1721 WEBSTER STREET PROJECT
CEQA ANALYSIS

City of Oakland

Bureau of Planning

250 Frank H. Ogawa Plaza, Suite 2114

Oakland, CA 94612

April 2017

URBAN PLANNING PARTNERS INC.

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ATTACHMENTS

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I. EXECUTIVE SUMMARY

General Project Information

Project Address:	1721 Webster Street (1715 Webster Street, 1727 Webster Street, 1721 Webster Street, 1717 Webster Street)
Project Number:	PLN 16-445
Zoning:	CBD-C (Central Business District General Commercial Zone)
General Plan:	Central Business District
APNs:	008-0624-006-00 and 008-0624-007-00
Lot Size:	0.52 acres
Applicant:	NASH-Holland 1721 Webster Investors, LLC 4301 Hacienda Drive, Suite 250 Pleasanton, CA 94588 Attn: Raymond Connell (925) 226-2471
Staff Contact:	Peterson Z. Vollmann (510) 238-6167 pvollmann@oaklandnet.com

This CEQA Checklist is prepared pursuant to California Resources Code Sections 21003, 21083, 21083.3, 21090, 21094.5, and 21166 and State CEQA Guidelines Sections 15162, 15163, 15183, 15183.3, 15168, and 15180.

The project applicant, NASH-Holland 1721 Webster Investors, LLC, is proposing to redevelop two parcels in Downtown Oakland with a mixed-use residential development. The 1721 Webster Street project (proposed project) would be an approximately 365,469-gross–square-foot mixed-use residential building, with up to 25 stories. The proposed project would include up to 250 residential units—approximately 241,284 square feet of residential uses—and approximately 9,540 square feet of retail and office uses along Webster Street. The proposed project would provide up to 250 vehicle parking spaces and approximately 76 bicycle parking spaces in the 98,718-square-foot, six-level podium structure. The proposed building would have a maximum height of 262 feet with an additional 10 feet for mechanical equipment.

The project site is currently developed with a two-story commercial building that is occupied by parking uses, a pet food store, coffee shop, hair salon, and a fitness facility.

The CEQA checklist, included in this document, summarizes the analysis, findings, and conclusions of previous Oakland Program EIRs as follows: Oakland's 1998 General Plan Land Use and Transportation Element EIR (1998 LUTE EIR); the 2010 Housing Element Update EIR and 2014 Addendum (2010 Housing Element EIR and 2014 Addendum); and the Central

District Urban Renewal Plan EIR and Amendments (2011 Renewal Plan) EIR. These are referred to collectively throughout this document as Program EIRs.

II. BACKGROUND

Planning Context

The project site is addressed in prior City of Oakland planning documents, including the following plans:

- 1998 General Plan Land Use and Transportation Element (LUTE)[1]
- 2010 General Plan Housing Element Update[2] plus a 2014 Addendum[3]
- 2012 Central District Urban Renewal Plan Amendments[4]

In addition, the project site is located within the Downtown Specific Plan area; the plan is currently under development and anticipated to be adopted in 2017 or 2018.

CEQA Context

The analysis in this environmental review supports the determination that each of the applicable CEQA streamlining and/or tiering code sections described below, separately and independently, provide a basis for CEQA compliance as follows: (1) the proposed project qualifies for an exemption per Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan or Zoning); (2) the proposed project qualifies for streamlining provisions of CEQA under Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3 (Streamlining for Infill Projects); and (3) the proposed project qualifies to tier off Program EIRS and EIRs prepared for redevelopment projects per CEQA Guidelines Section 15168 (Program EIRs) and Section 15180 (Redevelopment Projects)as none of the conditions requiring a supplemental or subsequent EIR, as specified in CEQA Guidelines Sections 15162 (Subsequent EIRs) and 15163 (Supplement to an EIR), are present.

Program EIRs

The following describes the Program EIRs considered in this CEQA Analysis. Each of the following documents:

- 1998 Land Use and Transportation Element (LUTE) EIR
- 2010 Oakland Housing Element Update EIR and 2014 Addendum
- 2011 Central District Urban Renewal Plan Amendments EIR

Each of these documents is summarized below and hereby incorporated by reference and can be obtained from the City of Oakland Bureau of Planning at 250 Frank H. Ogawa Plaza, Suite 3315, Oakland, California 94612. General Plan Program EIRs are located at http://www2.oaklandnet.com/government/o/PBN/OurServices/GeneralPlan/DOWD008821.

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[1] City of Oakland, 1998. General Plan: Land Use and Transportation Element, March.
[2] City of Oakland, 2010. General Plan: Housing Element Update, December.
[3] City of Oakland, 2014. General Plan: Housing Element Addendum, December.
[4] City of Oakland. 2012. Central District Urban Renewal Plan Amendments, April.

1998 Land Use and Transportation Element (LUTE) EIR

The City certified the EIR for its General Plan LUTE in 1998 (1998 LUTE EIR).[5] The LUTE identifies policies for utilizing Oakland's land as future changes take place and sets forth an action program to implement the land use policy through development controls and other strategies. The LUTE identifies five Showcase Districts targeted for continued growth; the project site is located within the Downtown Showcase District (Downtown) intended to promote a mixture of vibrant and unique land uses with around-the-clock activity, continued expansion of job opportunities, and growing residential population.

The 1998 LUTE EIR is considered a Program EIR per CEQA Guidelines Sections 15183 and 15183.3. As such, subsequent activities under the LUTE are subject to requirements under each of the aforementioned CEQA Sections, which are described further in Chapter VI. Applicable mitigation measures identified in the 1998 LUTE EIR are largely the same as those identified in the other Program EIRs prepared after the 1998 LUTE EIR, either as mitigation measures or newer standard conditions of approval, the latter of which are described below in Chapter VI.

1998 LUTE EIR Environmental Effects Summary

The 1998 LUTE EIR (including its Initial Study Checklist) determined that development consistent with the LUTE would result in impacts that would be reduced to a less-than-significant level with the implementation of mitigation measures and/or standard conditions of approval (described in Chapter III) to the following resources: aesthetics (views, architectural compatibility and shadow only); air quality (construction dust [including PM_{10}] and emissions Downtown, odors); cultural resources (except as noted below as less than significant); hazards and hazardous materials; land use (use and density incompatibilities); noise (use and density incompatibilities, including from transit/transportation improvements); population and housing (induced growth, policy consistency/clean air plan); public services (except as noted below as significant); and transportation/circulation (intersection operations Downtown).

Less-than-significant impacts were identified for the following resources in the 1998 LUTE EIR and Initial Study: aesthetics (scenic resources, light and glare); air quality (clean air plan consistency, roadway emissions in Downtown, energy use emissions, local/regional climate change); biological resources; cultural resources (historic context/settings, architectural compatibility); energy; geology and seismicity; hydrology and water quality; land use (conflicts in mixed use projects and near transit); noise (roadway noise Downtown and citywide, multifamily near transportation/transit improvements); population and housing (exceeding household projections, housing displacement from industrial encroachment); public services (water demand, wastewater flows, stormwater quality, parks services); and transportation/circulation (transit demand). No impacts were identified for agricultural or forestry resources, and mineral resources.

[5] City of Oakland, 1998. Land Use and Transportation Element, Final EIR, February.

Significant unavoidable impacts were identified for the following environmental resources in the 1998 LUTE EIR: air quality (regional emissions, roadway emissions Downtown); noise (construction noise and vibration in Downtown); public services (fire safety); transportation/circulation (roadway segment operations); wind hazards, and policy consistency (clean air plan). Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

2010 Oakland Housing Element Update EIR and 2014 Addendum

The City has twice amended its General Plan to adopt updates to its Housing Element. The City certified a 2010 EIR for the 2007-2014 Housing Element,[6] and a 2014 Addendum to the 2010 EIR for the 2015-2023 Housing Element[7]. The General Plan identifies the City's current and projected housing needs, and sets goals, policies, and programs to address those needs, as specified by the state's Regional Housing Needs Allocation process. One of the two parcels that comprise the project site, Assessor Parcel Number (APN) 008-0624-007-00 at 1717 Webster, is identified as an Additional Housing Opportunity Site in the 2015-2023 Housing Element. Furthermore, the proposed project would contribute to the total number of housing units needed in the City of Oakland to meet its housing needs target.

The 2010 Housing Element EIR and 2014 Addendum is considered a Program EIR per CEQA Guidelines Sections 15183 and 15183.3. As such, subsequent activities under the Housing Element that involve housing, are subject to requirements under each of the aforementioned CEQA sections, which are described further in Chapter VI.

Applicable mitigation measures and standard conditions of approval (also described in Chapter VI) identified in the 2010 Housing Element EIR and 2014 Addendum are considered in the analysis in this document and are largely the same as those identified in the other Program EIR documents described in this section.

2010 Housing Element EIR and 2014 Addendum Environmental Effects Summary

The 2010 Housing Element EIR and 2014 Addendum (including its Initial Study Checklist) determined that housing developed pursuant to the Housing Element, which would include the project site, would result in impacts that would be reduced to a less-than-significant level with the implementation of mitigation measures and/or standard conditions of approval (described in Chapter VI) to the following resources: aesthetics (visual character/quality and light/glare only); air quality (except as noted below); biological resources; cultural resources; geology and soils; greenhouse gas emissions; hazards and hazardous materials (except as noted below, and no impacts regarding airport/airstrip hazards and emergency routes); hydrology and water quality (except as noted below); noise; public services (police and fire only); and utilities and service systems (except as noted below).

[6] City of Oakland, 2010. 2007–2014 Housing Element Update, Final EIR, November.
[7] City of Oakland, 2014. 2015–2023 Housing Element Addendum to the 2010 Housing Element EIR, July.

Less-than-significant impacts were identified for the following resources in the Housing Element Update EIR and Addendum: hazards and hazardous materials (emergency plans and risk via transport/disposal); hydrology and water quality (flooding/flood flows, and inundation by seiche, tsunami or mudflow); land use (except no impact regarding community division or conservation plans); population and housing (except no impact regarding growth inducement); public services and recreation (except as noted above, and no impact regarding new recreation facilities); and utilities and service systems (landfill, solid waste, and energy capacity only, and no impact regarding energy standards). No impacts were identified for agricultural or forestry resources, and mineral resources.

Significant unavoidable impacts were identified for the following environmental resources in the Housing Element Update EIR and Addendum: air quality (toxic air contaminant exposure) and traffic delays. Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

<u>2011 Central District Urban Renewal Plan Amendments EIR</u>

The project site is also addressed in the Central District Urban Renewal Plan, which generally encompasses the entire Downtown— approximately 250 city blocks (828 acres) in an area generally bounded by Interstate 980 (I-980), Lake Merritt, 27th Street, and the Embarcadero. The Oakland City Council adopted the Central District Urban Renewal Plan for the Project Area in June 1969. The City prepared and certified an EIR for the Proposed Amendments to the Central District Urban Renewal Plan (2011 Renewal Plan EIR) in 2011, and amended or supplemented the Plan up to April 3, 2012. The 2011 Renewal Plan EIR is considered a Program EIR per CEQA Guidelines Section 15180; as such, subsequent activities are subject to requirements under CEQA Section 15168.

Applicable mitigation measures and standard conditions of approval (described in Chapter VI) identified in the 2011 Renewal Plan EIR are considered in the analysis in this document and are also largely the same as those identified in the other Program EIRs described in this section.

2011 Renewal Plan EIR Environmental Effects Summary

The 2011 Renewal Plan EIR[8] determined that development facilitated by the proposed amendments would result in impacts to the following resources that would be reduced to a less-than-significant level with the implementation of identified mitigation measures and/or standard conditions of approval (described in Chapter VI): aesthetics (light/glare only); air quality (except as noted below as less than significant and significant); biological resources (except no impacts regarding wetlands or conservation plans); cultural resources (except as noted below as significant); geology and soils; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality (stormwater and 100-year flooding only); noise (exceeding standards – construction and operations only); traffic/circulation (safety and transit only); utilities and service systems (stormwater and solid waste only).

[8] Oakland Redevelopment Agency, 2011. Draft EIR for the proposed amendments to the Central District Urban Renewal Plan, March.

Less-than-significant impacts were identified for the following resources in the 2011 Renewal Plan EIR : aesthetics (except as noted above as less than significant with standard conditions of approval); air quality (clean air plan consistency); hydrology and water quality (except as noted above as less than significant with standard conditions of approval); land use and planning; population and housing; noise (roadway noise only); public services and recreation; traffic/circulation (air traffic and emergency access); and utilities and service systems (except as noted above as less than significant with standard conditions of approval). No impacts were identified for agricultural or forestry resources, and mineral resources.

The 2011 Renewal Plan EIR determined that the proposed amendments combined with cumulative development would have significant unavoidable impacts on the following environmental resources: air quality (toxic air contaminant exposure and odors); cultural resources (historic); and traffic/circulation (roadway segment operations). Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

III. PURPOSE AND SUMMARY OF THIS DOCUMENT

The purpose of this CEQA document is to evaluate the potential environmental effects of the proposed project and to determine whether such impacts were adequately covered under the Program EIRs, referenced above, such that CEQA streamlining and/or tiering provisions and exemptions could be applied. The analysis herein incorporates information from the Program EIRs. It includes a CEQA Checklist (see Chapter VI) and supporting documentation to provide comprehensive review and public information for the basis of any determination.

Based on the environmental evaluation, and as the checklist demonstrates, the proposed project qualifies for several CEQA streamlining and/or tiering provisions and CEQA exemptions, each of which separately and independently provide a basis for CEQA compliance. These provisions and exemptions are discussed below, and provide a basis for CEQA compliance.

Community Plan Exemption

Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan or Zoning) allow streamlined environmental review for projects that are "consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified, except as might be necessary to examine whether there are project specific significant effects which are peculiar to the project or its site." Section 15183(c) specifies that "if an impact is not peculiar to the parcel or to the proposed project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards…, then an EIR need not be prepared for the project solely on the basis of that impact."

The analysis in the Program EIRs—the 1998 LUTE EIR and, for the residential component of the 1721 Webster Street Project, the 2010 Housing Element EIR and 2014 Addendum, as well as the 2011 Renewal Plan EIR—are applicable to the 1721 Webster Street Project and are the Program EIRs providing the basis for use of the Community Plan Exemption.

Qualified Infill Exemption

Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3 (Streamlining for Infill Projects) allow streamlining for certain qualified infill projects by limiting the topics subject to review at the project level, if the effects of infill development have been addressed in a planning level decision, or by uniformly applicable development policies. An infill project is eligible if the project (1) is located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least 75 percent of the site's perimeter; (2) satisfies the performance standards provided in CEQA Guidelines Appendix M; and (3) is consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy.

No additional environmental review is required if the infill project would not cause any new specific effects or more significant effects, or if uniformly applicable development policies or standards would substantially mitigate such effects.

Consistent with CEQA Guidelines Section 15183.3(b), which allows streamlining for qualified infill projects, this environmental document is limited to topics applicable to project-level review only. Cumulative level effects of infill development have been addressed in other planning level decisions of the LUTE and 1998 LUTE EIR, the 2010 Housing Element and EIR and 2014 Addendum or by uniformly applicable development policies (SCAs) which mitigate such impacts. Based on the streamlining provisions of CEQA Guidelines Sections 15183 and 15183.3, the project's cumulative effect would be less than significant.

The 1721 Webster Street Project meets the requirements for a qualified infill project, the analysis in the Program EIRs noted above is applicable to the proposed project, and the Program EIRs provide the basis for use of the Qualified Infill Exemption under CEQA Guidelines Section 15183.3.

Program EIRs and Redevelopment Projects

CEQA Guidelines Section 15168 (Program EIRs) and Section 15180 (Redevelopment Projects) provide that the 2011 Renewal Plan EIR can be used as a Program EIR in support of streamlining and/or tiering provisions under CEQA. The 2011 Renewal Plan EIR is a Program EIR for streamlining and/or tiering provisions by CEQA Section 15168. The section defines the Program EIR as one prepared on a series of actions that can be characterized as one large project and are related geographically and by other shared characteristics. Section 15168 states that "subsequent activities in the Program EIR must be examined in the light of the Program EIR to determine whether an additional environmental document must be prepared." If the agency finds that pursuant to CEQA Guidelines Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the Program EIR and no new environmental document would be required.

Further, CEQA Guidelines Section 15180 specifies that "if a certified redevelopment plan EIR is prepared, no subsequent EIRs are required for individual components of the redevelopment plan unless a subsequent EIR or supplement to the EIR would be required by Section 15162 or 15163." The 2011 Renewal Plan EIR is considered a certified redevelopment plan.

Previous Mitigation Measures and Current Standard Conditions of Approval

As described above, the CEQA Checklist provided in Chapter VI of this document evaluates the potential project specific environmental effects of the proposed 1721 Webster Street Project, and evaluates whether such impacts were adequately covered by the Program EIRs previously described in Chapter II to allow the above-listed provisions of CEQA to apply. The analysis conducted incorporates by reference the information contained in each of the Program EIRs. The proposed project is legally required to incorporate and/or comply with the applicable requirements of the mitigation measures identified in the Program EIRs. Therefore, the mitigation measures are herein assumed to be included as part of the proposed project, including those that have been modified to reflect the City's current standard language and requirements, as discussed below.

Standard Conditions of Approval – Application in General

The City of Oakland established its Standard Conditions of Approval and Uniformly Applied Development Standards (SCAs) in 2008, and they have since been amended and revised several times. The City's SCAs are incorporated into new and changed projects as conditions of approval regardless of a project's environmental determination. The SCAs incorporate policies and standards from various adopted plans, policies, and ordinances (such as the Oakland Planning and Municipal Codes, Oakland Creek Protection Ordinance, Stormwater Water Management and Discharge Control Ordinance, Oakland Protected Trees Ordinance, Oakland Grading Regulations, National Pollutant Discharge Elimination System (NPDES) permit requirements, Housing Element-related mitigation measures, California Building Code and Uniform Fire Code, among others), which have been found to substantially mitigate environmental effects. 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.

