A. Amerzcua, R. Countess, I. Wang, C. Pilinis, and J. Watson, presented at the 83rd annual meeting of the Air and Waste Management Association, Pittsburgh, Pa.
- Development of the SCAQS Emission Inventory, 1989 Mirabella, V.A. Mirabella and M. Nazemi, presented at the 82nd annual meeting of the Air and Waste Management Association, Anaheim, Ca.
- An Analysis of Weekend/Weekday Ozone Differences in the South Coast Air Basin of California, 1989
 M. Zeldin, Y. Horie, and V. Mirabella, presented at the 82nd annual meeting of the Air and Waste Management Association, Anaheim, Ca.
- Methodologies for Applying the Urban Airshed Model to Determine the Effectiveness of Measures to Reduce Ozone Levels in the Los Angeles Basin, 1989 M. Yocke, L. Mahoney, H. Hogo, and V.



Mirabella, presented at the 82nd annual meeting of the Air and Waste Management Association, Anaheim, Ca.

- Snowpack and Flow Simulation for the Eastern Brook, 1988 C. Chen, L. Gomez, and V. Mirabella, presented at the Sub-alpine Watershed Processes and Water Quality, Lake Tahoe, Nevada.
- Retention of Acid Anions by Sub-Alpine Meadows, 1988 C. Chen, L. Gomez, L. Lund, and V. Mirabella, presented at the Sub-alpine Watershed Processes and Water Quality, Lake Tahoe, Nevada.
- Diffusion and Reaction of Pollutants in Stratus Clouds: Application to Nocturnal Acid Formation in Plumes, 1985 C. Seigneur, P. Saxena, and V. A. Mirabella, Environmental Science Technical Volume 19, No. 9
- Development of an Acid Rain Trajectory Model, 1984 C. Seigneur, P. Saxena and V. A. Mirabella, presented at the 77th annual meeting of the Air Pollution Control Association, San Francisco
- Estimating Future NO2 Levels in the Greater Los Angeles Area by Source Type Contribution, 1982 Y. Horie, and V A. Mirabella,:; JAPCA, Vol. 32 No.3.
- "On A Clear Day", 1982 V. A. Mirabella, Clean Air Journal of Australia and New Zealand, 2nd Quarter, 1982
- Emission Trade-Offs: One Way to Increase Generating Capacity, 1979 M.D. High, and V.A. Mirabella, presented at the 41st annual meeting of the American Power Conference, Chicago, Illinois.
- Atmospheric Dispersion Modeling, 1979 V. A. Mirabella, Discussion Paper, JAPCA, Vol 29, No. 9
- Experience in IMPACT Modeling of Complex Terrain, 1979 R.C. Sklarew, and V.A. Mirabella, presented at the fourth symposium on Atmospheric Turbulence Diffusion and Air Pollution, Reno, Nevada.
- Recent Verification Studies with the SAI Urban Airshed Model in the South Coast Air Basin, 1979
 T.W. Tesche, C.S. Burton and V.A. Mirabella, presented at the fourth symposium on Atmospheric Turbulence Diffusion and Air Pollution, Reno, Nevada.
- Optimum Site Selection for Wind Energy Systems, 1978 R.C. Sklarew, and V.A. Mirabella, presented at the Second International Conference on Alternative Energy Sources; Palm Springs, California.
- Point Source Modeling for Reactive Plumes in Complex Terrain, 1977 J.C. Wilson, A.J. Fabrick, R.L. Sklarew, and V.A. Mirabella, presented at the 70th Annual Meeting of the APCA, Toronto, Canada.
- Comparison of Several Models with Ambient Sulfur Dioxide Measurements Near the Navajo Generating Station, 1976 R.B. Lantz, G.F. Hoffnagle and V.A. Mirabella, presented at the 69th Annual APCA Meeting; Portland, Oregon.
- DEPICT: Detailed Examination of Plume Impact in Complex Terrain, 1976 R.C. Sklarew, J.C. Wilson, S.J. Fabrick, and V.A. Mirabella, presented at Geothermal Environmental Seminar, Clear Lake, California.
- Model Simulation of a Tracer Study in Rough Terrain, 1975 G.F.Hoffnagle, V.A. Mirabella, and T.L. Spangler, presented at the First Annual AMS Conference on Regional, and Mesoscale Modeling Analysis and Prediction in Las Vegas, Nevada
- Statistical Properties of Turbulence at the Kennedy Space Center for Aerospace Vehicle Design, 1971, J. Dutton, H.A. Panofsky, D.C. Deavon, B.R. Kerman, and V.A. Mirabella, prepared for the National Aeronautics and Space Administration

Attachment 3

FEHR & PEERS

DRAFT MEMORANDUM

Date:

July 12, 2017

To:

Joe Hernon

From:

Sam Tabibnia

Subject:

VMT Assessment for 605 9th Street Project in Oakland

Ok17-0188

This memorandum provides a vehicle miles traveled (VMT) assessment for the proposed 605 9th Street development in the City of Oakland. Fehr & Peers analyzed the Project's VMT based on the City of Oakland's CEQA Thresholds of Significance.