Consistent with the requirements of CEQA, a determination of whether the project would have a significant impact was made prior to the approval of the proposed project and, where applicable, SCAs and/or mitigation measures in the Program EIRs have been identified to mitigate those impacts. In some instances, exactly how the measures/ conditions identified will be achieved awaits completion of future studies, an approach that is legally permissible where measures/conditions are known to be feasible for the impact identified; where subsequent compliance with identified federal, state, or local regulations or requirements apply; where specific performance criteria is specified and required; and where the proposed project commits to developing measures that comply with the requirements and criteria identified.

Standard Conditions of Approval – Application in this CEQA Analysis

Several SCAs would apply to the proposed project because of its characteristics and are triggered by the City's consideration of a discretionary action for the proposed project. Some of the SCAs identified in this document as applicable to the proposed project were also identified in the 2011 Renewal Plan EIR, 2010 Housing Element EIR and 2014 Addendum, and 1998 LUTE EIR prior to the City's application of SCAs. Further, certain mitigation measures identified in these Program EIRs have since been adopted by the City as SCAs for all projects. Therefore, some of the previously identified applicable mitigation measures from the Program EIRs have been modified, and in some cases wholly replaced, to reflect the City's current standard language and requirements of its SCAs. Any mitigation measures applicable to the proposed project are captured in the SCAs and references to mitigation measures reflect standard language only.

All applicable SCAs for the proposed project are listed in Attachment A to this document, which is incorporated by reference into this CEQA Analysis. Because the SCAs are mandatory City requirements, the impact analysis for the proposed project assumes that they will be imposed and implemented. If this CEQA Checklist or its attachments inaccurately identifies or fails to list a mitigation measure or SCA, the applicability of that mitigation measure or SCA to the proposed project is not affected.

Aesthetics and Parking Analysis

Subsequent to certification of the Program EIRs, the CEQA statutes were amended related to assessment of aesthetics and parking impacts. CEQA Section 21099(d) states, "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment."[9] Accordingly, aesthetics and parking are no longer to be considered in determining if a project has the potential to result in significant environmental effects for projects that meet all three of the following criteria: (1) the project is in a transit priority area;[10] (2) the project is on an infill site;[11] (3) the project is residential, mixed-use residential, or an employment center.[12]

The proposed project meets all three criteria as follows: (1) it is located 0.2 mile from the 19th Street BART Station in a transit priority area; (2) the project site is an infill site within the urban area of the city of Oakland and is currently developed with commercial uses; and (3) the project is a mixed-use residential project.

Therefore, this analysis does not consider aesthetics or the adequacy of parking in determining the significance of project impacts under CEQA. Nonetheless, the City of Oakland recognizes that the public and decision makers may be interested in information pertaining to the aesthetic and parking effects of a proposed project. Therefore, the information below related to aesthetics and parking is provided solely for informational purposes and is not used to determine the significance of the environmental impacts, pursuant to CEQA.

1721 Webster Street Project CEQA Compliance

The 1721 Webster Street Project satisfies each of the CEQA provisions, as summarized below.

[9] CEQA Section 21099(d)(1).

[10] CEQA Section 21099(a)(7) defines a transit priority area as an area within one-half mile of an existing or planned major transit stop. A 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.

[11] CEQA Section 21099(a)(4) defines an infill site as a lot located within an urban area that has been previously developed, or a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

[12] CEQA Section 21099(a)(1) defines an employment center as a project located on property zoned for commercial uses with a floor area ratio (FAR) of no less than 0.75 and located within a transit priority area.

1. **Community Plan Exemption.** Based on the analysis conducted in this document, and pursuant to CEQA Guidelines Section 15183, the proposed project also qualifies for a community plan exemption. The proposed project meets the requirements for a community plan exemption, as it is permitted in the zoning district where the project site is located, and is consistent with the land uses envisioned for the site. This analysis considers the evaluation in the 2010 Housing Element EIR and 2014 Addendum relative to the housing components of the proposed project, and the analysis in the 1998 LUTE EIR for the overall project. This CEQA Analysis concludes that the proposed project would not result in significant impacts that (1) are peculiar to the project or project site; (2) were not identified as significant project-level, cumulative, or offsite effects in the Program EIRs; or (3) were previously identified as significant effects, but are determined to have a more severe adverse impact than discussed in the Program EIRs. Findings regarding the proposed project's consistency with the zoning are included as Attachment B to this document.

2. **Qualified Infill Exemption.** The analysis conducted indicates that the proposed project qualifies for a qualified infill exemption and, pursuant to CEQA Guidelines Section 15183.3, is generally consistent with the required performance standards provided in CEQA Guidelines Appendix M, as evaluated in Attachment C to this document. This CEQA Analysis supports that the proposed project would not cause any new specific effects or more significant effects than previously identified in applicable planning level EIRs, and uniformly applicable development policies or standards (referred to herein as SCAs) would substantially mitigate the project's effects. The proposed project is proposed on a previously developed site in downtown Oakland and is surrounded by urban uses. Furthermore, the proposed project is consistent with the land use, density, building intensity, and applicable policies for the site. The analysis herein considers the analysis in the 2011 Renewal Plan EIR; the 1998 LUTE EIR; and the 2010 Housing Element EIR and 2014 Addendum relative to the residential components of the proposed project.

3. **Program EIRs and Redevelopment Projects.** Overall, based on an examination of the analysis, findings, and conclusions of the 1998 LUTE EIR, the 2011 Renewal Plan EIR, the 2010 Housing Element EIR and 2014 Addendum with respect to the residential component of the project—all of which are summarized in the CEQA Checklist in Chapter VI of this document—the potential environmental impacts associated with the proposed project have been adequately analyzed and covered in the Program and Redevelopment EIRs per CEQA Guidelines Section 15168 and 15180. This analysis demonstrates that the proposed project would not result in substantial changes or involve new information that would warrant preparation of a subsequent EIR, per CEQA Guidelines Section 15162 or 15163, because the level of development now proposed for the site is within the broader development assumptions analyzed in the Program EIRs. Therefore, no further review or analysis under CEQA is required.

IV. PROJECT DESCRIPTION

Project Location

The project site is an approximately 0.52-acre site mid-block on the west side of Webster Street, between 17th and 19th streets at 1711 to 1739 Webster Street. The site consists of two parcels—APN 008-0624-006-00 and APN 008-0624-007-00. As shown on Figure 1, the proposed project site is mid-block on Webster Street, and is surrounded primarily by commercial and retail buildings and a few surface parking lots. The project site is located two blocks east of Uptown Oakland and approximately ¼-mile southwest of Lake Merritt.

The project site is accessible from Interstate 580, approximately 1mile to the north; Interstate 880, approximately 0.7-mile south; and Interstate 980, approximately 0.6-mile to the west. Multiple transit routes serve the project site, including Alameda-Contra Costa County Transit District Routes 1, 1R, 11, 12, 14, 18, 26, 40, 51A, 58L, 72, 72M, 72R, 651, 800, 805, 851, BSN, BSD, and NL. The 19th Street Bay Area Rapid Transit District (BART) station is approximately 0.2 mile west of the site and the 12th Street BART Station is approximately ½mile southwest of the site.

Existing Conditions

The 0.52-acre site is predominantly flat and is approximately 35 feet above mean sea level.[13] The project site is entirely occupied with a two-story brick garage and commercial building, which was constructed in 1924. The building has an Oakland Cultural Heritage Survey (OCHS) rating of D3 (Minor Importance, not in a historic district) and is not considered a historic resource per CEQA. The project site is not located in an Area of Primary Importance (API) but is adjacent to the 17th Street Commercial Historic District Area of Primary Importance that extends along 17th Street between Harrison and Franklin streets.[14]

The ground floor contains a series of storefronts and a vehicle entrance to an interior parking garage. The building is currently used primarily for parking, which is operated by Douglas Parking LLC. In addition, retail and commercial uses front onto Webster Street along the ground floor and second floor, including: Coloso Coffee, Amanda Kate Hill Fitness & Nutrition, RAWR cat food store, and Faso Brady Hair Salon.

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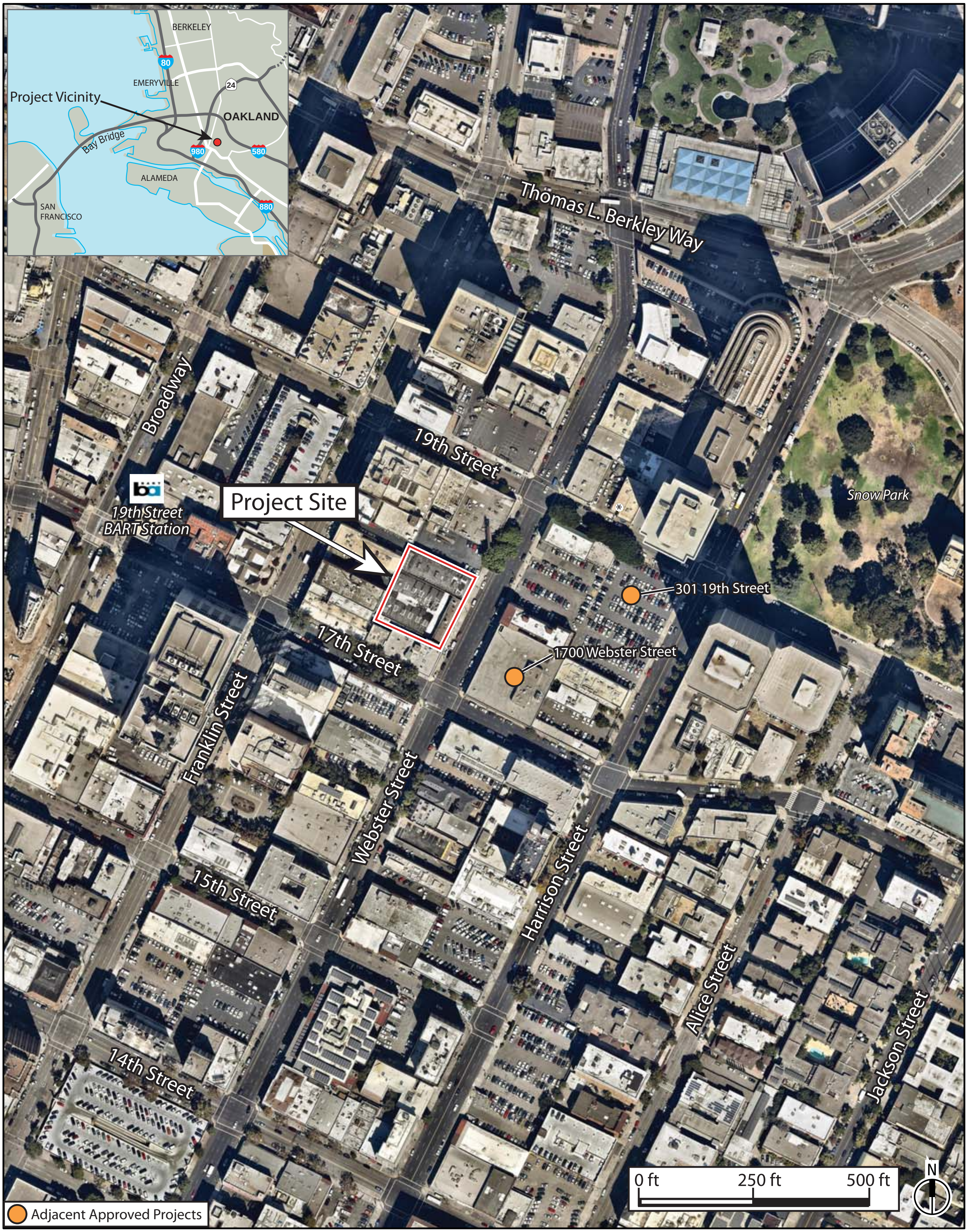
[13] AECOM, 2016, Phase I Environmental Site Assessment – Douglas Parking Property, 1721 Webster Street, Oakland, California, July 21.

[14] Architecture + History, LLC, 2017. Historic Resources Evaluation Report for 1711-1739 Webster Street, Oakland California, March 15.



Source: Urban Planning Partners, Google Earth, 2016

Figure 1
Project Vicinity

Table 1 Existing Uses on the Project Site

APNs	Existing Uses	Building Description/ Year Constructed	Historic Resource Rating
1711-1739 Webster Street			
008-0624-006-00 008-0624-007-00	Ground floor and 2nd floor space is used for vehicle parking. Douglas Parking Co. – Vehicle parking Coloso Coffee – Coffee shop Faso Brady Hair Salon – Hair salon RAWR – Cat food shop Amanda Kate Hill Fitness & Nutrition – Fitness center	21,500-square-foot, two-story masonry and concrete building. Built in 1924.	OCHS D3 (Minor importance and not in a historic district).

Notes: OCHS = Oakland Cultural Heritage Survey
Source: City of Oakland Parcel Information, 2016, http://www2.oaklandnet.com/maps, accessed December 7.

The property has roughly 150 feet of frontage along Webster Street and access to the site is provided from one curb cut and driveway. The site is entirely void of vegetation; however, there are three mature Indian laurel fig (*Ficus microcarpa*) street trees directly to the north of the site along Webster Street.

The existing land uses in the project vicinity are primarily commercial (including retail, restaurants, entertainment, and office buildings) and multi-family residential. Immediately north of the site, existing uses include a surface parking lot and restaurants and bars with frontage along 19th Street. Immediately west of the site, existing uses include a mix of small businesses such as a UPS and dry cleaners and the Leamington Hotel, with frontage along Franklin Street. To the south, existing uses include restaurants, small retail shops, a small grocery market, and office buildings. Existing uses directly east of the site, across Webster Street, include the Mentone Arms apartment building (with a ground-floor restaurant) and surface parking lots.

Two projects immediately across Webster Street east of the project site between 17th and 19th streets have been approved by the Planning Department. 301 19th Street is a proposed eight-story building which would include 224 residential units and approximately 3,709 square feet of commercial uses. 1700 Webster Street is currently under construction, and will be a 20-story building with 206 residential units and approximately 5,100 square feet of commercial uses. Due to the proximity to the proposed project site, a cumulative noise analysis of 1700 Webster and 201 19th Street is included in Section J, Noise, of the CEQA Checklist in Chapter VI.

The General Plan land use designation for the project site is Central Business District. This district is intended to encourage, support, and enhance the downtown area as a high-density, mixed-use urban center of regional importance, and a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation.

The project site is zoned CBD-C (Central Business District General Commercial Zone). The intent of the CBD-C zone is to create, maintain, and enhance areas of the Central Business

District appropriate for a wide range of ground-floor office and other commercial activities. Upper-story spaces are intended to be available for a wide range of residential and office or other commercial activities. The site is also within the proposed Downtown Specific Plan area—a plan that is currently under development with an anticipated completion of late 2017 or early 2018.

Project Characteristics

The proposed project would demolish the existing two-story commercial building and would construct an approximately 365,469-square-foot, 25-story mixed-use residential building. The building would be up to 262 feet in height with approximately 10 feet of additional height with the mechanical equipment. The building would have one below-grade level.

The new project address would be 1721 Webster Street. The proposed project would include approximately 2,080 square feet of ground-floor retail space along Webster Street, 7,460 square feet of office uses, and up to 241,284 square feet of residential uses with up to 250 residential units. The proposed project would provide up to 98,718 square feet of parking, consisting of up to 250 vehicle parking spaces and approximately 76 bicycle parking spaces. The project characteristics are shown in Table 2 below. The site plan, typical floor plans, typical building section, and building renderings are shown in Figures 2 through 7.

The proposed building would consist of a six-level podium parking structure (one below grade parking level and five above-grade levels) with retail and office uses along the Webster Street frontage and a central residential tower rising above the podium. The podium and commercial components of the building would extend up to approximately 50 feet above grade, and the tower would extend up to approximately 262 feet above grade, with approximately 10 feet of mechanical uses. The podium base will be offset 1 foot from the interior lot lines while the tower mass will be set back approximately 15 to 20 feet from interior lot lines. Both the podium and tower elements would be built to the front property line to reinforce the street wall on Webster Street.

<u>Residential Uses</u>

Approximately 241,284 gross square feet of residential uses would be constructed in tower levels six through 25, above the podium parking structure and commercial uses. Up to 250 residential units would be constructed, composed of approximately 60 studio units, 114 one-bedroom units, and 76 two-bedroom units.

<u>Commercial Uses</u>

The proposed project would include a total of approximately 9,540 square feet of commercial uses comprised of 2,080 square feet of retail uses on the ground floor and 7,460 square feet of office uses on level four. The office space would be one story, with ceiling height up to 13 feet.