The project would consist of 25 multi-family residential units and 23 parking spaces at the southwest corner of the Jefferson Street/9th Street intersection in downtown Oakland.

Based on our assessment, the project would satisfy the City's screening criteria for low VMT generation, and is therefore presumed to not exceed VMT thresholds. The project's impacts to VMT would be less than significant. The rest of this memorandum presents more background and detail on the VMT analysis completed for this project.

BACKGROUND

On September 21, 2016, the City of Oakland's Planning Commission directed staff to update the City of Oakland's California Environmental Quality Act (CEQA) Thresholds of Significance Guidelines related to transportation impacts in order to implement the directive from Senate Bill 743 (Steinberg 2013) to modify local environmental review processes by removing automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion, as a significant impact on the environment pursuant to CEQA. The recommendation aligns with draft proposed guidance from the Governor's Office of Planning and Research and the City's approach to transportation impact analysis with adopted plans and polices related to transportation, which promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. Consistent with the Planning Commission

Joe Hernon July 12, 2017 Page 2 of 6



direction and the Senate Bill 743 requirements, the City of Oakland published the interim *Update* to CEQA Thresholds of Significance and Transportation Impact Study Guidelines on October 17, 2016 to guide the evaluation of the transportation impacts associated with land use development projects.¹

Many factors affect travel behavior, including density of development, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development that is located at a great distance from other land uses, in areas with poor access to non-single occupancy vehicle travel modes generate more automobile travel compared to development located in urban areas, where a higher density of development, a mix of land uses, and travel options other than private vehicles are available.

Given these travel behavior factors, most of Oakland has a lower VMT per capita and VMT per worker ratios than the nine-county San Francisco Bay Area region. In addition, some neighborhoods of the city have lower VMT ratios than other areas of the city.

VEHICLE MILES TRAVELED ESTIMATE

Neighborhoods within Oakland are expressed geographically in transportation analysis zones, or TAZs. The Metropolitan Transportation Commission (MTC) Travel Model includes 116 TAZs within Oakland that vary in size from a few city blocks in the downtown core, to multiple blocks in outer neighborhoods, to even larger geographic areas in lower density areas in the hills. TAZs are used in transportation planning models for transportation analysis and other planning purposes.

The MTC Travel model is a model that assigns all predicted trips within, across, or to or from the nine-county San Francisco Bay Area region onto the roadway network and the transit system, by mode (single-driver and carpool vehicle, biking, walking, or transit) and transit carrier (bus, rail) for a particular scenario.

¹ The interim October 2016 thresholds and guidelines are applicable to this project because they were in effect at the time the project was under review. Subsequently, City of Oakland finalized the thresholds of significance and analysis guidelines in the revised *Transportation Impact Review Guidelines*, published on April 14, 2017. The thresholds applicable to this project and the conclusions of this memorandum would be the same under both the interim October 2016 and the final April 2017 thresholds and analysis guidelines.



The travel behavior from MTC Travel Model is modeled based on the following inputs:

- Socioeconomic data developed by the Association of Bay Area Governments (ABAG)
- Population data created using 2000 US Census and modified using the open source PopSyn software
- Zonal accessibility measurements for destinations of interest
- Travel characteristics and automobile ownership rates derived from the 2000 Bay Area
 Travel Survey
- Observed vehicle counts and transit boardings.

The daily VMT output from the MTC Travel Model for residential and office uses comes from a tour-based analysis. The tour-based analysis examines the entire chain of trips over the course of a day, not just trips to and from the project site. In this way, all of the VMT for an individual resident or employee is included; not just trips into and out of the person's home or workplace. For example: a resident leaves her apartment in the morning, stops for coffee, and then goes to the office. In the afternoon she heads out to lunch, and then returns to the office, with a stop at the drycleaners on the way. After work she goes to the gym to work out, and then joins some friends at a restaurant for dinner before returning home. The tour-based approach would add up the total amount driven and assign the daily VMT to this resident for the total number of miles driven on the entire "tour".

Based on the MTC Travel Model, the regional average daily VMT per capita is 15.0 under 2020 conditions and 13.8 under 2040 conditions.

THRESHOLDS OF SIGNFICANCE

According to the City of Oakland *Transportation Impact Review Guidelines* (April 2017), the following are thresholds of significance related to substantial additional VMT:

- For residential projects, a project would cause substantial additional VMT if it exceeds existing regional household VMT per capita minus 15 percent.
- For office projects, a project would cause substantial additional VMT if it exceeds the existing regional VMT per employee minus 15 percent.
- For retail projects, a project would cause substantial additional VMT if it VMT if it results a
 net increase in total VMT.



Screening Criteria

VMT impacts would be less than significant for a project if any of the identified screening criteria are met:

- 1. Small Projects: The project generates fewer than 100 vehicle trips per day
- 2. Low-VMT Areas: The project meets map-based screening criteria by being located in an area that exhibits below threshold VMT, or 15 percent or more below the regional average, as illustrated on maps provided by MTC
- 3. Near Transit Stations: The project is located in a Transit Priority Area or within a one-half mile of a Major Transit Corridor or Stop² and satisfies the following:
 - Has a Floor Area Ratio (FAR) of more than 0.75
 - Does not includes more parking for use by residents, customers, or employees of the project than other typical nearby uses, or more than required by the City in areas where there is a parking minimum
 - Is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Transportation Commission)

VMT IMPACT ANALYSIS

The Project satisfies all three screening criteria, as detailed below.