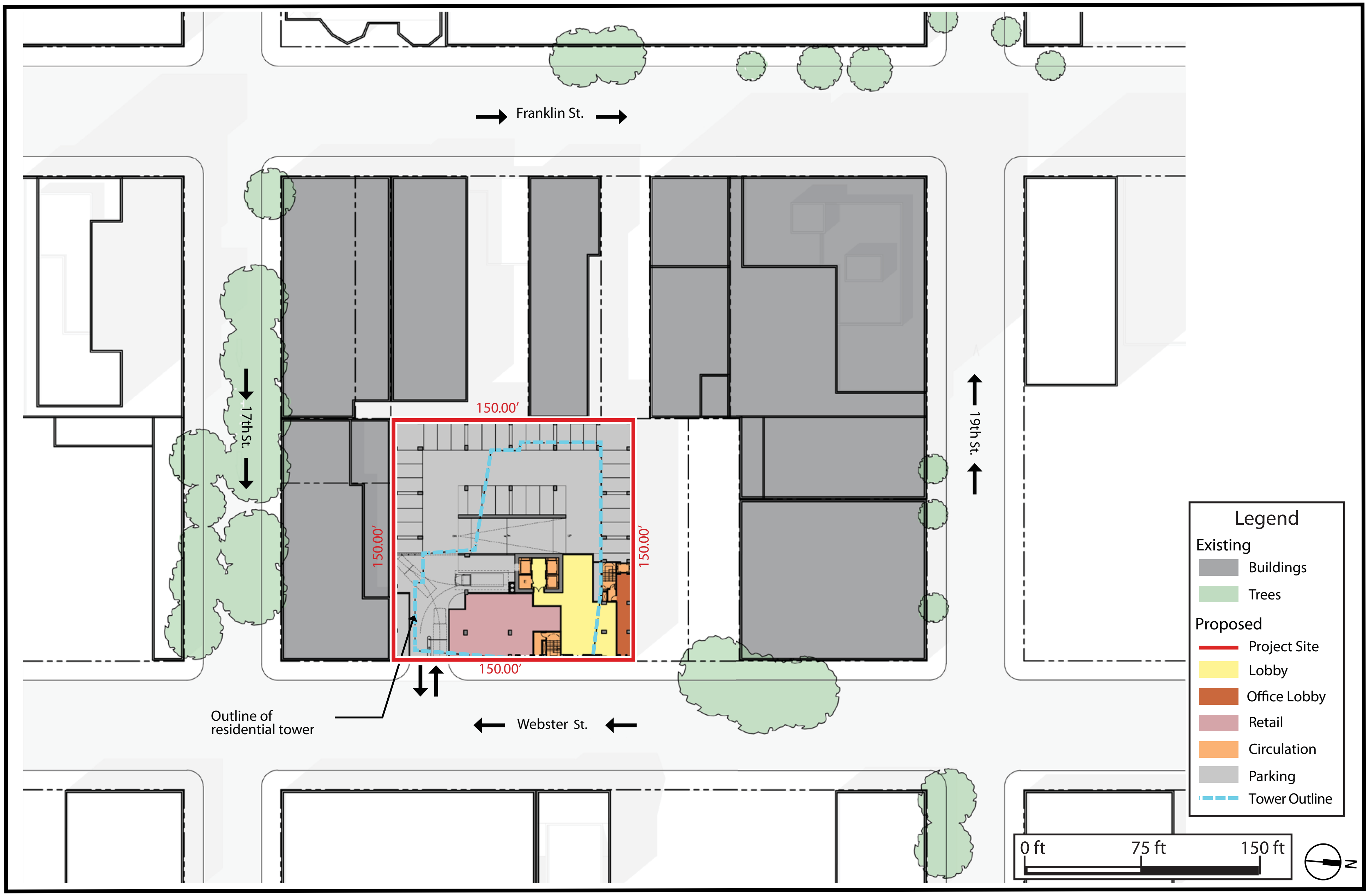
Table 2 Project Characteristics

Lot	**Dimensions**
Size	0.52 acre
Proposed Uses	**Area (gsf)**
Residential	241,284
Lobbies, Amenities, Other	15,927
Retail	2,080
Office	7,460
Parking	98,718
Total Uses	**365,469**
Proposed Residential Units	**Amount (Percent)**
Studio	60 (24%)
1-bedroom	114 (46%)
2-bedroom	76 (30%)
Total Units	**250 (100%)**
Proposed Parking	**Number of Spaces**
Vehicle Parking Spaces	250
Bicycle Parking Spaces	84 (67 long-term/17 short-term)
Open Space	**Area (sf)**
Common Roof Terrace	5,784
Amenity Deck at Level 6	8,888
Private Terraces at Level 6	418
Total Open Space	**15,090**

Building Characteristics

- 25 stories and up to 262 feet with approximately an additional 10 feet of mechanical equipment above
- Podium – one basement level through level 5
- Tower – levels 6 through 25
- Ground-floor retail
- Office space on level 4
- Amenity deck located on level 6 and roof terrace on level 25

Notes: gsf = gross square feet; sf = square feet.
Uses shown in table are approximate.
Source: Solomon Cordwell Buenz, 2017.

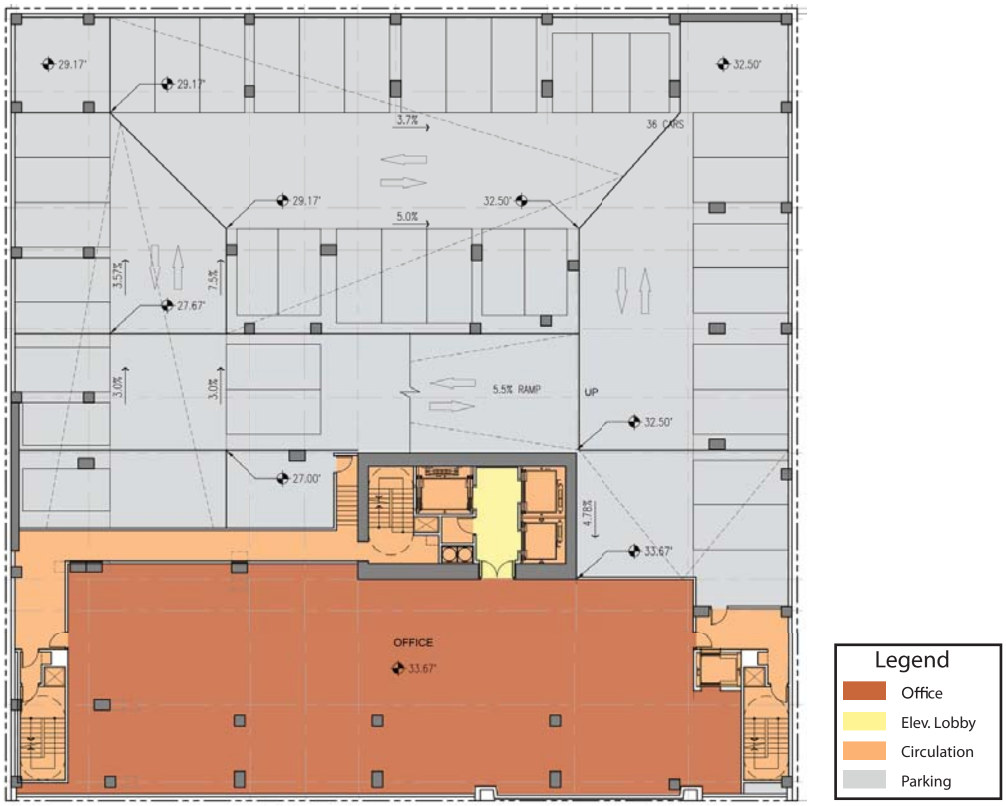


Source: Solomon Cordwell Buenz, 2016

1721 Webster Street Project CEQA Analysis

Figure 2
Site Plan

Office Level Plan



Webster Street

Podium Level Plan

Webster Street

Not to scale

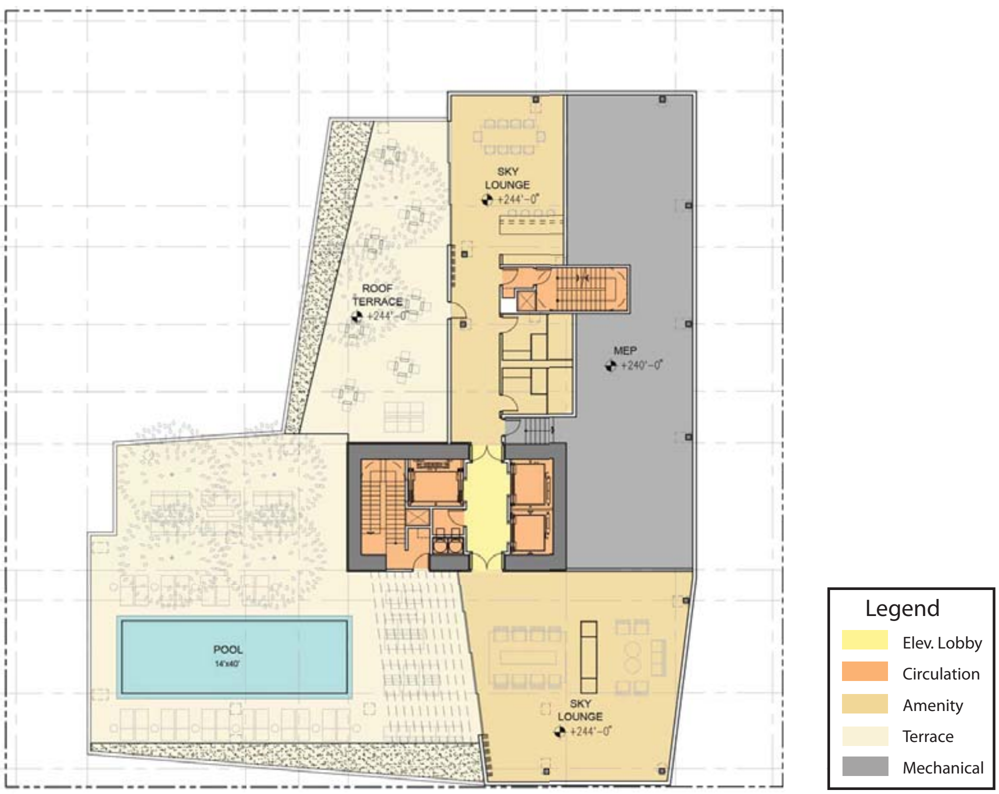
Source: Solomon Cordwell Buenz, 2016

Figure 3
Office & Podium Level Floor Plans

Tower Level Plan
(Typical)

Webster Street

Roof Level Plan

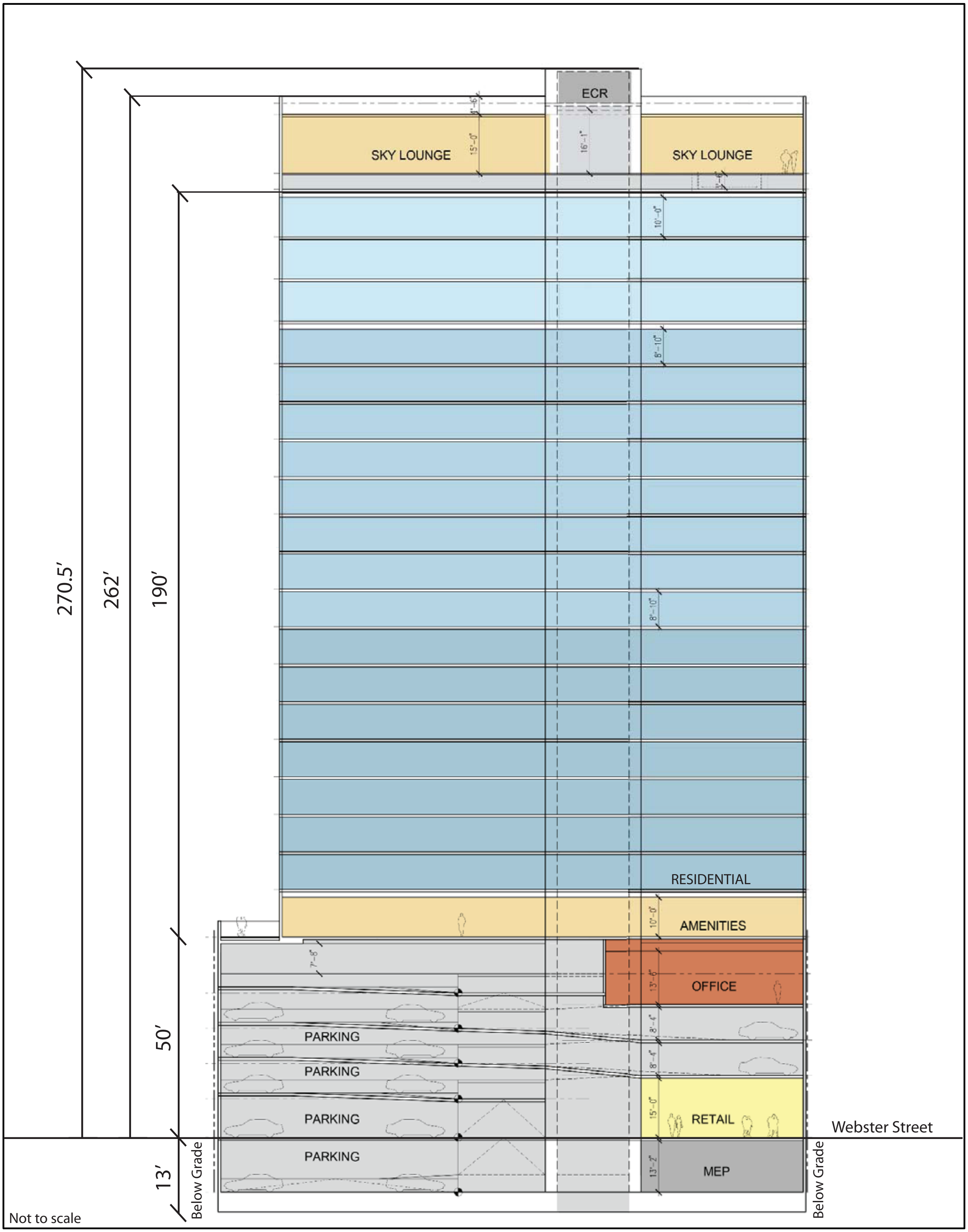


Webster Street

Not to scale

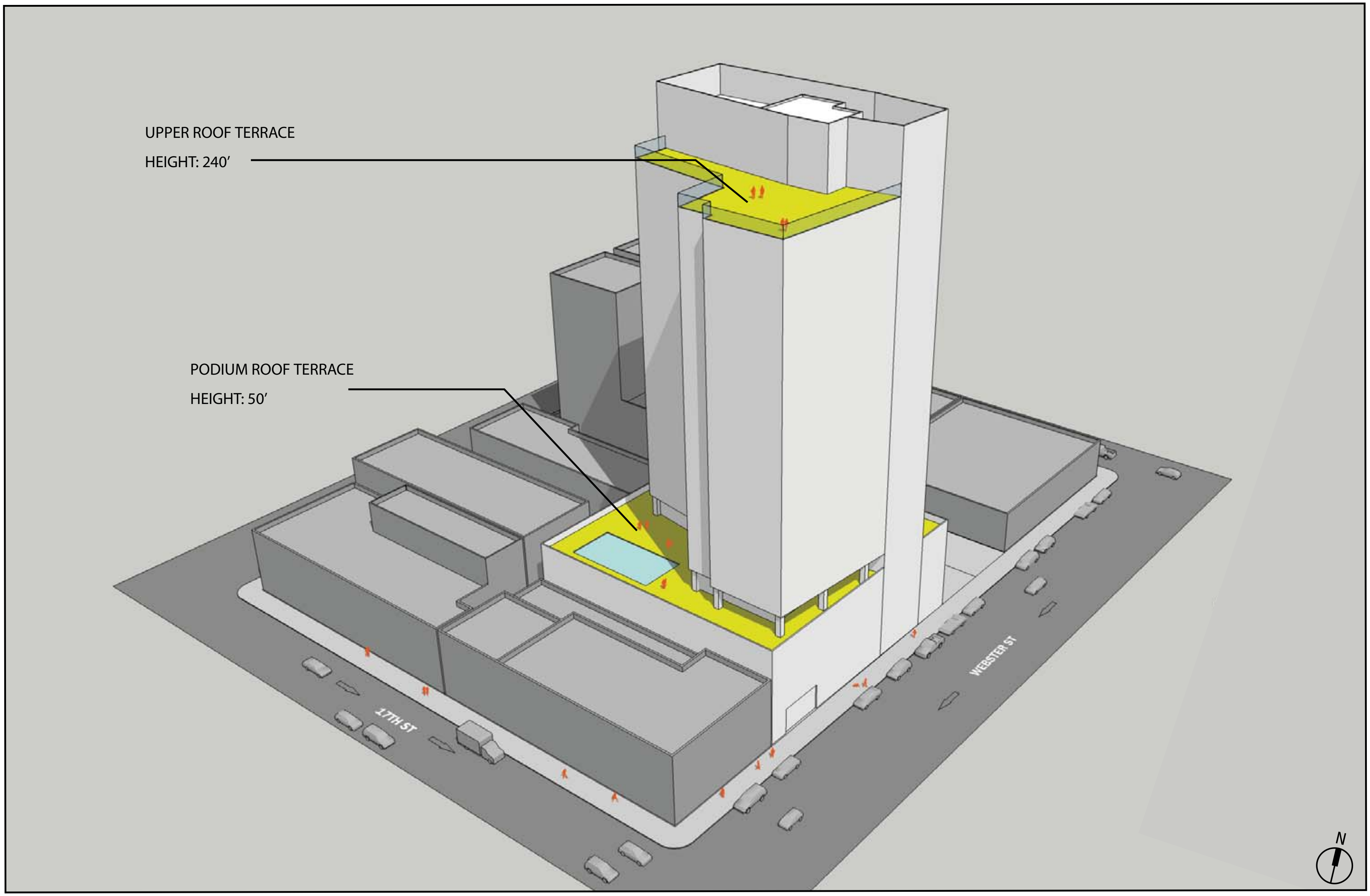
Source: Solomon Cordwell Buenz, 2016

Figure 4
Typical Tower and Roof Level Floor Plans



Source: Solomon Cordwell Buenz, 2016

Figure 5
Building Section and Elevation



Source: Solomon Cordwell Buenz, 2016

Figure 6
Massing Perspective

Source: Solomon Cordwell Buenz, 2016

Figure 7
Northwest View from Webster Street

Access, Circulation, and Parking

The main residential lobby would be located along the middle of the project site on Webster Street and a single vehicle driveway would provide access to the parking garage from Webster Street for both commercial and residential uses. Approximately 98,719 square feet of parking space would be provided in a podium structure including the basement level and five above-grade levels. Approximately 250 parking spaces would be provided as follows: 210 vehicular parking spaces would be provided for the residential uses and 40 parking spaces would be made available to the public. All parking would be unbundled and parking that is not used by the residents would be available to the public to rent. Approximately 76 bicycle parking spaces would be provided (63 long-term and 13 short-term). One loading space would be accessed from Webster Street and located within the parking structure on the ground floor.