Criterion #1: Small Projects

Table 1 summarizes the trip generation for the proposed project based on the City of Oakland *Transportation Impact Review Guidelines* (April 2017) methodology, which uses the trip generation data published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual* (Ninth Edition) as a starting point. The ITE's Trip Generation Manual (Ninth Edition) is primarily based on data collected at single-use suburban sites where the automobile is often the only travel mode. However, the proposed project is in a dense mixed-use urban environment where many trips are walk, bike, or transit trips. Since the project is about 0.4 miles from the 12th Street Oakland City Center BART Station, this analysis reduces the ITE based trip generation by 46.9 percent to

Major transit stop is defined in CEQA Section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.



account for non-vehicular trips. This reduction is consistent with the City of Oakland's Transportation Impact Study Guidelines and is based on US Census data which shows that the non-automobile mode share within 0.5-mile of a BART station in Alameda County is about 46.9 percent.

TABLE 1: PROJECT AUTOMOBILE TRIP GENERATION SUMMARY

Land Use	Units ¹	ITE	Daily	A	M Peak H	our	PM Peak Hour		
adria OSC		Code	Dany	In	Out	Total	In	Out	Total
Apartment	25 DU	220 ²	166	3	10	13	10	6	16
Subtotal			166	3	10	13	10	6	16
Non-Auto Reduct	tion (-46.9%) 3	-78	-1	-5	-6	-5	-3	-8
Adjusted Projec	t Trips		88	2	5	7	5	3	8

^{1.} DU = Dwelling Units,

AM Peak Hour: T = 0.51*(X) (20% in, 80% out) PM Peak Hour: T = 0.62*(X) (65% in, 35% out)

As shown in **Table 1**, the project would generate fewer than 100 trips per day and therefore would satisfy Criterion #1.

Criterion #2: Low-VMT Area

Table 2 shows the 2020 and 2040 VMT for TAZ 969, the TAZ in which the project is located as well as applicable VMT thresholds of 15 percent below the regional average. As shown in Table 2, the 2020 and 2040 average daily VMT per capita in the project TAZ is more than 15 percent below the regional averages. Therefore, the project would satisfy Criterion #2.

TABLE 2: DAILY VEHICLE MILES TRAVELED PER CAPITA

		TAZ 969				
	20	020	20)40		
Land Use	Regional Average	Regional Average minus 15%	Regional Average	Regional Average minus 15%	2020	2040
Residential (VMT per Capita) ¹	15.0	12.8	13.8	11.7	4.0	3.4

^{1.} MTC Model results at analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerCapita and accessed in June 2017. Source: Fehr & Peers, 2017.

^{2.} ITE Trip Generation (9th Edition) land use category 220 (Apartment- Adj. Streets, 7-9 AM, 4-6 PM): Daily: T = 6.65*(X)

^{3.} The 46.9% reduction is based on *City of Oakland Transportation Impact Review Guidelines* (April 2017) for urban environments within 0.5 miles of a BART Station.

Source: Fehr & Peers, 2017.



Criterion #3: Near Transit Stations

The proposed project would be located about 0.4 miles from the 12th Street Oakland City Center BART Station and is within one-half mile of several frequent bus routes along Broadway (Routes 6 and 51A with 10 minute peak headways, and Routes 72, 72M, and 72R, with 10 to 12 minute peak headways), 7th and 8th Streets (Route 62 with 15 minute peak headways), and 11th and 12th Streets (Route 1 with 8 to 10 minute peak headways and Route 40 with 10 minute peak headways). The Project would satisfy Criterion #3 because it would meet the following three conditions for this criterion:

- The Project has an FAR greater than 0.75.
- The Project would include 23 parking spaces for the proejct residents, which corresponds to about 0.9 parking spaces per unit. The City of Oakland Municipal Code Section 117.116.060 requires between minimum of zero and maximum of 1.25 parking spaces per unit for mutli-family residential developments in the CBD-R zone. The proposed parking supply is within the supply range allowed by the Municipal Code. Therefore, the project would not provide more parking than other typical nearby uses, nor would it provide more parking than required by the City Code.
- The Project is located within the Downtown Oakland Priority Development Area (PDA) as defined by Plan Bay Area, and is therefore consistent with the region's Sustainable Communities Strategy.

CONCLUSION

The Project would satisfy the Small Project (#1), Low-VMT Area (#2), and Near Transit Stations (#3) screening criteria. Therefore, it is presumed that the proposed project would not result in substantial additional VMT and project impacts with respect to VMT would be less-than-significant.

Please contact Sam with questions or comments.



Sam Tabibnia

Senior Associate

about

Sam is a registered Professional Civil Engineer and Traffic Engineer in California, and Professional Traffic Operations Engineer with 19 years of experience in Fehr & Peers' Oakland office. Sam has extensive experience managing a variety of transportation planning and traffic engineering projects, including integrated land use/transportation planning, transportation impact studies, traffic fee studies, traffic calming plans, parking studies, site plan review, and traffic operations analysis. Sam's particular areas of expertise include environmental review under CEQA, and development site traffic engineering review.

education

Master of Science in Civil Engineering, University of California, Berkeley, 1997 Bachelor of Science in Civil Engineering, University of California, Berkeley, 1995

<u>affiliations</u>

Institute of Transportation Engineers: Associate

<u>registrations</u>

Licensed Civil Engineer, State of California (#64006) Licensed Traffic Engineer, State of California (#2313) Licensed Professional Traffic Operations Engineer (#1639)

<u>expertise</u>

- Traffic Engineering
- Transportation and Land Use Planning
- Traffic Impact Analysis and Environmental Reports
- Transportation Demand Management (TDM) Plans
- Institutional Planning
- Parking Studies
- Traffic Calming
- Parking Studies
- Site Access and Circulation
- General and Area Wide Specific Plans

publications & presentations

Evaluating Interface Standards for the Public Transit Industry, Transportation Research Record No. 1618, 1998

Transportation Impact Studies – Analysis of Alternative Transportation Modes, 1999 ITE Annual Meeting and Exhibit

Measuring Costs and Benefits of Reducing Congestion in a Growing City: Striking a Balance, 2004 ITE Annual Meeting and Exhibit

Methodology for Trip Generation Estimation for a Large Urban University, 2005 ITE District 6 Annual Meeting

honors and awards

Redwood City General Plan - APA Northern California Comprehensive Planning, Small Jurisdiction, 2012 MacArthur BART Access Feasibility Plan – California APA Project of Merit, 2008

FEHR PEERS

project experience

Pittsburg/Bay Point BART Master Plan (Pittsburg, CA)

Fehr & Peers prepared the transportation sections of the Specific Plan and EIR, and a stand-alone Access Plan which would develop the current surface parking and vacant land surrounding the BART station as a dense, mixed-use development.

Coliseum Area Specific Plan and EIR (Oakland, CA)

Fehr & Peers was part of the multi-disciplinary team that prepared the Specific Plan and environmental documents for the proposed Coliseum Area project, which would replace the current stadia with up to three new stadia and accommodate new sports-related entertainment district, a new mixed-use residential neighborhood, and new research and development.

General Plan Update and EIR (Redwood City, CA)

Fehr & Peers prepared the Circulation Element update, addressing all travel modes, including pedestrians, bicycles, buses, trains, automobiles, and trucks and completed the environmental analysis.

Children's Hospital and Research Center Oakland EIR and TDM (Oakland, CA)

Fehr & Peers prepared the transportation chapter of the EIR for the project which included multi-modal street improvements to better serve the expanded campus, and preparared a robust TDM plan to reduce the traffic and parking demand generated by the project.

Safeway Redevelopment Project Broadway at Pleasant Valley Avenue EIR (Oakland, CA)

Fehr & Peers prepared the transportation chapter of the EIR for the shopping center expansion project and provided input on the access and circulation system within and surrounding the project site.

Kaiser Medical Center Master Plan and EIR (Oakland,

Fehr & Peers provided a variety of services for a new onemillion square foot medical center, including the multimodal transportation system serving the site, preparing the transportation section of the EIR, and design support during project construction.

Kaiser Medical Center Master Plan (San Leandro, CA)

Fehr & Peers worked with the project team to design the transportation system and estimate parking demand at different phases of development for a new medical center.

Oakland Transportation Impact Fee Nexus Analysis (Oakland, CA)

Fehr & Peers was part of the team that prepared the first citywide fee for new developments to fund the multimodal transportation infrastructure needed to serve the growing population and the changing travel needs of the City.

Oak Knoll Project EIR (Oakland, CA)

Fehr & Peers evaluated alternative land use developments and is currently preparing the environmental document for the military base reuse at the former Oak Knoll Naval Hospital which would consist of about 1,000 new residential units and a neighborhood serving shopping center. Fehr & Peers is also preparing a TDM plan for the proposed development.

Center Street Garage Reconstruction (Berkeley, CA)

Fehr & Peers estimated future parking demand in downtown Berkeley to determine the size of the proposed garage, prepared the transportation section of the environmental document, and worked with City to formulate strategies to mitigate the parking impacts during construction.

South Richmond Specific Plan EIR (Richmond, CA)

Fehr & Peers prepared the transportation chapter of the EIR for the proposed specific plan which would accommodate up to 5,700 residential units and over six million square feet of non-residential development. As part of the project, Fehr & Peers quantified the effects of various multi-modal improvements on project automobile trip generation and VMT.

General Plan Update EIR (Albany, CA)

Fehr & Peers prepared completed the transportation section of the environmental document which analyzed the impacts of the development envisioned and policies proposed by the General Plan on various aspects of the transportation system, including estimation of VMT.

FEHR PEERS

ATTACHMENT E

Attachment 4

Charles M. Salter

ASSOCIATES INC.