Open Space

The proposed project would provide approximately 15,090 square feet of common open space for the building residents. Level 6 would have approximately 8,888 square feet of open green space on the southwest corner of the project site. The roof terrace would include approximately 5,784-square-foot open space. Amenities may include a courtyard with a lap pool, fireplace, BBQ and dining area, garden, dog run, and an outdoor exercise area. The residential tower would also have private outdoor terraces (approximately 418 total square feet).

Streetscape Improvements

Sidewalk and streetscape improvements would be installed as part of the proposed project and would include new street trees along Webster Street.

Activity/Employment

The proposed project would include a mix of residential, office, and retail uses. Based on Alameda CTC's generation rate of 2.1 persons per residential unit, the proposed project could generate approximately 525 new residents. In addition, the 2,080 square feet of retail uses and 7,460 square feet of commercial uses could generate approximately 28 jobs.[15]

Project Construction

Construction activities would consist of demolition of the existing, excavation and shoring, foundation and below-grade construction, and construction of the building and finishing interiors. Project construction is expected to occur over approximately 26 months, with construction scheduled to commence in late 2017, and be completed by winter/spring 2020.The site would be excavated up to approximately 17 feet below grade and approximately 14,500 cubic yards of soil would be excavated and off-hauled from the site. No soils are

[15] Using the Alameda CTC Model assumption of 3 persons per thousand square feet for commercial and 2.5 persons per thousand square feet for office.

anticipated to be imported to the site. Groundwater on the site has been encountered between approximately 13 to 24 feet below ground surface and could fluctuate several feet depending on the season and rainfall; therefore, dewatering may be required during construction as further explained in Chapter VI.H, Hydrology and Water Quality. The building foundation is anticipated to be an approximately 3-foot-thick mat-slab foundation supported with ground improvements at the core of the building. Ground improvements would likely be drilled displacement columns or torque-down piles. The displacement columns would be drilled to a depth of approximately 40 feet below grade. The proposed project would result in approximately 19,880 square feet of impervious surfaces (approximately 88 percent of the site), which is a reduction from the existing conditions—22,500 square feet of impervious surface (100 percent of the site).

Project Approvals

The proposed project would require a number of discretionary actions and approvals, including without limitation:

<u>Actions by the City of Oakland</u>

- Planning Commission – Regular Design Review, CEQA determination, major conditional use permit (CUP), and vesting tentative parcel map for lot merger and condominium purposes.
- Building Department – Demolition permit, grading permit, and other related on- and off-site work permits (e.g., public right-of-way improvements, and tie backs) as well as encroachment permits.
- Building Services Division – Approval of Post-Construction Stormwater Control Plan demonstrating compliance with Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) Municipal Regional Permit (MRP).

<u>Actions by Other Agencies</u>

- Bay Area Air Quality Management District (BAAQMD) – Issuance of permits for installation and operation of the emergency generator. Acceptance of notice of asbestos abatement and demolition activities, if any. East Bay Municipal Utility District (EBMUD) – Grant a Special Discharge Permit to discharge construction dewatering to the sanitary sewer and/or approval of new service requests and new water meter installations.
- Federal Aviation Administration (FAA) – Prior to construction, applicant will submit FAA Form 7460-1, Notice of Proposed Construction or Alteration, providing notification of the construction of a structure over 200 feet in height. FAA will issue a notice determining whether the proposed construction is an obstruction.
- Alameda County Environmental Health (ACEH) – Approval for any proposed remedial action and required clearances.

V. SUMMARY OF FINDINGS

An evaluation of the proposed project is provided in the CEQA Checklist below. This evaluation concludes that the proposed project qualifies for an exemption from additional environmental review. The proposed project was found to consistent with the development density and land use characteristics established by the City of Oakland General Plan, and any potential environmental impacts associated with its development were adequately analyzed and covered by the analysis in the applicable Program EIRs, which are: the 1998 LUTE EIR, the 2011 Renewal Plan EIR, and the 2010 Housing Element EIR and 2014 Addendum, which is applicable to the for the residential component of the proposed project.

The proposed project would be required to comply with the applicable mitigation measures identified in the Program EIRs as modified, and in some cases wholly replaced, to reflect the City's current standard language and requirements of its SCAs, as well as any applicable City of Oakland SCAs (see Attachment A, at the end of the CEQA Checklist). With implementation of the applicable SCAs, the proposed project would not result in a substantial increase in the severity of significant impacts that were previously identified in the Program EIRs or any new significant impacts that were not previously identified in the Program EIRs.

In accordance with Public Resources Code Sections 21003, 21083, 21083.3, 21090, 21094.5, and 21166, and CEQA Guidelines Sections 15162, 15163, 15183, 15183.3, 15168, and 15180, and as set forth in the CEQA Checklist below, the proposed project qualifies for one or more exemptions because the following findings can be made:

- **Community Plan Exemption.** The analysis within Attachment B demonstrates that the project is consistent with the development density established by existing zoning and General Plan policies for which an EIR was certified (i.e., the Program EIRs), and therefore qualifies for a community plan exemption. The analysis herein considers the Program EIRs and concludes that the proposed project would not result in significant impacts that (1) would be peculiar to the project or project site; (2) were not previously identified as significant project-level, cumulative, or off-site effects in the Program EIRs; or (3) were previously identified as significant but—as a result of substantial new information that was not known at the time the Program EIRs was certified—would increase in severity above the level described in the EIR. Therefore, the proposed project is exempt from further environmental review in accordance with Public Resources Code Section 21083 and 21083.05and CEQA Guidelines Section 15183.
- **Qualified Infill Exemption.** The analysis indicates that the proposed project qualifies for an infill exemption and is generally consistent with the required performance standards provided in CEQA Guidelines Appendix M, as evaluated in Attachment C to this document. This CEQA Analysis concurs that the proposed project would not cause any new specific effects or more significant effects than previously identified in applicable Program EIRs and that uniformly applicable development policies or standards (SCAs) would substantially mitigate the proposed project's effects.

The proposed project is proposed on a previously developed site in downtown Oakland, surrounded by urban uses, and is consistent with the land use, density, building intensity, and applicable policies for the site. The proposed project therefore meets the requirements for an infill exemption, as evidenced in Attachment C to this document. The analysis herein considers the analysis in the Program EIRs and finds that the proposed project would not cause any new significant impacts on the environment that were not already analyzed in the Program EIRs or result in more significant impacts than those that were previously analyzed in the Program EIRs. The effects of the proposed project have been addressed in the Program EIRs, and no further environmental documents are required, in accordance with Public Resources Code Section 21083 and 21094.5.5 and State CEQA Guidelines Section 15183.3.

- **Program EIRs and Redevelopment Projects.** The analysis in the Program EIRs and in this CEQA Analysis demonstrates that the proposed project would not result in substantial changes or involve new information that would warrant preparation of a subsequent EIR or supplemental EIR, per CEQA Guidelines Section 15162 or Section 15163, because the level of development now proposed for the site is within the broader development assumptions analyzed in the EIR. The effects of the proposed project have been addressed in the Program EIRs and no further environmental documents are required in accordance with Public Resources Code Section 21083 and State CEQA Guidelines Sections CEQA Guidelines Sections 15168 and 15180.

Each of the above findings provides a separate and independent basis for CEQA compliance.

for ____________________ April 27, 2017

Darin Ranelletti **Date**
Environmental Review Officer

VI. CEQA CHECKLIST

Overview

This CEQA Checklist provides a summary of the potential environmental impacts that may result from adoption and implementation of the proposed project. The analysis in this CEQA Checklist also summarizes the impacts and findings of Program EIRs that covered, specifically or as part of the cumulative analyses; the environmental effects of the proposed project and that are still applicable to the proposed project. As previously indicated, the Program EIRs include the 1998 LUTE EIR, 2011 Renewal Plan EIR, and the 2010 General Plan Housing Element Update EIR. Given the timespan between the preparations of these EIRs, there are variations in the specific environmental topics addressed and significance criteria, however, as discussed above in Chapter III and throughout this Checklist, the overall environmental effects identified in each are largely the same and any significant differences are noted.

This CEQA Checklist hereby incorporates by reference the discussion and analysis in the Program EIRs for all potential environmental impact topics; however, only those environmental topics that could have a potential project-level environmental impact are included herein. The EIR significance criteria have been consolidated and abbreviated in this CEQA Checklist for administrative purposes; a complete list of the significance criteria can be found in the Program EIRs.

This CEQA Checklist provides a determination of whether the proposed project would result in:

- Equal or Less Severity of Impact Previously Identified in Program EIRs
- Substantial Increase in Severity of Previously Identified Significant Impact in Program EIRs
- New Significant Impact

Where the severity of the impacts of the proposed project would be the same as or less than the severity of the impacts described in the Program EIRs, the checkbox for Equal or Less Severity of Impact Previously Identified in Program EIRs is checked. The checkboxes for Substantial Increase in Severity of Previously Identified Significant Impact in Program EIRs or New Significant Impact are checked if there are significant impacts that are:

- Peculiar to project or project site (per CEQA Guidelines Sections 15183 or 15183.3)
- Not identified in the previous EIR (Program EIRs) (per CEQA Guidelines Sections 15183 or 15183.3), including off-site and cumulative impacts (per CEQA Guidelines Section 15183)
- Due to substantial changes in the project (per CEQA Guidelines Section 15162 and 15168)
- Due to substantial changes in circumstances under which the project will be undertaken (per CEQA Guidelines Section 15162)

- Due to substantial new information not known at the time the Program EIRs was certified (per CEQA Guidelines Sections 15162, 15183, or 15183.3)

The proposed project is required to comply with applicable mitigation measures identified in the Program EIRs as modified, and in some cases wholly replaced, to reflect the City's current standard language and requirements of its SCAs and with City of Oakland SCAs.[16] The project sponsor has agreed to incorporate and/or implement the SCAs as part of the proposed project. This CEQA Checklist includes references to the applicable SCAs, a list of the SCAs is included in Attachment A, and this list is incorporated by reference into the CEQA Checklist. If the CEQA Checklist (including Attachment A) inaccurately identifies or fails to list an SCA, the applicability of that SCA to the proposed project is not affected. If the language describing an SCA included in the CEQA Checklist (including Attachment A) is inaccurately transcribed, the language set forth in the Program EIRs or City of Oakland SCAs shall control.

Consistent with the requirements of CEQA, a determination of whether the project would have a significant impact has occurred prior to the approval of the proposed project and, where applicable, standard conditions of approval in the Program EIRs have been identified that will mitigate them. In some instances, exactly how the conditions identified will be achieved awaits completion of future studies, an approach that is legally permissible where measures/conditions are known to be feasible for the impact identified, where subsequent compliance with identified federal, state or local regulations or requirements apply, where specific performance criteria is specified and required, and where the proposed project commits to developing measures that comply with the requirements and criteria identified.

Attachments

The following attachments are included at the end of this CEQA Checklist:

A. Standard Conditions of Approval and Reporting Program

B. Project Consistency with Community Plan or Zoning, per CEQA Guidelines Section 15183

C. Infill Performance Standards, per CEQA Guidelines Section 15183.3

D. Shadow Study for the 1721 Webster Street Project prepared by Prevision Design

E. Wind Tunnel Study for the 1721 Webster Street Project prepared by RWDI

F. Air Quality and Greenhouse Gas Emissions Estimates and Health Risk Analysis for 1721 Webster Street Project prepared by BASELINE Environmental Consulting

[16] These are development standards that are incorporated into projects as SCAs, regardless of a project's environmental determination, pursuant, in part, to CEQA Guidelines Section 15183. 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 of the SCAs are applied, based on the zoning district, community plan, and the type(s) of permit(s)/approvals(s) required for the project. Depending on the specific characteristics of the project type and/or project site, the City will determine which SCA applies to each project.

G. Historical Resource Evaluation Report for 1721 Webster Street Project prepared by Architecture and History, LLC

H. Traffic Noise Outputs for the 1721 Webster Street Project prepared by BASELINE Environmental Consulting

A. Aesthetics, Shadow, and Wind

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Have a substantial adverse effect on a public scenic vista; substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, located within a state or locally designated scenic highway; substantially degrade the existing visual character or quality of the site and its surroundings; or create a new source of substantial light or glare which would substantially and adversely affect day or nighttime views in the area;	■	□	□
b. Introduce landscape that would now or in the future cast substantial shadows on existing solar collectors (in conflict with California Public Resource Code Sections 25980 through 25986); or cast shadow that substantially impairs the function of a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors;	■	□	□
c. Cast shadow that substantially impairs the beneficial use of any public or quasi-public park, lawn, garden, or open space; or, cast shadow on an historical resource, as defined by CEQA Guidelines Section 15064.5(a), such that the shadow would materially impair the resource's historic significance;	■	□	□
d. Require an exception (variance) to the policies and regulations in the General Plan, Planning Code, or Uniform Building Code, and the exception causes a fundamental conflict with policies and regulations in the General Plan, Planning Code, and Uniform Building Code addressing the provision of adequate light related to appropriate uses; or	■	□	□
e. Create winds that exceed 36 mph for more than one hour during daylight hours during the year. The wind analysis only needs to be done if the project's height is 100 feet or greater (measured to the roof) and one of the	■	□	□

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
following conditions exist: (a) the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown.			

Program EIR Findings

Scenic vistas, scenic resources, visual character, light and glare, and shadow were analyzed in the Program EIRs, which found that the effects to these topics would be less than significant. The 2011 Renewal Plan EIR and the 2010 Housing Element EIR and 2014 Addendum cited applicable SCAs that would ensure less-than-significant visual quality effects. The 2011 Renewal Plan EIR concludes that development facilitated by the proposed amendments would not adversely affect scenic resources or views, due to the densely built urban environment of the Downtown area.

The 1998 LUTE EIR identified a less-than-significant impact related to scenic resources in areas identified for change and transition, which would include the project site. The 1998 LUTE EIR states that development in these areas of change would not cause significant impacts as they are already permitted by the current land use designation. The 1998 LUTE EIR identified mitigation measures that are functionally equivalent to the SCAs to reduce certain potential aesthetic effects to less-than-significant levels. The 1998 LUTE EIR also identified potentially significant and unavoidable impacts regarding wind hazards.

The CEQA statutes have been amended related to assessment of aesthetics impacts. CEQA Section 21099(d) states, "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment."[17] Accordingly, aesthetics is no longer considered in determining if a project has the potential to result in significant environmental effects for projects that meet all three of the following criteria:

a. The project is in a transit priority area[18]
b. The project is on an infill site[19]

[17] CEQA Section 21099(d)(1).

[18] CEQA Section 21099(a)(7) defines a "transit priority area" as an area within one-half mile of an existing or planned major transit stop. A "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.

c. The project is residential, mixed-use residential, or an employment center[20]

The proposed project meets all three criteria as follows: (1) it is located 0.2 mile from the 19th Street BART Station in a transit priority area; (2) the project site is an infill site within the urban area of the city of Oakland and is currently developed with commercial uses; and (3) the project is a mixed-use residential project. Thus, this CEQA Analysis does not consider aesthetics and the adequacy of parking in determining the significance of project impacts under CEQA. Nonetheless, the City of Oakland recognizes that the public and decision makers may be interested in information pertaining to the aesthetic effects of a proposed project and may desire that such information be provided as part of the environmental review process. Because the proposed project meets these criteria as described above, the information below related to aesthetics is provided solely for informational purposes and is not used to determine the significance of the environmental impacts, pursuant to CEQA.

Project Analysis

Scenic Vistas, Scenic Resources, Visual Character, and Light and Glare (Criterion 1a)

Scenic resources in the project vicinity include Lake Merritt and the east bay hills. Scenic views of these resources are intermittently visible from the project vicinity and there are no direct views due to the flat topography and varied heights of buildings in the area, ranging from two to twenty-plus stories. The proposed project would construct a 25-story residential-tower that would be taller than the current existing buildings surrounding the site, but would be consistent with the height of the building under construction at 1700 Webster Street. Furthermore, the height of the proposed building is consistent with the zoning for the site and is consistent with the heights of other buildings in the Downtown. The proposed project would not have additional impacts to scenic vistas or scenic resources, beyond those identified in the Program EIRs. Therefore, similar to the findings of the Program EIRs, the proposed project would not significantly affect any scenic vistas or scenic resources.

The proposed project would be consistent with the Program EIRs and would not impair the visual character of the project site or the surrounding area. The 1998 LUTE describes the visual character and development in Downtown Oakland as high-density. The proposed project and other future development that increases density would be consistent with the visual character of the area. The site is currently occupied by a two-story commercial building with no landscaping and limited vegetation in the surrounding area. The 25-story tower would rise above the six-story base, and the proposed building design would continue the urban character along the street frontage on the block. The maximum height of the project building would be approximately 262 feet tall with additional 10 feet of mechanical use. Given the

[19] CEQA Section 21099(a)(4) defines an "infill site" as a lot located within an urban area that has been previously developed, or a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

[20] CEQA Section 21099(a)(1) defines an "employment center" as a project located on property zoned for commercial uses with a FAR of no less than 0.75 and located within a transit priority area.

relative height of the building compared the varied building heights in Downtown, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. Furthermore, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Therefore, the proposed project would be consistent with the Program EIRs and would not have an adverse effect on the visual character of Downtown Oakland.

The proposed project would be required to comply with the City's SCAs related to aesthetics prior to approval of construction-related permits, including SCA-AES-1: Graffiti Control (#16), SCA-AES-2: Landscape Plan (#17), SCA-AES-3: Lighting (#18), and SCA-UTIL-4: Underground Utilities (#75).

Shadow (Criteria 1.b through 1.d)

A shadow study prepared for the proposed project (see Attachment D) shows the shadows that would be cast by the proposed project at 9:00 a.m., 12:00 p.m., and 3:00 p.m. for the summer solstice (June 21st) (Attachment D, Exhibits A1-A3), spring/fall equinoxes (March 20th and September 22nd) (Attachment D, Exhibits B1-B3), and winter solstice (December 21st) (Attachment D, Exhibits C1-C3), consistent with City's Threshold of Significance Guidelines (2013). The greatest shading from the proposed project during these times would be cast to the east across Webster Street (between 17th and 20th), to the north along 19th Street (between Telegraph and Harrison), and to the south along 17th Street (between Broadway and Webster).