Acoustics

10 July 2017

Audiovisual

Joe Hernon

Telecommunications

Ninth & Jefferson Associates, LLC

Security

1714 Franklin Street #100-244

Oakland CA 94612

Email: joehernon@gmail.com

Subject:

605 9th Street Apartments **Environmental Noise Study**

Salter Project: 17-0317

Dear Joe:

We have conducted an environmental noise study for the proposed project. The purpose of the study is to determine the noise environment at the proposed site, compare the measured data with applicable standards, and propose mitigation measures, as necessary. We have also assessed noise associated with the construction of the project and addressed the Standard Conditions of Approval. This report summarizes the results.

PROJECT CRITERIA

State Noise Standards

Part 1 of the 2016 California Building Code requires that the indoor noise level in residential units of multi-family dwellings not exceed DNL1 45 dB.

City Noise Standards

The City of Oakland interior noise standard is consistent with the State requirement for new multi-family housing.

The City of Oakland Noise Ordinance² provides provisions for construction noise levels. These provisions are as follows:

The daytime noise level received by any residential, commercial, or industrial land use which is produced by any non-scheduled, intermittent, short-term construction or demolition operation (less than ten days) or by any repetitively scheduled and relatively long-term construction or demolition operation (ten days or more) shall not exceed:

Charles M. Salter, PE David R. Schwind, FASA Eric (Broadhurst) Mori. PE Philip N. Sanders LEED AP Thomas A. Schindler, PF Durand R. Begault, PhD, FAES Ken Graven, PE, RCDD, CTS-D Anthony P. Nash, PE Cristina L. Miyar Jason R. Duty, PE Lloyd B. Ranola

Eric A. Yee Joshua M. Roper, PE, LEED AP

Thomas J. Corbett, CTS

Peter K. Holst, PE, LEED AP

Ethan C. Salter, PE, LEED AP

Craig L. Gilian, RCDD

Alexander K. Salter, PE

Jeremy L. Decker, PE Rob Hammond, PSP, NICET III

Andrew J. McKee

Steven A. Woods

Josh J. Harrison Vinay C. Patel

Valerie C. Smith, PE

Benjamin D. Piper

Elisabeth S. Kelson

Ryan G. Raskop, AIA, NCARB

Brian C. Wourms

Diego Hernandez

Ryan A. Schofield

Alex T. Schiefer Abner E. Morales

Adrian L. Lu

Greg R. Enenstein

Philip J. Perry, PMP

Steve L. Leiby

Kenneth W. Lim

Felipe Tavera

Blake M. Wells, LEED GA Katherine M. Moore

Jordan L. Roberts

Sybille M. Roth

Bryce M. Graven

Heather A. Salter

Dee E. Garcia

Catherine F. Spurlock

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DNL (Day-Night Average Sound Level) - A descriptor for a 24-hour A-weighted average noise level. DNL accounts for the increased acoustical sensitivity of people to noise during the nighttime hours. DNL penalizes sound levels by 10 dB during the hours from 10 PM to 7 AM. For practical purposes, the DNL and CNEL are usually interchangeable. DNL is sometimes written as L_{dn}.

City of Oakland Municipal Code, Chapter 17 "Noise"

Table 1: Maximum Allowable Receiving Noise Level Standards, dBA

	Weekdays 7 am to 7 pm	Weekends 9 am to 8 pm
Short-Term Operation		
Residential	80	65
Commercial, Industrial	85	70
Long-Term Operation		
Residential	65	55
Commercial, Industrial	70	60

Construction of the project would be considered long term. This report includes recommendations to reduce noise from construction activities that exceed these long-term noise criteria.

Standard Conditions of Approval (SCA)

The City of Oakland has imposed the following Standard Conditions of Approval related to noise:

- SCA 29: Construction Noise
- SCA 30: Extreme Construction Noise
- SCA 31: Construction Noise Complaints
- SCA 32: Operational Noise
- SCA 41: Window and Door Details

EXISTING AND FUTURE NOISE ENVIRONMENT

The proposed project is located at the southwest corner of 9th Street and Jefferson Street in Oakland. The major noise source at the project site is traffic on 9th Street. Interstates 880 and 980 (I-880 and I-980) are approximately 900 feet and 800 feet away, respectively, and contribute to the noise environment at higher elevations.

To quantify the existing noise environment, we conducted two long-term noise measurements and two short-term noise measurements at the project site between 25 and 31 May 2017 (see Figure 1 for the measurement locations and measured noise levels). The long-term monitors were at a height of 10 feet above grade. One short-term monitor (S1) was at a height of 40 feet above grade. The other short-term monitor (S2) was at a height of 70 feet above grade.

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We calculated noise levels at the various building facades using our measured data. A future traffic analysis was not provided for this project. However, we have added 1 dB to our calculations to account for future traffic noise.

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RECOMMENDATIONS

General

We calculated the window and exterior door STC³ ratings needed to meet the criteria using the Planning Submittal drawings dated 18 March 2017 that show the floor plans and exterior elevations. Our calculations include the following assumptions:

- Bedrooms will have carpet
- All other rooms will have hard-surfaced flooring
- Ceilings are 9 feet high
- The exterior wall is a 3-coat stucco system

The recommended STC ratings are for full window assemblies (glass and frame) rather than just the glass itself. Tested sound-rated assemblies should be used. For reference, typical one-inch glazing assemblies (two 1/4-inch thick panes with a 1/2-inch airspace) achieve an STC rating of 32. Where STC ratings above 33 are required, at least one pane will need to be laminated.

Residential

To meet the indoor DNL 45 dB criterion, it will be necessary for all of the facades to be sound-rated. The window and exterior door STC ratings needed to meet the criterion are shown on Figures 2 to 5.

Where windows need to be closed to achieve an indoor DNL of 45 dB, an alternative method of supplying fresh air (e.g., mechanical ventilation) should be considered. If passive ventilation (such as z-ducts) is planned, then certain acoustical considerations are needed. Where the STC ratings are 28 to 35, the z-duct would need a minimum separation of 3 feet between the interior and exterior vents. Where STC ratings are above 35, the z-duct separation should be a minimum of 6 feet. This issue should be discussed with the project mechanical engineer.

CONSTRUCTION NOISE

Prior to construction of the new building, the existing one-story commercial building will be demolished. New construction will consist of an eight-story residential building containing a ground floor lobby/parking area with seven stories of residences above. This will generate long-term construction-related noise and vibration at the nearby residences. However, in our experience, the noise and vibration associated with this construction can be managed to reduce the impact to the existing environment.

Recently, we have analyzed several residential construction projects within or near downtown Oakland. Table 2 shows projects with a construction noise analysis approved by the City.

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T 415.397.0442 F 415.397.0454 www.cmsalter.com Sound Transmission Class (STC) – A single-number rating standardized by ASTM and used to rate the sound insulation properties of partitions. The STC rating is derived from laboratory measurements of a building element and as such is representative of the maximum sound insulation. Increasing STC ratings correspond to improved airborne0 noise isolation.



Table 2: Approved Construction Projects in Oakland

Project Location	Description
4th Street and Madison Street (Jack London Square)	Two five-story buildings with ground-level retail, leasing, and amenities
447 17th Street	33-story concrete tower with six levels of parking over 27 levels of residences
1689 Alice Street	Five stories of wood-framed residences over ground-level parking
1708 Wood Street	Eight phases of townhome construction

The potential construction-related noise and vibration impacts of this project were estimated by extrapolating from the recently approved projects. Based on its size and scope, construction will take place over a shorter period and have a smaller area footprint. Piles will not be used for the structure, nor will a tower crane. The project also does not share a property line with any residences. Based on the provided information, the construction-related noise and vibration to the surrounding environment can be effectively managed to meet City guidelines.

STANDARD CONDITIONS OF APPROVAL

1

The City of Oakland has imposed the following SCA with regards to the building before, during, and after construction.

SCA Item	Requirement	Implementation
29	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:	Will comply
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.	Will comply

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b	Except as provided herein, impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically-powered wherever possible 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.	Will comply
С	Applicant shall use temporary power poles instead of generators where feasible.	Will comply
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.	Will comply
е	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.	Will comply
30	Extreme Construction Noise. Prior to any extreme noise generating construction activities (e.g., pier drilling, piledriving and other activities generating greater than 90 dBA), the project applicant shall submit a Construction Noise Management Plan prepared by related permit 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:	Will comply
	Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings.	Will comply
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.	Will comply
iii	Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site.	Will comply

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Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by using sound blankets (for example) and implement such measure if such measures are feasible and would noticeably reduce noise impacts.	Will comply
Monitor the effectiveness of noise-attenuation measures by taking noise measurements.	Will comply
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.	Will comply
Construction Noise Complaints. The project applicant shall submit to the City 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:	Will comply
Designation of an on-site construction complaint and enforcement manager for the project.	Will comply
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.	Will comply
Protocols for receiving, responding to, and tracking received complaints.	Will comply
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.	Will comply
Operational Noise. 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	Will comply
	temporarily improving the noise reduction capability of adjacent buildings by using sound blankets (for example) and implement such measure if such measures are feasible and would noticeably reduce noise impacts. Monitor the effectiveness of noise-attenuation measures by taking noise measurements. 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. Construction Noise Complaints. The project applicant shall submit to the City 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: Designation of an on-site construction complaint and enforcement manager for the project. 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. Protocols for receiving, responding to, and tracking received complaints. 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. Operational Noise. 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 st

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Window and Door Details. The applicant shall submit to the Planning and Zoning Division for review and approval, a window and door schedule, including cross-sections and elevations, and final architectural details of the front and side elevations.

Will comply

Additionally, although it is not included in the Standard Conditions of Approval by the City of Oakland, the project would have to comply with SCA 63, which directly relates to window treatments. The recommendations provided above would comply with SCA 63.

This concludes our environmental noise study for the 605 9th Street project. Should you have any questions, please give us a call.

Sincerely,

CHARLES M. SALTER ASSOCIATES, INC.