The proposed project would not shade any public parks or open spaces between 9:00 a.m. to 3:00 p.m., when park use is likely at its heaviest. The proposed project would cast new shadow on Snow Park (Harrison and 19th streets) in the spring and fall after 3:00 p.m. some afternoons at a time when the park is largely already shaded under existing conditions (see Attachment D, Exhibits D1 and D1-C). Maximum shading from the project would occur on the park around 6:15 p.m. in the spring and fall with the new shadow covering an area that is currently unshaded under existing conditions and is approximately 20 percent of the park. The shading would occur when the sun is low in the sky and the majority of the park is already shaded. Given the time of day that shading would occur and the amount of the park that is already shaded at this time, this new shading would not be substantial and would not substantially impair the beneficial the use of the park.

The proposed project would also cast new shadow on the Henry J. Kaiser Memorial Park (19th and Rashida Muhammad streets) in the winter early in the morning (prior to 8:40 a.m.). The park is already partially shaded during this time under existing conditions. Maximum shading from the project would occur on the park around 8:30 a.m. in the winter, with the new shadow covering an area that is unshaded under existing conditions and is approximately 25 percent of the park. Shadows would occur for approximately 10 minutes after the time of maximum shading. The shading would occur when the sun is low in the sky and the majority of the park is already shaded. Given the time of day that shading would occur, the amount of the park that is already shaded at this time, and the limited duration of the shading, this new shading would not be substantial and would not substantially impair the beneficial use of the park.

The following historic buildings and solar receptors would receive limited shading from the proposed project as noted below. Shading on historic buildings is described for the street-facing elevations. See Chapter VI.D, Cultural Resources, for additional information about historic buildings.

- 1830 Webster: minimal shadow cast on Webster Street façade, between 2:00 to 3:00 p.m., from fall through spring
- 1732 Webster Street, Mentone Arms Apartments: minimal shadow cast Webster Street façade, for a few minutes prior to 3:00 p.m. over the summer
- 1701 Franklin Street, First Church of Christ Scientist: minimal shadow cast on the Franklin Street façade, between 9:00 to 10:10 a.m., from spring to fall (see Attachment D, Exhibit B1)
- 733 Broadway: minimal shadow cast on rooftop solar collectors, between 9:00 to 9:15 a.m. in late October and early March (see Attachment D, Exhibits E1-E2)

Overall, the shading on the historic properties in proximity of the proposed project, would be for short durations, would not affect the character-defining elements of the buildings, and would not materially impair the historic significance of the resources. In addition, the limited shading on the solar collectors would not substantially impair the function of the solar collectors.

Past, present, and reasonably foreseeable future projects considered in the shadow analysis include projects proposed in the immediate vicinity which could create shadows that would combine with those from the proposed project and shade potential resources.21 The shadow profiles of the proposed project in combination with the shadow profiles of cumulative projects are shown in Attachment D (see Exhibits A1-C through E1-C). As stated above, the shading of the proposed project on Snow Park would occur much later in the day than when use of the park is greatest. Furthermore, the project's shadow on the park would be minimal, particularly in combination with the cumulative shadows from the projects at 19th and Harrison streets and 1640 Broadway and existing shading from surrounding buildings (Attachment D, Exhibits D1-C). For these reasons, under cumulative conditions, the limited shading from the proposed project would not substantially impair the beneficial use of the park and thus would not be cumulatively considerable. Similarly, shadows cast on Henry J. Kaiser Memorial Park would occur earlier in the day (before 9:00 a.m.) when usage of the park is lower and would be limited in duration to approximately 10 minutes. The project's shadow on the park would be minimal in combination with the cumulative shadows of the project at 1900 Broadway. Under the cumulative conditions the new additional shading would not substantially impair the beneficial use of the park and thus would not be cumulatively considerable. Therefore, there would be no significant cumulative shadow impacts.

[21] Resources within close proximity to the proposed project include: 2015 Telegraph Avenue, 2016 Telegraph Avenue, 1900 Broadway, 1640 Broadway, 19th and Harrison streets, 222 19th Street, 1510 Webster Street, 1433 Webster Street, 1314 Franklin, 1331 Harrison Street, and 14th and Alice streets.

Overall, the proposed project would not have a significant shadow impact.

Wind (Criterion 1.e)

The proposed project is located Downtown (as defined by the City of Oakland) and would exceed 100 feet in height as it would be up to 262 feet with an additional 10 feet in mechanical use. Therefore, consistent with the City of Oakland CEQA Thresholds of Significance Guidelines, a wind study was prepared for the proposed project to evaluate its wind effects (see Attachment E).

The wind study evaluated 48 locations in the project vicinity, primarily along sidewalks and public rights-of-way. Under existing conditions, none of the locations tested exceeded the City's hazard wind threshold of 36 miles per hour for more than one hour during daylight hours during the year. Further, under the existing conditions with the proposed project, the wind study also found that pedestrian wind levels would not exceed the hazard threshold.

For the purposes of the wind study, past, present, and reasonably foreseeable future projects considered in this analysis include buildings within an approximately 1,600-foot radius of the project site because these buildings have the potential to affect wind conditions within this radius, as well as other projects proposed west of the project site (west is generally the direction from which the wind approaches the site). These projects include the following: 2016 Telegraph Avenue; 1900 Broadway; 19th and Harrison; 1640 Broadway; 1510 Webster Street; 1433 Webster Street; 14th and Alice streets; 1331 Harrison Street; and 1314 Franklin Street.[22] Under cumulative conditions with the proposed project, the wind conditions would not exceed the hazard threshold.

Therefore, based on the findings of the wind study, the proposed project would not result in any significant impacts related to wind, consistent with the findings of the Program EIRs.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the proposed project would not substantially increase the severity of significant aesthetic impacts identified in the Program EIRs, nor would it result in new significant impacts related to aesthetics, shadow, or wind that were not identified in the Program EIRs. The proposed project would be required to implement City of Oakland SCAs related to landscaping, landscape maintenance, public right-of-way improvements, and lighting plans, as identified in Attachment A. For reference, these are: SCA-AES-1: Lighting (#18), SCA-AES-2: Graffiti Control (#16), SCA-AES-3: Landscape Plan (#17), and SCA-UTIL-5: Underground Utilities (#75).

[22] 1700 Webster Street, which is currently under construction, is included in the wind analysis as an existing building.

B. Air Quality

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. During project construction result in average daily emissions of 54 pounds per day of ROG, NO_x, or $PM_{2.5}$ or 82 pounds per day of PM_{10}; during project operation result in average daily emissions of 54 pounds per day of ROG, NO_x, or $PM_{2.5}$, or 82 pounds per day of PM_{10}; result in maximum annual emissions of 10 tons per year of ROG, NO_x, or $PM_{2.5}$, or 15 tons per year of PM_{10}; or	■	☐	☐
b. For new sources of Toxic Air Contaminants (TACs), during either project construction or project operation expose sensitive receptors to substantial levels of TACs under project conditions resulting in (a) an increase in cancer risk level greater than 10-in-1-million, (b) a noncancer risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average $PM_{2.5}$ of greater than 0.3 microgram per cubic meter; or, under cumulative conditions, resulting in (a) a cancer risk level greater than 100-in-1 million, (b) a noncancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average $PM_{2.5}$ of greater than 0.8 microgram per cubic meter; or expose new sensitive receptors to substantial ambient levels of Toxic Air Contaminants (TACs) resulting in (a) a cancer risk level greater than 100-in-1-million, (b) a noncancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average $PM_{2.5}$ of greater than 0.8 microgram per cubic meter.	■	☐	☐

Program EIR Findings

Air quality was analyzed in the Program EIRs. The 1998 LUTE EIR found that the implementation of the Plan would not be consistent with population and VMT assumptions used in air planning and would result in significant and unavoidable impacts on regional emissions of criteria air pollutants. Furthermore, the 1998 LUTE found that cumulative development would result in long-term traffic increases and associated air pollutant emissions, resulting in significant and unavoidable impacts on air quality. It identified mitigation measures to reduce the impact of criteria pollutant emissions from construction equipment and stationary sources to a less-than-significant level; however, the 1998 LUTE EIR found that increased criteria pollutant emissions from increased traffic, including reduced emissions after implementation of identified mitigation measures, would result in a significant and unavoidable impact.

The 2010 Housing Element Update EIR identified significant impacts related to area and mobile sources of air pollutants and diesel particulate matter. However, these impacts were determined less than significant with the implementation of applicable SCAs. No mitigation measures were identified for these the significant and unavoidable impacts.

The 2011 Renewal Plan EIR identified effective SCAs to address less-than-significant effects regarding dust/PM_{10}, odors, and consistency with the applicable Bay Area Clean Air Plan. The 2011 Renewal Plan EIR identified significant and unavoidable impacts regarding cumulative health risks after the consideration of SCAs.

Project Analysis

The proposed project is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). In June 2010, the BAAQMD adopted thresholds of significance to assist lead agencies in the evaluation and mitigation of air quality impacts under CEQA. As shown in the checklist table above, the City of Oakland has adopted the BAAQMD's thresholds for emissions of ozone precursors (i.e., reactive organic gases [ROGs] and nitrogen oxides [NO_x]), suspended particulate matter (both respirable (PM_{10}) and fine ($PM_{2.5}$), and toxic air contaminants (TACs). These thresholds are supported by substantial evidence presented in the BAAQMD's Revised Draft Options and Justification Report.[23] While the thresholds pertaining to the effect of the environment on the proposed project, as compared to the project's impact on the environment, are not legally required to be analyzed under CEQA, they are nevertheless evaluated to provide information to decision makers and the public.

Criteria Air Pollutants (Criterion 2.a)

The BAAQMD currently recommends using the most recent version of the California Emissions Estimator Model (CalEEMod version 2016.3.1) to estimate construction and operational emissions of criteria air pollutants and precursors for a proposed project. CalEEMod uses widely accepted models for emission estimates combined with appropriate default data for a variety of land use projects that can be used if site-specific information is not available. The default data (e.g., type and power of construction equipment) are supported by substantial evidence provided by regulatory agencies and a combination of statewide and regional surveys of existing land uses. The primary input data used to estimate emissions associated with construction and operation of the proposed project are summarized in Table 3. To be conservative, pollutant emissions were estimated in CalEEMod for the maximum project

[23] Bay Area Air Quality Management District (BAAQMD), 2009. Revised Draft Options and Justification Report; California Environmental Quality Act Thresholds of Significance, October.

development scenario. A copy of the CalEEMod report for the proposed project, which summarizes the input parameters, assumptions, and findings, is provided in Attachment F.

Table 3 Summary of CalEEMod Land Use Input Parameters for the Maximum Development Scenario

Land Use Type	CalEEMod Land Use Type	Units	Unit Amount[a]
Residential	Apartments High Rise	Dwelling Units	250
		Square Feet	260,000
Retail	High-Turnover (Sit-Down) Restaurant	Square Feet	2,500
Parking Garage	Enclosed Parking with Elevator	Spaces	275
		Square Feet	100,000
Commercial	General Office Building	Square Feet	10,000

Notes: The proposed project footprint would be about 0.52 acres.
[a] Conservatively represents the maximum project development scenario per land use type, which may be greater than the proposed project as analyzed for most topics in this checklist.
Source: NASH-Holland 1721 Webster Investors, LLC, 2017.

Criteria Air Pollutants from Construction

Project construction activities would generate criteria air pollutant emissions that could potentially adversely affect regional air quality. Based on the project design, construction activities would include demolition, grading, trenching, building construction, paving, and applications of architectural coatings. The primary pollutant emissions of concern during project construction would be ROG, NO_x, PM_{10}, and $PM_{2.5}$ from the exhaust of off-road construction equipment and on-road vehicles related to worker vehicles, vendor trucks, and haul trucks. In addition, fugitive dust emissions of PM_{10} and $PM_{2.5}$ would be generated by soil disturbance and demolition activities and fugitive ROG emissions would result from the application of architectural coatings and paving. Emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$ during project construction were estimated using the CalEEMod input parameters summarized in Table 4.

Development of the proposed project would require the City's enhanced control measures for construction emissions described under SCA-AIR-1: Construction-Related Air Pollution Controls (Dust and Equipment Emissions) (#19), would apply. In accordance with SCA-AIR-1, the evaluation assumed that all off-road diesel equipment would be equipped with engines certified to meet the California Air Resources Board's (CARB's) Tier 4 emission standards, which have incorporated best available control technologies into the engine design to reduce emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$.

Table 4 Summary of CalEEMod Construction Input Parameters for the Maximum Development Scenario

CalEEMod Input Category	Construction Assumptions and Changes to Default Data
Construction Phase	A project-specific construction schedule and equipment list with estimated hours of operation was used for the project (see Attachment F). Construction is assumed to begin in December 2017 and last about 26 months.
Material Movement	Approximately 14,500 cubic yards of soil is expected to be hauled off-site.
Demolition	Approximately 2,500 tons of demolition debris is expected to be hauled off-site.

Notes: Construction assumptions were based on information provided by the project sponsor. Default CalEEMod data was used for all other parameters not described.
Source: NASH-Holland 1721 Webster Investors, 2017.

The total emissions estimated during construction were averaged over the total working days (566 days) and compared to the City's thresholds of significance. The project's estimated emissions for ROG, NO_x, and exhaust PM_{10} and $PM_{2.5}$ both before and after applying the Tier 4 engine requirements under SCA-AIR-1 were below the applicable thresholds. As shown in Table 5, estimated emissions would be below the BAAQMD thresholds and, therefore, construction of the proposed project would have a less-than-significant impact on regional air quality.

Table 5 Estimated Project and Project with SCA Construction Emissions for the Maximum Development Scenario (Pounds per Day)

Emissions Scenario	ROG	NO_x	Exhaust PM_{10}	Exhaust $PM_{2.5}$
Project Emissions ***without*** SCA-AIR-1	8.6	14.8	0.67	0.65
Thresholds of Significance	54	54	82	54
Exceeds Quantitative Threshold?	**No**	**No**	**No**	**No**
Project Emissions ***with*** SCA-AIR-1	7.6	5.4	0.05	0.05
Thresholds of Significance	54	54	82	54
Exceeds Quantitative Threshold?	**No**	**No**	**No**	**No**

Source: BASELINE Environmental Consulting, 2017 (see Attachment F).

Neither BAAQMD nor the City has a quantitative threshold of significance for fugitive dust PM_{10} and $PM_{2.5}$ emissions; however, the BAAQMD considers implementation of best management practices (BMPs) to control dust during construction sufficient to reduce potential impacts to a less-than-significant level. Implementation of dust-control measures described under SCA-AIR-1 would satisfy the BAAQMD's requirement for BMPs during construction. Because implementation of dust-control measures under SCA-AIR-1 would satisfy the BAAQMD's threshold of significance, the impact on regional air quality from dust generated during project construction would be less than significant.

In addition to the emissions controls required under SCA-AIR-1, the proposed project must comply with all applicable laws and regulations regarding demolition of existing structures on the project site. Because the existing building is of an age that it could potentially contain asbestos materials, SCA-AIR-3: Asbestos in Structures (#23) would apply. With implementation of SCA-AIR-1 and SCA-AIR-3, construction of the proposed project would not substantially increase the severity of significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to criteria pollutant emissions that were not identified in the Program EIRs.

Criteria Air Pollutants from Operations

Project operation would generate criteria air pollutant emissions that could potentially affect regional air quality. The primary pollutant emissions of concern during project operation would be ROG, NO_x, and exhaust PM_{10}, and $PM_{2.5}$ from mobile sources, energy use, area sources (e.g., consumer products, architectural coatings, and landscape maintenance equipment), and stationary sources. Project emissions were estimated for 2020, which is the earliest expected year of operation. Since statewide vehicle emission standards are required to improve over time in accordance with the Pavley (Assembly Bill 1493) and Low-Emission Vehicle regulations (Title 13, California Code of Regulations, and Section 1961.2), estimating emissions for the earliest year of operation provides the maximum annual emissions. Additional project-specific information used to calculate operation emissions in CalEEMod, including changes to default data, is summarized in Table 6.

Table 6 Summary of CalEEMod Operation Input Parameters for the Maximum Development Scenario

CalEEMod Input Category	Operation Assumptions and Changes to Default Data
Vehicle Trips	Daily trip rates for each type of land use were adjusted according to the project traffic analysis (see Chapter VI.M of this document). These trip estimates account for a 43 percent trip reduction based on the City of Oakland's Transportation Impact Study Guidelines data for development in an urban environment within ½-mile of a BART station.
Stationary Sources	In accordance with the California Building Code, an emergency generator would be required for the project. It was assumed that a maximum 1,000 horsepower diesel generator would be used for non-emergency operation up to 50 hours per year (for routine testing and maintenance).

Note: Default CalEEMod data used for all other parameters not described.
Source: BASELINE Environmental Consulting, 2017.

The estimated maximum annual emissions and average daily emissions during the operational phase of the proposed project are compared to the City's thresholds of significance in Table 7. The estimated emissions for ROG, NO_x, and exhaust PM_{10} and $PM_{2.5}$ were below the thresholds and, therefore, would have a less-than-significant impact on regional air quality. As a result, operation of the proposed project would not substantially increase the severity of significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to criteria pollutant emissions during construction that were not identified in the Program EIRs.