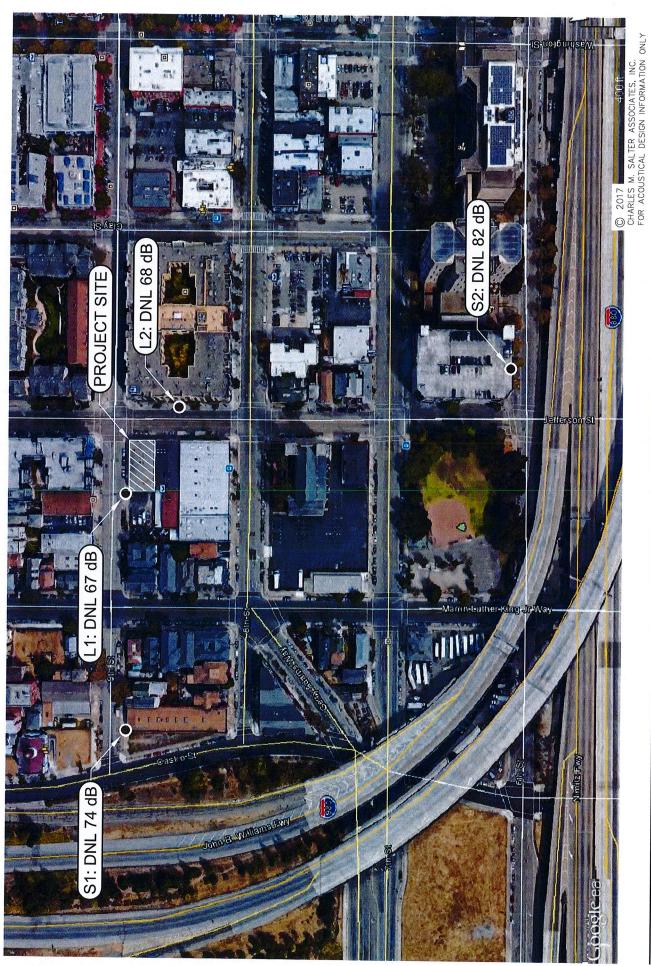
Blake M. Wells, LEED® Green Associate Consultant

Eric Mori, PE

Senior Vice President

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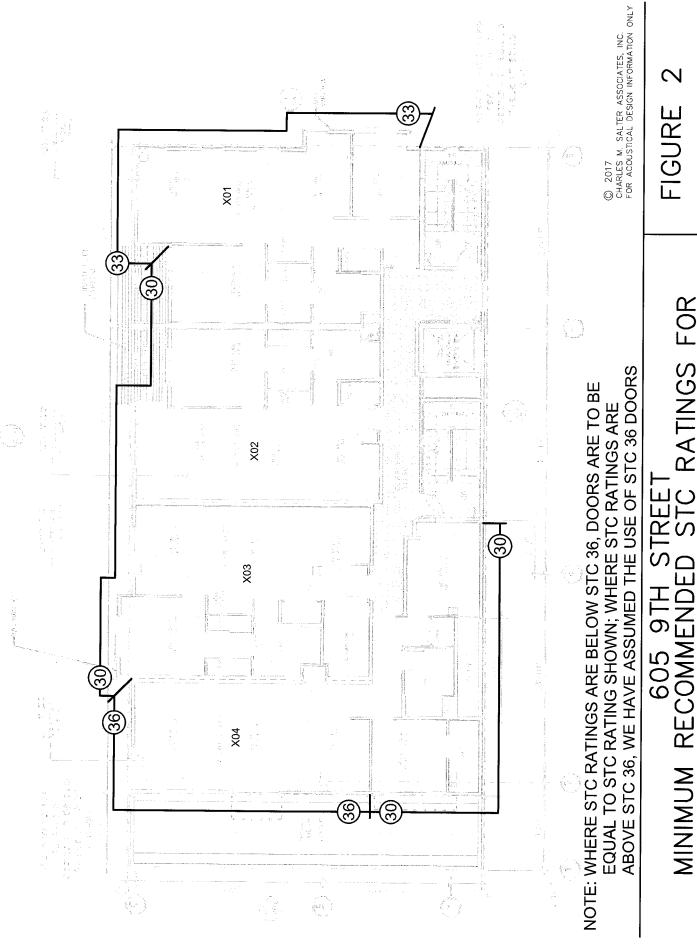
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BMW/EBM 06.05.17

Salter # 17-0317

605 9TH STREET LOCATIONS AND MEASURED DNL MEASUREMENT



BMW/EBM 06.05.17

Salter # 17-0317

RATINGS FOR (FLOORS 2 AND 3)

MINIMUM RECOMMI WINDOWS AND EXTERIC

© 2017 CHARLES M. SALTER ASSOCIATES, INC. FOR ACOUSTICAL DESIGN INFORMATION ONLY X NOTE: WHERE STC RATINGS ARE BELOW STC 36, DOORS ARE TO BE EQUAL TO STC RATING SHOWN; WHERE STC RATINGS ARE ABOVE STC 36, WE HAVE ASSUMED THE USE OF STC 36 DOORS X02 STREE1 D STC (8) X03 9TH 605

Charles M Salter Associates Inc

MINIMUM RECOMMENI WINDOWS AND EXTERIOR 130 Sutter Street San Francisco California 94104 Tel: 415 397 0442 www.cmsalter.com

BMW/EBM 06.05.17

Salter # 17-0317

RATINGS FOR FLOORS 4 AND 5)