Table 7 Estimated Operation Emissions for the Maximum Development Scenario

	Maximum Annual Emissions (Tons)				Average Daily Emissions (Pounds)			
Emissions Source	**ROG**	**NOx**	**Exhaust PM_{10}**	**Exhaust $PM_{2.5}$**	**ROG**	**NOx**	**Exhaust PM_{10}**	**Exhaust $PM_{2.5}$**
Area	1.32	0.02	0.01	0.01	7.23	0.12	0.06	0.06
Energy	0.02	0.16	0.01	0.01	0.10	0.89	0.07	0.07
Mobile	0.33	2.11	0.01	0.01	1.82	11.57	0.08	0.07
Generator	0.04	0.18	0.01	0.01	0.22	1.01	0.03	0.03
Total Project Emissions	1.7	2.5	<0.1	<0.1	9.4	13.6	0.2	0.2
Thresholds of Significance	10	10	15	10	54	54	82	54
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**

Source: BASELINE Environmental Consulting, 2017 (see Attachment F).

Toxic Air Contaminants (Criterion 2b)

Project construction would generate diesel particulate matter (DPM) and $PM_{2.5}$ emissions from the exhaust of off-road diesel construction equipment and on-road vehicles (worker, vendor, and haul trucks) accessing the project site. Similarly, project operations would generate DPM and $PM_{2.5}$ emissions from testing and maintenance of an emergency generator. DPM and $PM_{2.5}$ from diesel-powered engines are a complex mixture of soot, ash particulates, metallic abrasion particles, volatile organic compounds, and other components that can contribute to a range of health problems. In 1998, CARB identified DPM from diesel-powered engines as a TAC based on its potential to cause cancer and other adverse health effects.[24]

The emissions of DPM and $PM_{2.5}$ from diesel exhaust during project construction and operation could pose a health risk to nearby sensitive receptors. The term sensitive receptor refers to a location where individuals are more susceptible to poor air quality. Sensitive receptors include schools, convalescent homes, and hospitals because the very young, the old, and the infirm are more susceptible than the rest of the public to air-quality-related health problems. Residential areas are also considered sensitive to poor air quality because people are often at home for extended periods, thereby increasing the duration of exposure to potential air contaminants. The BAAQMD recommends evaluating the potential health risks to sensitive receptors within 1,000 feet of a proposed project that could be exposed to TACs, such as DPM and $PM_{2.5}$.

[24] California Air Resources Board (CARB), 1998. Initial Statement of Reasons for Rulemaking; Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant. June.

Generation of TAC Emissions during Construction

The annual average concentrations of DPM and exhaust $PM_{2.5}$ concentrations during construction of the maximum development scenario were estimated within 1,000 feet of the project using the U.S. Environmental Protection Agency's Industrial Source Complex Short Term (ISCST3) air dispersion model. For this analysis, emissions of exhaust PM_{10} were used as a surrogate for DPM, which is a conservative assumption because more than 90 percent of DPM is less than 1 micron in diameter. The input parameters and assumptions used for estimating emission rates of DPM and $PM_{2.5}$ from off-road diesel construction equipment and on-road vehicles (worker, vendor, and haul trucks) accessing the project site are included in Attachment F.

Daily emissions from construction were assumed to occur over an 8-hour period between 8:00 a.m. and 4:00 p.m. Monday through Friday. The exhaust from off-road equipment was represented in the ISCST3 model as a series of volume sources with a release height of 5 meters to represent the mid-range of the expected plume rise from frequently used construction equipment. On-road vehicles accessing the project site were represented in the ISCST3 model as a series of line-area sources with a release height of 3 meters for exhaust emissions.

A uniform grid of receptors spaced 10 meters apart with receptor heights of 1.8 meter (for ground-level receptors) and 6 meters (for second-story receptors) was placed around the project site as a means of developing isopleths (i.e., concentration contours) that illustrate the dispersion pattern from the various emissions sources. The ISCST3 model input parameters included 1 year of BAAQMD meteorological data from the Oakland Sewage Treatment Plant weather station located about 2½ miles northwest of the project site.

The air dispersion model was used to estimate annual average concentrations of DPM and $PM_{2.5}$, both before and after applying the requirement under SCA-AIR-1 to use Tier 4 engines. Based on the results of the air dispersion model (Attachment F), potential health risks were evaluated for the maximally exposed individual resident (MEIR) located at a second-story apartment about 75 feet east of the project boundary both with and without application of SCA-AIR-1. The annual average concentrations of DPM and $PM_{2.5}$ at the MEIR are summarized in Table 8.

Table 8 Annual Average Concentrations at MEIR During Construction of the Maximum Development Scenario

	Annual Average Concentration ($\mu g/m^3$)	
Emissions Source	**DPM**	**Exhaust $PM_{2.5}$**
Project Construction ***without*** SCA-AIR-1	0.520	0.505
Project Construction ***with*** SCA-AIR-1	0.020	0.020

Note: $\mu g/m^3$ = micrograms per cubic meter
Source: BASELINE Environmental Consulting, 2017 (see Attachment F).

In accordance with guidance from the BAAQMD[25] and the Office of Environmental Health Hazard Assessment (OEHHA),[26] a health risk assessment was conducted to calculate the incremental increase in cancer risk and chronic hazard index (HI) to sensitive receptors from DPM emissions during construction. Analysis of acute non-cancer health hazards from construction activity is not recommended by BAAQMD, nor has a reference exposure level been approved by OEHHA and CARB. The annual average concentration of DPM at the MEIR was used to conservatively assess potential health risks to nearby sensitive receptors.

The incremental increase in cancer risk from on-site DPM emissions during construction was assessed for an infant from the third trimester and through his/her first 2 years exposed to DPM at the MEIR location. This exposure scenario represents the most sensitive individual who could be exposed to adverse air quality conditions in the vicinity of the proposed project. It was also assumed that the MEIR would be exposed to an annual average DPM concentration over the entire estimated duration of construction, which is about 26 months; therefore, this analysis is conservative. The input parameters and results of the health risk assessment are included in Attachment F.

Estimates of the health risks at the MEIR from DPM and $PM_{2.5}$ concentrations during construction of the maximum development scenario, both before and after applying the Tier 4 engine requirements under SCA-AIR-1, are summarized and compared to the City's thresholds of significance in Table 9. The estimated chronic HI for DPM and annual average $PM_{2.5}$ concentration from construction emissions without SCA-AIR-1 were below the City's thresholds; however, the excess cancer risk exceeded the City's thresholds without SCA-AIR-1. Implementation of SCA-AIR-1 would reduce the excess cancer risk by about 96 percent and the risk level would not exceed the City's threshold of significance. Therefore, with implementation of SCA-AIR-1, the project's emissions of DPM and $PM_{2.5}$ during construction would have a less-than-significant impact on nearby sensitive receptors. Overall, construction of the proposed project would not substantially increase the severity of significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to the generation of TAC emissions that were not identified in the Program EIRs.

Generation of TAC Emissions during Operation

To operate an emergency generator, the project would be required to comply with the BAAQMD's permit requirements for a stationary source. In accordance with BAAQMD's Regulation 2-5, New Source Review of Toxic Air Contaminants, the BAAQMD does not issue permits for generators that would result in an excess cancer risk greater than 10-in-1-million or chronic HI greater than 1.0. These health standards are also enforced through the City's SCA-AIR-2: Stationary Sources of Air Pollution (Toxic Air Contaminants) (#21).

[25] Bay Area Air Quality Management District (BAAQMD), 2012. Recommended Methods for Screening and Modeling Local Risks and Hazards, May.

[26] Office of Environmental Health Hazard Assessment (OEHHA), 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, February.

Conservatively assuming the project's emergency generator would result in the BAAQMD's maximum permissible excess cancer risk of 10-in-1-million due to emissions of DPM, the BAAQMD's Risk and Hazards Emissions Screening Calculator (Beta Version) [27] was used to estimate the equivalent screening-level health risks values for chronic HI and annual average $PM_{2.5}$ concentrations. The calculator applies similar methods used to establish the emission threshold levels for TACs reported in the BAAQMD's Regulation 2-5. The health risk screening values from the project's emergency generator were then refined based on the distance from the project to the MEIR using the BAAQMD's Diesel Internal Combustion Engine Distance Multiplier Tool.[28] The conservative screening-level health risks to sensitive receptors associated with operation of the emergency generator are summarized and compared to the City's thresholds of significance in Table 10. The estimated excess cancer risk and chronic HI for DPM and the annual average $PM_{2.5}$ concentration from operation of the emergency generator were below the BAAQMD's thresholds of significance; therefore, the project's emissions of DPM and $PM_{2.5}$ during operation of an emergency generator would have a less-than-significant impact on nearby sensitive receptors and no further actions are required to address health risks under the City's SCA-AIR-2. As a result, operation of the proposed project would not substantially increase the severity of significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to the generation of TAC emissions that were not identified in the Program EIRs.

Table 10 Health Risks at MEIR from Operation of an Emergency Generator at the Project Site

	Diesel Particulate Matter		**Exhaust $PM_{2.5}$**
Emissions Scenario	**Cancer Risk (per million)**	**Chronic Hazard Index**	**Annual Average Concentration (µg/m³)**
Emergency Generator	5.0	<0.1	0.01
Thresholds of Significance	10	1.0	0.3
Exceeds Threshold?	**No**	**No**	**No**

Notes: µg/m³ = micrograms per cubic meter
Source: BAAQMD, 2016. *Risk and Hazards Emissions Screening Calculator (Beta Version).*

Cumulative TAC Emissions

In addition to a project's individual TAC emissions during construction and operation, the potential cumulative health risks to sensitive receptors from existing and reasonably foreseeable future sources of TACs were evaluated. Based on the proximity to existing and future sources of TACs, cumulative health risks were estimated at the MEIR. The BAAQMD's online screening tools were used to provide conservative estimates of how much existing and

[27] Bay Area Air Quality Management District (BAAQMD), 2016. Risk and Hazards Emissions Screening Calculator (Beta Version).
[28] Bay Area Air Quality Management District (BAAQMD), 2012. Diesel Internal Combustion Engine Distance Multiplier Tool, June 13.

foreseeable future TAC sources would contribute to cancer risk, HI, and $PM_{2.5}$ concentrations. The individual health risks associated with each source were summed to find the cumulative health risk at the MEIR.

Based on the BAAQMD's Stationary Source Screening Analysis Tool,[29] 12 existing stationary sources of TAC emissions were identified within 1,000 feet of the MEIR (Table 11). Preliminary health risk screening values at the MEIR from the stationary sources were determined using the Stationary Source Screening Analysis Tool and Risk & Hazard Stationary Source Inquiry Form.[30] The BAAQMD's Diesel Internal Combustion Engine Distance Multiplier Tool was used to refine the screening values associated with seven of the existing stationary sources to represent the attenuated health risks that can be expected with increasing distance from diesel engines.

[29] Bay Area Air Quality Management District (BAAQMD), 2012. Stationary Source Screening Analysis Tool. Available at: http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools, May 30.

[30] Bay Area Air Quality Management District (BAAQMD), 2016. Risk & Hazard Stationary Source Inquiry Form. Data requests submitted to Allison Kirk of the BAAQMD on November 17, November 22, and December 2, 2016.

Table 11 Summary of Cumulative Health Risks at the MEIR

Sources	Source Type	Cancer Risk (10^{-6})	Chronic Hazard Index	$PM_{2.5}$ ($\mu g/m^3$)
Proposed Project				
Construction ***without*** SCA-AIR-1	Diesel Exhaust	149.2	0.10	0.51
Construction ***with*** SCA-AIR-1	Diesel Exhaust	5.8	<0.01	0.02
Emergency Generator	Diesel Generator	5.0	<0.01	0.01
Future Stationary Sources				
1700 Webster Street	Diesel Generator	5.8	<0.01	0.01
301 19th Street	Diesel Generator	3.1	<0.01	0.01
1510 Webster Street	Diesel Generator	0.8	<0.01	<0.01
1900 Broadway	Diesel Generator	0.7	<0.01	<0.01
1640 Broadway	Diesel Generator	0.6	<0.01	<0.01
222 19th Street	Diesel Generator	0.5	<0.01	<0.01
1433 Webster Street	Diesel Generator	0.5	<0.01	<0.01
Existing Stationary Sources				
Le Magic Cleaners (10397)	Not Reported[a]	<0.1	<0.01	<0.01
Pacific Gas and Electric (14173)	Diesel Generator	4.4	<0.01	0.01
CIM Group Properties (20248)	Diesel Generator	3.1	<0.01	0.01
AC Transit General Office (14532)	Diesel Generator	1.2	<0.01	<0.01
Pacific Bell (13494)	Diesel Generator	4.1	<0.01	0.01
Verizon Business (14711)	Diesel Generator	1.6	<0.01	<0.01
Oakland Property, LLC (19997)	Diesel Generator	0.4	<0.01	<0.01
AT&T Corp (18668)	Diesel Generator	2.0	<0.01	<0.01
Douglas Parking Company (18179)	Closed[b]	NA	NA	NA
Kaiser Permanente (G11348)	Closed[b]	NA	NA	NA
Kaiser Foundation Health Plan (G9132)	Closed[b]	NA	NA	NA
Mark Borsuk Esq (13071)	Closed[b]	NA	NA	NA
Existing Mobile Sources				
Harrison Street (20,425 AADT)	Major Roadway	2.6	NA	0.05
Cumulative Impacts				
Cumulative Health Risks ***without*** SCA-AIR-1 during Construction		186	0.1	0.6
City of Oakland's Cumulative Thresholds		100	10.0	0.8
Exceeds Threshold?		**Yes**	**No**	**No**

Table 11 Summary of Cumulative Health Risks at the MEIR

Sources	Source Type	Cancer Risk (10^{-6})	Chronic Hazard Index	$PM_{2.5}$ ($\mu g/m^3$)
	Cumulative Health Risks ***with*** SCA-AIR-1during Construction	42	<0.1	0.1
	City of Oakland's Cumulative Thresholds	100	10.0	0.8
	Exceeds Threshold?	**No**	**No**	**No**

Notes: $\mu g/m^3$ = micrograms per cubic meter; NA = not applicable
[a] Information about the source type was not reported by the BAAQMD.
[b] According to the BAAQMD, these stationary sources have been closed and do not pose potential health risks or hazards to nearby sensitive receptors.
Sources: Health risk screening values derived from the BAAQMD's Tools and Methodologies. Available at: http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools, accessed January 2017. Average annual daily traffic (AADT) volumes reported by Kalibrate Technologies (2016).

Based on review of 2015 average annual daily traffic (AADT) volumes forecasted in Alameda County by Kalibrate Technologies,[31] there is one major roadway (Harrison Street) with an AADT volume greater than 10,000 vehicles per day within 1,000 feet of the project site. The maximum potential health risks at the MEIR from mobile emissions along Harrison Street were estimated using the BAAQMD's Roadway Screening Analysis Calculator.[32]

There are eight proposed residential and/or office developments within 1,000 feet of the MEIR, which could involve the operation of emergency diesel generators, as shown in Table 11. The BAAQMD does not issue permits for stationary sources that result in an excess cancer risk greater than 10-in-1-million or a chronic HI greater than 1.0 at the source of emissions. Conservatively assuming each proposed generator would result in a maximum excess cancer risk of 10-in-1-million due to emissions of DPM, the BAAQMD's Risk and Hazards Emissions Screening Calculator (Beta Version) was used to estimate the equivalent screening-level health risks values for chronic HI and annual average $PM_{2.5}$ concentrations. The health risk screening values from the future generators were then refined based on the distance from each source to the MEIR using the BAAQMD's Diesel Internal Combustion Engine Distance Multiplier Tool. For example, the cancer risk at 165 feet from a proposed generator would be reduced by 50 percent from 10-in-1-million to 5- in-1-million.

Estimates of the cumulative health risks at the MEIR are summarized and compared to the City's cumulative thresholds of significance in Table 11. The chronic HI from DPM emissions and annual average $PM_{2.5}$ concentrations at the MEIR were below the City's cumulative thresholds before applying the City's Tier 4 engine requirements to control construction emissions under SCA-AIR-1; however, the excess cancer risk exceeded the City's cumulative threshold without SCA-AIR-1. Implementation of SCA-AIR-1 would reduce the excess cancer risk by about 96 percent and the risk level would not exceed the City's threshold of significance.

[31] Kalibrate Technologies, 2016. Current Year Estimates TrafficMetrix Data. Comma-separated value file of 2015 average annual daily traffic counts estimated in Alameda County.
[32] Bay Area Air Quality Management District (BAAQMD), 2015. Roadway Screening Analysis Calculator, April 16.

Therefore, the project's emissions of DPM and $PM_{2.5}$ during construction and operation would have a less-than-significant cumulative impact on nearby sensitive receptors. Overall, construction and operation of the proposed project would not substantially increase the cumulative severity of significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to the generation of TAC emissions that were not identified in the Program EIRs.

Exposure to Toxic Air Contaminants

Future residents of the project site could be exposed to existing and reasonably foreseeable future sources of TAC emissions. While CEQA does not require the analysis or mitigation of potential effects the existing environment may have on a project (with certain exceptions), an analysis of the potential effects existing TAC sources may have on the future receptors at the project site was performed to provide information to the public and decision makers. The health risks posed to the closest residential receptor on the project site to each TAC source were considered to conservatively analyze cumulative health risks to all future receptors on the project site.

The approach for assessing the cumulative health risks to future sensitive receptors on the project site was the same as the methods described above to determine potential health risks to existing sensitive receptors. As shown in Table 12, the estimated cumulative excess cancer risk and chronic HI from DPM emissions and annual average $PM_{2.5}$ concentrations at the project site would be below the City's cumulative threshold of significance. Overall, siting new receptors on the project site would not substantially increase the severity of significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to TAC exposures that were not identified in the Program EIRs.

Conclusion

Based on the analysis and the findings and conclusions of the Program EIRs, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to construction and operational air pollutant emissions that were not identified in the Program EIRs. No mitigation measures are required. The proposed project would be required to implement City of Oakland SCAs related to air quality as identified in Attachment A. For reference, these are: SCA-AIR-1: Construction-Related Air Pollution Controls (Dust and Equipment Emissions) (#19), SCA-AIR-2: Stationary Sources of Air Pollution (Toxic Air Contaminants) (#21), and SCA-AIR-3: Asbestos in Structures (#23).