ORS

© 2017 CHARLES M. SALTER ASSOCIATES, INC. FOR ACOUSTICAL DESIGN INFORMATION ONLY BMW/EBM 06.05.17 4 Salter # 17-0317 X 204 STC RATINGS FOR DOORS (FLOOR 6) ABOVE STC 36, WE HAVE ASSUMED THE USE OF STC 36 DOORS NOTE: WHERE STC RATINGS ARE BELOW STC 36, DOORS ARE TO BE EQUAL TO STC RATING SHOWN; WHERE STC RATINGS ARE X02 BTH 9TH RECOMME AND EXT 605 X04 MINIMUM WINDOWS

© 2017 CHARLES M. SALTER ASSOCIATES, INC. FOR ACOUSTICAL DESIGN INFORMATION ONLY (98)X 204 NOTE: WHERE STC RATINGS ARE BELOW STC 36, DOORS ARE TO BE EQUAL TO STC RATING SHOWN; WHERE STC RATINGS ARE ABOVE STC 36, WE HAVE ASSUMED THE USE OF STC 36 DOORS X02 66 X04

BMW/EBM 06.05.17

Salter # 17-0317

RATINGS FOR FLOORS 7 AND 8)

STREE D STO

9TH

605

ORS

MINIMUM RECOMMEI WINDOWS AND EXTERIOF

S

Eric Mori, PE Senior Vice President



education

University of California, Berkeley, BS Mechanical Engineering, 1989

professional registration California: ME No. M28195

professional affiliations Institute for Noise Control Engineering

Allied Member of AIA San Francisco

publications

Coauthor, ACOUSTICS: Architecture, Engineering, the Environment (1998 William Stout Publisher)

Coauthor, Multi-family housing sound isolation: A summary of industry standards for design of demising assemblies (Dec 2006) Presented at Inter-Noise 2006, Sponsored by I-INCE

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Mr. Mori has been an acoustical consultant with Charles M. Salter Associates, Inc. since 1989. His areas of expertise include architectural, environmental, and mechanical noise and vibration control. He has extensive consulting experience with mid and high-rise multi-family housing and mixed-use projects, both during the design phases and as an expert witness.

project experience

- 1640 Broadway Residences, Oakland, CA
- Jack London Square Development, Parcels D and F2, Oakland, CA
- 525 Harrison Residences, San Francisco, CA
- 101 Polk Residences, San Francisco, CA
- 150 Van Ness Residences, San Francisco, CA
- 100 Van Ness Residences, San Francisco, CA
- 399 Fremont Residences, San Francisco, CA
- 41 Tehama Residences, San Francisco, CA
- Transbay Block 9 Residences, San Francisco, CA
- Transbay Block 8 Residences, San Francisco, CA
- 45 Lansing Residences, San Francisco, CA
- 1001 Van Ness Residences, San Francisco, CA
- 1500 Mission Residences, San Francisco, CA
- 1321 Mission Residences, San Francisco, CA
- 1415 Mission Residences, San Francisco, CA
- Rincon Green Residences, San Francisco, CA
- One Rincon Hill Towers, San Francisco, CA
- Venn Residences, San Francisco, CA
- 1075 Market Residences, San Francisco, CA
- 525 Harrison Residences, San Francisco, CA
- Mission Bay Block 13W Residences, San Francisco, CA
- 1028 Market Residences, San Francisco, CA
- 923 Folsom Residences, San Francisco, CA
- 1075 Market Residences, San Francisco, CA

Blake M. Wells, LEED® Green Associate Consultant



education

The City College of New York, MS Sustainability in the Urban Environment, 2012

Columbia College Chicago, BA Audio Arts & Acoustics, 2008

professional registration LEED® Green Associate

professional affiliationsAllied Member of AIA San Francisco

Mr. Wells joined Charles M. Salter Associates, Inc. in 2015. He specializes in environmental noise studies, architectural noise control, office acoustics, and mechanical system noise and vibration reduction. His typical projects include offices, schools, entertainment venues, and residential/mixed-use projects.

project experience

- 1001 Van Ness Residences, San Francisco, CA
- 1640 Broadway Residences, Oakland, CA
- 1726 Mission Street Housing, San Francisco, CA
- 2155 Webster Residences, San Francisco, CA
- Greystar Haven Apartments, Menlo Park, CA
- Crescent Heights Tower, Los Angeles, CA
- Avalon Bay Apartment, San Francisco, CA
- Napa Creek Multifamily Housing, Napa, CA
- The Union Apartments, Oakland, CA
- 2268 El Camino Real Apartments, Mountain View, CA
- Silicon Valley-Based Company Offices, Various Locations, CA
- Uber Technologies, San Francisco, CA
- AT&T Park, San Francisco, CA
- Presidio Hotel Building 105 Rehabilitation, San Francisco, CA
- NVIDIA, Santa Clara, CA
- Symantec Executive Suite, Mountain View, CA
- Town School for Boys, San Francisco, CA
- Mount Pleasant High School Building 900, Mount Pleasant, CA
- Workday Development Center, Pleasanton, CA
- Applied Micro Office, Santa Clara, CA

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