Table 12 Summary of Cumulative Health Risks to Future Project Receptors

Sources	Source Type	Cancer Risk (10^{-6})	Chronic Hazard Index	$PM_{2.5}$ ($\mu g/m^3$)
Proposed Project				
Emergency Generator	Diesel Generator	10.0	<0.01	0.02
Future Stationary Sources				
1700 Webster Street	Diesel Generator	5.8	<0.01	0.01
301 19th Street	Diesel Generator	2.5	<0.01	<0.01
1640 Broadway	Diesel Generator	1.0	<0.01	<0.01
1900 Broadway	Diesel Generator	1.0	<0.01	<0.01
1510 Webster Street	Diesel Generator	1.0	<0.01	<0.01
1433 Webster Street	Diesel Generator	0.7	<0.01	<0.01
222 19th Street	Diesel Generator	0.4	<0.01	<0.01
1955 Broadway	Diesel Generator	0.4	<0.01	<0.01
Existing Stationary Sources				
Le Magic Cleaners (10397)	Not Reported[a]	0.0	<0.01	<0.01
AC Transit General Office (14532)	Diesel Engines	2.5	<0.01	<0.01
Pacific Bell (13494)	Diesel Generator	9.3	0.01	0.02
Pacific Gas and Electric (14173)	Diesel Generator	4.7	<0.01	0.01
CIM Group Properties (20248)	Diesel Generator	2.5	<0.01	<0.01
Verizon Business (14711)	Diesel Generator	1.6	<0.01	<0.01
Oakland Property, LLC (19997)	Diesel Engines	0.3	<0.01	<0.01
AT&T Corp (18668)	Diesel Generator	2.0	<0.01	<0.01
Douglas Parking Company (18179)	Closed[b]	NA	NA	NA
Kaiser Permanente (G11348)	Closed[b]	NA	NA	NA
Kaiser Foundation Health Plan (G9132)	Closed[b]	NA	NA	NA
Mark Borsuk Esq (13071)	Closed[b]	NA	NA	NA
Sears #1039 (16802)	Closed[b]	NA	NA	NA
Existing Mobile Sources				
Harrison St (20,425 AADT)	Major Roadway	2.0	NA	0.04

Table 12 Summary of Cumulative Health Risks to Future Project Receptors

Sources	Source Type	Cancer Risk (10^{-6})	Chronic Hazard Index	$PM_{2.5}$ ($\mu g/m^3$)
Cumulative Impacts				
	Cumulative Health Risks	48	<0.1	0.1
	City of Oakland's Cumulative Thresholds	100	10.0	0.8
	Exceeds Thresholds?	**No**	**No**	**No**

Notes: $\mu g/m^3$ = micrograms per cubic meter
NA = not applicable
[a] Information about the source type was not reported by the BAAQMD.
[b] According to the BAAQMD, these stationary sources have been closed and do not pose potential health risks or hazards to nearby sensitive receptors.
Sources: Health risk screening values derived from the BAAQMD's Tools and Methodologies. Available at: http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools, accessed January 2017.
Average annual daily traffic (AADT) volumes reported by Kalibrate Technologies (2016).

C. Biological Resources

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; Have a substantial adverse effect on federally protected wetlands (as defined by Section 404 of the Clean Water Act) or state protected wetlands, through direct removal, filling, hydrological interruption, or other means; Substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;	■	☐	☐
b. Fundamentally conflict with the City of Oakland Tree Protection Ordinance (Oakland Municipal Code [OMC] Chapter 12.36) by removal of protected trees under certain circumstances; or Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources.	■	☐	☐

Program EIR Findings

Special-status species, wildlife corridors, riparian and sensitive habitat, wetlands, and tree and creek restoration were analyzed in each of the Program EIRs, which found that effects to these topics would be less than significant. The 2011 Renewal Plan EIR and the 2010 Housing Element EIR and 2014 Addendum cited applicable SCAs that would ensure less-than-significant biological resource effects. The 1998 LUTE EIR did not identify any significant biological impacts and no mitigation measures were needed.

Project Analysis

Special-Status Species, Wildlife Corridors, Riparian and Sensitive Habitat, Wetlands, Tree and Creek Protection (Criteria 3.a and 3.b)

The project site is developed with a commercial building and is entirely covered with impervious surfaces. There is no vegetation on the site and there are no street trees immediately adjacent to the site. A few street trees are located north of the site, but these trees are not connected to other nearby natural habitats and would not constitute a wildlife corridor. In addition, there are no natural sensitive communities in the area.

The project would plant new street trees and install landscaping on the podium level roof terrace. As described in Chapter VI.H, Hydrology and Water Quality, stormwater would be treated consistent with C.3 requirements.

Conclusion

Consistent with the findings of the Program EIRs, the proposed project would not result in any significant impacts related to biological resources. Further, based on an examination of the analysis, findings, and conclusions of the Program EIRs considered in this analysis, implementation of the proposed project would not substantially increase the severity of impacts identified in the Program EIRs, nor would the proposed project result in new significant impacts related to biological resources that were not identified other Program EIRs. The Program EIRs did not identify any mitigation measures related to biological resources, and none would be needed for the implementation of the project. Furthermore, no SCAs relating to biological resources would apply.

D. Cultural Resources

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5. Specifically, a substantial adverse change includes physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be "materially impaired." The significance of an historical resource is "materially impaired" when a project demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that convey its historical significance **and** that justify its inclusion on, or eligibility for inclusion on an historical resource list (including the California Register of Historical Resources, the National Register of Historic Places, Local Register, or historical resources survey form (DPR Form 523) with a rating of 1-5);	■	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;	■	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or	■	☐	☐
d. Disturb any human remains, including those interred outside of formal cemeteries.	■	☐	☐

Program EIR Findings

Cultural resources, including historic, archaeological, and paleontological resources, were analyzed in the Program EIRs. The 2011 Renewal Plan EIR, which addresses much of the oldest part of Downtown, identified two significant and unavoidable historic cumulative impacts related to city-wide development and cited applicable SCAs and mitigation measures that would minimize the effects; however, they would not be reduced to a less-than-significant level. The 2010 Housing Element EIR and 2014 Addendum found that all impacts related to historic resources, paleontological and archeological resources, and human remains would be less than significant and no mitigation measures would be required. The 1998 LUTE EIR identified impacts related to paleontological and archaeological remains, and demolition, however with the implementation of mitigation measures that are functionally equivalent to current SCAs, these potential impacts were found to be less than significant.

Project Analysis

Historical Resources (Criterion 4a)

The project site is currently developed with a two-story commercial building that was constructed in 1924. The building has an Oakland Cultural Heritage Survey (OCHS) rating of D3, meaning it is a building with Minor Importance and is not in a historic district. A historical resource evaluation report was prepared for the proposed project (see Attachment G). It confirmed the current rating of the property (D3), and found that the structure is not a Potential Designated Historic Property, nor is it a historic resource under CEQA.[33]

The building is a decorative brick garage with retail storefronts. It has a rectangular floor plan and the ground floor contains a series of storefronts and a vehicle entrance to an interior parking garage. There is a straight parapet above exterior walls of mottled brick. The building has two sections. On the south side, the storefront ranging from 1711 to 1729 Webster Street has 12 6-foot-by-10-foot wire glass skylights, a truss roof, one row of wood posts, hollow clay tile walls and a concrete floor. The northern section of the storefront, 1731to 1739 Webster, has seven wire glass skylights, a truss roof, and a reinforced concrete frame infilled with hollow clay tile.

The proposed project would demolish the building. Because the building is not a historic resource under CEQA, the demolition of the building would not result in direct significant historical resource impacts.

The project site is adjacent to the 17th Street Commercial Historic District and several historic properties are located in the vicinity. The 17th Street Commercial Historic District encompasses a portion of 17th Street between Harrison and Franklin Streets and is an Area of Primary Importance (API).[34] Historic properties in the vicinity of the project site include:

- Mentone Arms residential building at 1732-36 Webster Street (a CEQA historic resource)
- Robert A. Howden commercial building at 329-337 17th Street /1628-1630 Webster Street (a City Landmark and a CEQA historic resource within the 17th Street Commercial Historic District)
- Commercial building at 372-378 17th Street (a CEQA historic resource)

[33] Architecture + History, LLC, 2017. Historic Resources Evaluation Report for 1711-1739 Webster Street, Oakland California, March 15. Potential Designated Historic Properties are properties that may be eligible as Designated Historic Properties because they have received either (1) an existing or contingency rating of A, B, or C from the reconnaissance or intensive surveys or (2) have been determined by the surveys to contribute or potentially contribute to an Area of Primary or Secondary Importance.

[34] Architecture + History, LLC, 2017. Historic Resources Evaluation Report for 1711-1739 Webster Street, Oakland, California, March 15.

- Holmes commercial building at 1700-06 Franklin Street/380-398 17th Street (a CEQA historic resource within the 17th Street Commercial Historic District)
- Elvin Building commercial building at 1701-1709 Webster Street/350-370 17th Street (a CEQA historic resource within the 17th Street Commercial Historic District)
- W.G. Gilmour commercial building at 351-373 17th Street /1635 Webster Street (a CEQA historic resource within the 17th Street Commercial Historic District)
- Leamington Hotel and Annex commercial buildings at 1800-1826 Franklin /365-385 19th Street and 1736-1742 Franklin Street (a City Landmark and a CEQA historic resource)
- Commercial building at 1803 Webster Street /351-361 19th Street
- Commercial building at 1830 Webster /337-343 19th Street
- Paramount Theatre commercial building at 2525 Broadway (a City Landmark and a CEQA historic resource)
- First Church of Christ Scientist vacant church building at 1701 Franklin Street (a CEQA historic resource)

The proposed project would include new construction located adjacent to individually significant historic resources and near, but not within the boundaries of the historic district. The proposed project would not result in the removal of any character-defining features of the nearby historic district and while it would be considerably taller than the nearby historic resources, it would not materially impair any of the adjacent historic properties, either within the same block or in adjacent blocks. The proposed height of the building is allowed by zoning and any shadows cast by it on nearby historic resources would not render those historic resources ineligible for inclusion in any federal, state or local registers. See Chapter VI.A, Aesthetics, Shadow, and Wind, for further information about shadows and shading. Further, the proposed project would not impair the significance of those historic resources surrounding the site.

Archaeological and Paleontological Resources and Human Remains (Criteria 4.b, 4.c, and 4.d)

The proposed project would entail excavation to a depth of approximately 17 feet below grade. The proposed project site appears to be underlain by a fill layer that extends approximately 5 feet below existing grade, according to the Phase II Environmental Site Assessment prepared for the project site.[35] Soils generally below the fill layer may have potential for unknown archaeological or paleontological resources. The City's SCAs related to archaeological and paleontological resources and human remains would apply to the project and reduce any potential impacts to a less-than-significant level. The proposed project would be required to implement SCAs related to the discovery of archaeological and paleontological resources during construction and the discovery of human remains during construction, as identified in Attachment A, including SCA-CUL-1: Archaeological and Paleontological Resources

[35] AECOM. 2016. Phase II Environmental Site Assessment Report: Douglas Parking Company Property, 1721 Webster Street, Oakland, California, July 22.

– Discovery During Construction (#29) and SCA-CUL-2: Human Remains – Discovery During Construction (#31).

Conclusion

Based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the proposed project would not substantially increase the severity of significant cultural impacts identified in the Program EIRs, nor would it result in new significant impacts related to historical, archaeological, and paleontological resources that were not identified in the Program EIRs. The proposed project would be required to implement City of Oakland SCAs related to archaeological and paleontological resources, and human remains as identified in Attachment A. For reference, these are SCA-CUL-1: Archaeological and Paleontological Resources – Discovery During Construction (#29), and SCA-CUL-2: Human Remains – Discovery During Construction (#31).

E. Geology, Soils, and Geohazards

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Expose people or structures to substantial risk of loss, injury, or death involving: • Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or Seismic Hazards Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; • Strong seismic ground shaking; • Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, collapse; or • Landslides;	■	☐	☐
b. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007, as it may be revised), creating substantial risks to life or property; result in substantial soil erosion or loss of topsoil, creating substantial risks to life, property, or creeks/waterways.	■	☐	☐

Program EIR Findings

Geology, soil erosion, and seismic geohazards were analyzed in the Program EIRs and impacts were found to be less than significant and no mitigation measures were required.

Project Analysis

Exposure to Risk of Loss, Injury, or Death Involving Fault Rupture, Seismic-Related Shaking, Liquefaction, Lateral Spreading, Subsidence, or Collapse, or Landslides (Criterion 5.a)

The project site is not located within or adjacent to an Alquist-Priolo Earthquake Fault Zone.[36] Therefore, the proposed project would not result in significant impacts with respect to rupture of a known earthquake fault. Furthermore, the project site is also not within a liquefaction hazard zone or earthquake-induced landslides hazard zone, as designated on a map prepared by the California Geological Survey.[37] Based on the relatively flat topography of the project site and surrounding area, landslides would not pose a risk to the proposed project.

[36] California Department of Conservation, 1982. Special Studies Zones, Oakland West, January 1.
[37] California Geological Survey (CGS), 2003. State of California Seismic Hazard Zones, Oakland West Quadrangle Official Map, February 14.

The project site is in a seismically active region, and the nearest active fault is the Hayward Fault, which is located approximately 7.8 miles northeast of the proposed project site. [38] The project site would experience very strong shaking in the event of a magnitude 6.8 earthquake on the Hayward Fault. [39]

A preliminary geotechnical investigation was performed for the proposed project using data collected from the site and site vicinity to evaluate the potential for earthquake-induced geologic hazards, including ground shaking, ground surface rupture, liquefaction, lateral spreading, and cyclic densification (also referred to as differential compaction) in the vicinity of the project site.[40] The findings of the preliminary geotechnical investigation are summarized below.

The project site is generally underlain by 14 feet of interbedded medium-dense to dense silty sand and clayey sand. The sand is underlain by the Merritt Sand that is composed of very dense sands and very stiff fine-grained material. Because of the age of the soil deposits and the inherent soil characteristics typically encountered in the Merritt Sand, the probability of liquefaction at the project site is low and the estimated post-liquefaction settlement at the site would likely be negligible. In addition, due to the relatively flat site and the absence of a continuous potentially liquefiable layer, the potential for lateral spreading to occur at the project site is low.

Because the site is primarily underlain by stiff to very stiff fine-grained deposits and dense to very dense granular deposits (which tend not to be subject to substantial differential compaction), the potential for cyclic densification to occur at the project site is very low.

The preliminary geotechnical investigation concluded that there are no major geotechnical or geological issues that would preclude development of the proposed project; and the primary geotechnical issues affecting the proposed development include: 1) the shallow groundwater relative to the bottom of excavation for the below-grade parking level; and 2) the provision of adequate vertical and lateral support for the proposed structure. The preliminary geotechnical investigation recommended that a final geotechnical report be prepared prior to final design, which may require a supplemental field investigation.

The proposed project would be required to comply with the City's SCAs related to geology and soils prior to approval of construction-related permits. This includes SCA-GEO-1: Construction-Related Permit(s) (#33) which would require the proposed project to comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction. Compliance with SCA-GEO-2: Soils Report (#34) would require

[38] Rockridge Geotechnical, 2016. Preliminary Geotechnical Investigation Due Diligence Evaluation for 1721 Webster Street, Oakland, California, June 13.

[39] Association of Bay Area Governments (ABAG), 2016. Shaking Severity Map. http://gis.abag.ca.gov/website/Hazards/?hlyr=haywardSouth&co=6001, accessed December 2.

[40] Rockridge Geotechnical, 2016. Preliminary Geotechnical Investigation Due Diligence Evaluation for 1721 Webster Street, Oakland, California, June 13.

the proposed project to implement the recommendations of a soils report prepared by a registered geotechnical engineer. The soils report must contain, at a minimum, field test results and observations regarding the nature, distribution and strength of existing soils, and recommendations for appropriate grading practices and project design.

Compliance with the SCAs discussed above would ensure that the proposed project would be designed and constructed to withstand seismic and geologic hazards which would minimize exposure of people and structures to substantial risk of loss, injury, or death during a large regional earthquake. Therefore, the proposed project would not result in significant impacts with respect to ground shaking and seismic-related ground failure.

Expansive Soil, Erosion or Loss of Topsoil, Creating Substantial Risks to Life, Property, or Creeks/Waterways. (Criterion 5.b)

Expansive soils have high clay content, and the preliminary geotechnical investigation indicated that the project site is underlain by medium dense to dense silty sand and clayey sand. Therefore, based on the preliminary geotechnical investigation, expansive soils are not anticipated to be a potential geologic hazard for the project site. However, if the site-specific soil investigation and soils report (as required by SCA-GEO-2) identify expansive soils beneath the project site, implementation of the geotechnical recommendations in the soils report would ensure that potential hazards associated with expansive soils would be mitigated to a less than significant level through appropriate foundation design.

The proposed project would require excavation of approximately 14,500 cubic yards of soil to accommodate the proposed basement level. Projects within the City that propose to excavate more than 500 cubic yards of soil are required to obtain a grading permit. Because the proposed project would require a grading permit, the project would be required to comply with SCA-HYD-1: Erosion and Sedimentation Control Plan for Construction (#45), which requires the implementation of an Erosion and Sedimentation Control Plan, which would minimize erosion and loss of top soil during construction. Following the completion of construction, there would be no exposed soil on the project site which could be subject to erosion. Therefore, the proposed project would not result in significant impacts with respect to substantial soil erosion or loss of topsoil.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the proposed project would not result in any new or more severe significant impacts related to geology, soils, and geohazards than those identified in the Program EIRs. SCAs related to soils, construction, grading, and erosion and sedimentation control would apply to the project, as identified in Attachment A at the end of the CEQA Checklist. For reference these are: SCA-GEO-1: Construction-Related Permit[s] (#33), SCA-GEO-2: Soils Report (#34), and SCA-HYD-1: Erosion and Sedimentation Control Plan for Construction (#45).

F. Greenhouse Gas and Climate Change

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, specifically: • For a project involving a stationary source, produce total emissions of more than 10,000 metric tons of CO_2e annually. • For a project involving a land use development, produce total emissions of more than 1,100 metric tons of CO_2e annually AND more than 4.6 metric tons of CO_2e per service population annually. The service population includes both the residents and the employees of the project. The project's impact would be considered significant if the emissions exceed BOTH the 1,100 metric tons threshold and the 4.6 metric tons threshold. Accordingly, the impact would be considered less than significant if the project's emissions are below EITHER of these thresholds.	■	☐	☐
b. Fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions.	■	☐	☐

Program EIR Findings

Climate change and greenhouse gas (GHG) emissions were not expressly addressed in the 1998 LUTE EIR. Since information on climate change and greenhouse gas emissions was known, or could have been known, when the Program EIR was certified, it is not actually new information as specifically defined under CEQA. This is consistent with the First District Court of Appeal's ruling in Concerned Dublin Citizens v. City of Dublin, 214 Cal.App.4th 1301 (2013). The 2011 Renewal Plan EIR identified less-than-significant GHG impacts with the incorporation of applicable City of Oakland's SCAs. No mitigation measures were necessary.

The proposed project under the 1998 LUTE EIR and the 2011 Renewal Plan EIR is required to evaluate impacts related to GHG emissions from construction and operation. The CEQA Guidelines by the Bay Area Air Quality Management District (BAAQMD) also require project-level GHG emissions to be quantified and disclosed for the purpose of providing more information to the lead agency and the public. The proposed project would be subject to the City of Oakland's SCAs.

Project Analysis

As described under Chapter VI.B, Air Quality, the City of Oakland has adopted thresholds of significance recommended by the BAAQMD[41] to evaluate potential impacts to the existing environment from GHG emissions. The BAAQMD's thresholds of significance for GHG emissions, which are defined in terms of carbon dioxide equivalents (CO_2e), were designed to ensure compliance with the State's Assembly Bill (AB) 32 GHG reduction goals. Under AB 32, the State is required to reduce GHG emissions to 1990 levels by 2030. The GHG thresholds adopted by the City are supported by substantial evidence presented in the BAAQMD's Revised Draft Options and Justification Report.[42]

Greenhouse Gas Emissions Generation (Criteria 6.a)

The BAAQMD recommends using the most current version of the California Emissions Estimator Model (CalEEMod version 2016.3.1) to estimate construction and operation emissions for a land use project. CalEEMod uses widely accepted models for emission estimates combined with appropriate default data for a variety of land use projects that can be used if site-specific information is not available. The default data (e.g., emission factors) are supported by substantial evidence provided by regulatory agencies and a combination of statewide and regional surveys of existing land uses and resources. The primary input data used to estimate emissions associated with construction and operation of the proposed project are conservatively based on the maximum project development scenario, as shown in Tables 3 and 4. Project emissions were estimated for 2020, which is the earliest expected year of operation. Since statewide vehicle emission standards are required to improve over time in accordance with the Pavley (AB 1493) and Low-Emission Vehicle regulations (Title 13, California Code of Regulations, Section 1961.2), estimating emissions for the earliest year of operation provides the maximum annual emissions. Additional project-specific information used to calculate GHG emissions in CalEEMod, including changes to default data, is summarized in Table 13.

[41] Bay Area Air Quality Management District (BAAQMD), 2010. Proposed Air Quality CEQA Thresholds of Significance, May 3.

[42] Bay Area Air Quality Management District (BAAQMD), 2009. Revised Draft Options and Justification Report; California Environmental Quality Act Thresholds of Significance, October.

Table 13 Summary of Project-Specific Assumptions for CalEEMod

CalEEMod Input Category	Assumptions and Changes to Default Data
Construction Phase	A project-specific construction schedule and equipment list with estimated hours of operation was used for the project (see Attachment F). Construction is expected to begin in December 2017 and last about 26 months.
Material Movement	Approximately 14,500 cubic yards of soil export is anticipated.
Demolition	Approximately 2,500 tons of demolition debris is expected to be hauled off-site.
Utility provider	Based on review of Pacific Gas & Electric's (2015) *Greenhouse Gas Emission Factors: Guidance for PG&E Customers*, the default CO_2 intensity factor reported for 2008 was updated to the most recent CO_2 intensity factor verified by a third party in 2013.
Vehicle Trips	Daily trip rates for each type of land use were adjusted according to the project traffic analysis (see Chapter VI.M, Transportation and Circulation). These trip estimates account for a 43 percent trip reduction based on the City of Oakland's Transportation Impact Study Guidelines data for development in an urban environment within ½-mile of a BART station.
Fireplaces and Woodstoves	It was assumed that there would be no fireplaces or woodstoves.
Wastewater	Based on the design of the East Bay Municipal Utility District's Wastewater Treatment Plant, emissions estimated from wastewater treatment assumed a process with 100 percent aerobic biodegradation and 100 percent anaerobic digestion with cogeneration.
Water Use	In accordance with the City of Oakland's Green Building Ordinance, the proposed project will implement mandatory measures from the statewide CALGreen Code to reduce indoor water use by approximately 20 percent.
Stationary Sources	In accordance with the California Building Code, an emergency generator would be required for the project. It was assumed that a maximum 1,000 horsepower diesel generator would be used for non-emergency operation up to 50 hours per year (for routine testing and maintenance).

Notes: Construction assumptions were based on information provided by the project sponsor. Default CalEEMod data used for all other parameters not described.
Source: NASH-Holland 1721 Webster Investors, 2017. BASELINE Environmental Consulting, 2017 (see Attachment F).

The City has adopted a Green Building Ordinance for private development projects that requires projects to implement mandatory measures from the statewide CALGreen Code and complete a Green Building Compliance Checklist (e.g., LEED or GreenPoint Rater).[43] While the proposed project would have to comply with the mandatory measures described under the current CALGreen Code, which would reduce indoor water use by approximately 20 percent, implementation of other building efficiency measures that could result in additional GHG reductions were not quantifiable, and therefore are not accounted for in the GHG analysis using CalEEMod. In addition, potential GHG reductions associated with implementation of the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017, were not accounted for in the GHG analysis using CalEEMod. Therefore, the analysis of GHG impacts for the proposed project is conservative.

[43] Rating system and checklist determined by City of Oakland Planning Department based on square footage of each land use.

In accordance with the City of Oakland's CEQA guidance for evaluating the GHG thresholds of significance, the construction CO_2e emissions were annualized over a period of 40 years and then added to the expected CO_2e emissions during operation. For this analysis, the service population was estimated as 562 persons for the maximum development scenario.[44]

According to the CEQA streamlining provisions described under Senate Bill (SB) 375, certain mixed-use residential projects that are consistent with the general use designation, density, building intensity, and applicable policies specified in a Sustainable Communities Strategy do not need to analyze climate change impacts resulting from cars and light-duty trucks. As defined in Public Resources Code (PRC) Section 21159.28(d), a mixed-use residential project is a project where at least 75 percent of the total building square footage of the project consists of residential use or a Transit Priority Project as defined in PRC Section 21155(b). A Transit Priority Project must contain the following:

1) At least 50 percent residential use based on total building square footage, and, if the project contains between 26 and 50 percent non-residential uses, a floor area ratio (FAR) of no less than 0.75
2) A minimum net density of at least 20 dwelling units per acre
3) Be within ½-mile of a major transit stop or high-quality transit corridor[45] included in a regional transportation plan

Under the maximum development scenario, there would be about 68 percent residential based on total building square footage, about 481 residential units per acre, and a BART station within a ½-mile of the project. According to PRC Section 21159.28[d], the proposed project meets the definition of a mixed-use residential project per PRC Section 21159.28[d].

The adopted Plan Bay Area[46] serves as the Sustainable Communities Strategy for the Bay Area. As defined by Plan Bay Area, Priority Development Areas (PDAs) are areas where new development will support the needs of residents and workers in a pedestrian-friendly environment served by transit. According to the Metropolitan Transportation Commission, the proposed project is located within a PDA.[47] Furthermore, the proposed project is permitted in the zoning district where the project site is located, and is consistent with the bulk, density, and land uses envisioned for the site. Therefore, since the proposed project qualifies as a mixed-use residential project pursuant to PRC Section 21159.28(d) and is consistent with the applicable provisions of Plan Bay Area, the estimated GHG emissions from cars and light-duty

[44] Service population was based on the Alameda County Transportation Commission Model used in the transportation analysis which assumes approximately 2.1 persons per residential unit, 3 persons per 1,000 square-feet of office, and 2.5 persons per 1,000 square-feet of retail.

[45] A high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

[46] Metropolitan Transportation Commission and Association of Bay Area Governments, 2013. Plan Bay Area, Strategy for a Sustainable Region, http://www.planbayarea.org/news/story/Plan-Bay-Area-Adopted.html, accessed November 18.

[47] Metropolitan Transportation Commission (MTC), 2016. Priority Development Area (PDA) and Transit Priority Area (TPA) Map for CEQA Streamlining. http://planbayarea.org/misc/Map-CEQA-Streamlining.html, accessed on November 18.

trucks are excluded from the GHG analysis. See Chapter VI.1, Aesthetic, Shadow, and Wind, Analysis, and Attachment C for additional discussion regarding how the proposed project meets the requirements for a Transit Priority Project.

As shown in Table 14, the total average annual CO_2e emissions and the total average annual CO_2e emissions per service population for the proposed project are compared to the City's GHG thresholds of significance. While the estimated CO_2e emissions from the proposed project would be above the City's annual emissions threshold, they would be below the efficiency threshold (based on the service population) for the maximum development scenario. Therefore, construction and operation of the proposed project would have a less-than-significant impact on global climate change.

Table 14 Summary of Average GHG Emissions for the Maximum Development Scenario

Emission Source	**CO_2e (MT/Year)**	**CO_2e (MT/Year/Service Populations)**
Construction[a]	22.5	0.04
Operation – Area	3.1	0.01
Operation – Energy	577.2	1.03
Operation – Mobile[b]	510.6	0.91
Operation – Waste	77.5	0.14
Operation – Water	31.4	0.06
Total Project Emissions	1,222	2.17
Thresholds of Significance	1,100	4.6
Exceeds Thresholds?	**Yes**	**No**

Notes: MT = metric tons; SP = service population
[a] In accordance with CEQA guidance from the City of Oakland, GHG emissions during construction are amortized over 40 years.
[b] In accordance with SB 375 CEQA streamlining provisions, GHG emissions during operation exclude vehicle trips from cars and light-duty trucks.
Source: BASELINE Environmental Consulting, 2017 (see Attachment F).

The proposed project includes a mixed-use residential building that would exceed five stories in height. Therefore, in accordance with the California Building Code, the proposed project would be required to operate an emergency generator for the elevator system; the emergency generator must comply with the BAAQMD's permit requirements for a stationary source. The BAAQMD recommends analyzing GHG emissions from permitted stationary sources separately from a project's operational emissions. It was assumed that a maximum 1,000-horsepower diesel generator would be used for non-emergency operation up to 50 hours per year (for routine testing and maintenance). The CO_2e emissions calculated by CalEEMod are shown in Table 15.

The maximum emissions of CO_2e from the emergency diesel generator are below the City's stationary-source threshold. Therefore, routine testing and maintenance of the emergency generator would have a less-than-significant impact on global climate change.

Overall, the land-based and stationary source operations of the proposed project would not substantially increase the severity of significant impacts identified in the previous CEQA documents, nor would it result in new significant impacts related to GHG emissions that were not identified in the previous CEQA documents.

Table 15 Summary of Average GHG Emissions from Emergency Generator

Stationary Source	**CO_2e (MT/year)**
Emergency Generator	19
Threshold of Significance	10,000
Exceeds Threshold?	**No**

Notes: MT = metric tons
Source: BASELINE Environmental Consulting, 2017 (see Attachment F).

Consistency with GHG Emissions and Policies (Criteria 6.b)

In December 2012, the City adopted the Energy and Climate Action Plan (ECAP). The purpose of the ECAP is to identify and prioritize actions the City can take to reduce energy consumption and GHG emissions associated with the City. The ECAP outlines a 10-year plan including more than 150 actions that will enable the City to achieve a 36 percent reduction in GHG emissions below the 2005 level by 2020.[48] These measures support implementation of the green planning policies in the City of Oakland's General Plan by promoting energy efficiency and minimizing vehicle emissions. The proposed project is consistent with, and would not hinder, the GHG reduction goals set forth in the ECAP and the green planning policies of the General Plan because the proposed project would promote land use patterns and densities that help improve regional air quality conditions, as demonstrated by its compliance with Plan Bay Area's preferred development scenario. The proposed project would also be required to comply with the City's Green Building Ordinance, which supports the goals, policies, and actions of the ECAP and General Plan.

The proposed project is subject to the City's SCAs, some of which reduce GHG emissions. These include but are not limited to preparation and implementation of a Transportation and Parking Demand Management (TDM) Plan under SCA-TRANS-1: Transportation and Parking Demand Management (#71) and a Construction and Demolition Waste Reduction and Recycling Plan under SCA-UTIL-3: Construction and Demolition Waste Reduction and Recycling (#74). The proposed project would not be subject to a GHG Reduction Plan under the City's SCA (#38), because estimated GHG emissions are below the City's thresholds of significance and the

[48] City of Oakland, 2012. Energy and Climate Action Plan, December 4.

proposed project is not large enough to trigger the requirement for a GHG Reduction plan. Overall, the proposed project would not conflict with applicable GHG plans, policies or regulations and this impact would be less than significant. Furthermore, the proposed project would not substantially increase the severity of significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to GHG emissions that were not identified in the Program EIRs.

Conclusion

Based on the analysis and the findings and conclusions of the Program EIRs, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to GHG emissions that were not identified in the Program EIRs. No mitigation measures are required. The following SCAs would be applicable to the proposed project: SCA-TRANS-1: Transportation and Parking Demand Management (#71) and SCA-UTIL-3: Construction and Demolition Waste Reduction and Recycling (#74). These SCAs are included in Attachment A.

G. Hazards and Hazardous Materials

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; Create a significant hazard to the public through the storage or use of acutely hazardous materials near sensitive receptors; Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (i.e., the Cortese List) and, as a result, would create a significant hazard to the public or the environment;	■	☐	☐
b. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school;	■	☐	☐
c. Result in less than two emergency access routes for streets exceeding 600 feet in length unless otherwise determined to be acceptable by the Fire Chief, or his/her designee, in specific instances due to climatic, geographic, topographic, or other conditions; or Fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	■	☐	☐

Program EIR Findings

Hazards and hazardous materials were analyzed in the Program EIRS, which found that effects to these topics would be less than significant, based on compliance with applicable regulatory requirements and City programs and policies, which would minimize hazards to workers, visitors, the public, and the environment from hazardous materials.

The 2010 Housing Element EIR and 2014 Addendum identified less-than- significant impacts and therefore no mitigation measures or SCAs were required for hazards and hazardous materials. The 2011 Renewal Plan EIR identified applicable City of Oakland SCAs addressing hazardous materials used during construction, hazardous building materials that could be disturbed by demolition, and hazardous materials that could be present in soil and groundwater. The 2011 Renewal Plan EIR also found that development facilitated by the 2011 Renewal Plan EIR would not impede an emergency access route and would continue to maintain the existing city grid system. The 1998 LUTE EIR identified one significant impact related to hazardous waste exposure and cited Mitigation Measure M.5, which requires the preparation and implementation of site-specific health and safety plans, as recommended by the Occupational Safety and Health Administration and is functionally equivalent to current SCAs in order to reduce certain potential hazardous materials effects to less-than-significant levels.

Project Analysis

Hazardous Materials Use, Storage and Disposal and Hazardous Building Materials (Criterion 7.a)

Construction of the proposed project would involve demolition of the existing structures on the project site which may contain hazardous building materials including lead-based paint (LBP), asbestos-containing materials (ACMs), and polychlorinated biphenyls (PCBs) containing materials and equipment. If not appropriately removed and disposed of, these hazardous materials could be released into the environment which may adversely affect construction workers, the public, and/or the environment.

Per SCA-HAZ-1: Hazardous Building Materials and Site Contamination (#40), a Hazardous Building Materials Assessment will be performed to identify potential hazardous materials in the existing building, including any LBP, ACMs, PCB containing light ballasts, and mercury containing fluorescent lights. The assessment will be submitted to the City for review. If hazardous materials are identified in the exiting building, the project applicant will submit specifications signed by a qualified environmental professional for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. The project applicant will implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.

As described in the 2011 Renewal Plan EIR, California Health and Safety Code Section 19827.5 allows local agencies to issue demolition or alteration permits only after the applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants including asbestos. The proposed project would be required to comply with SCA-AIR-3: Asbestos in Structures (#23), which requires the project applicant to comply with all applicable laws and regulations regarding demolition and renovation of ACMs, including but not limited to California Code of Regulations Title 8; California Business and Professions Code Division 3; California Health and Safety Code Sections 25915-25919.7; and BAAQMD Regulation 11, Rule 2, as may be amended. Evidence of compliance must be submitted to the City upon request. The proposed project would be required to comply with SCA-HAZ-2: Hazardous Materials Related to Construction (# 39), which requires implementation of lead-safe work practices and compliance with all local, regional, state, and federal requirements concerning lead.

In addition, consistent with the findings of the Program EIRs, the proposed project would be required to properly handle and dispose of electrical equipment, lighting ballasts and other building materials that may be identified to contain PCBs in accordance with the Toxic Substances Control Act and other federal and State regulations.

Construction of the proposed project would involve the use and transport of hazardous materials. These materials could include fuels, oils, paints and other chemicals used during construction activities. Handling and transportation of hazardous materials could result in accidental releases or spills and associated health risks to workers, the public, and environment. The proposed project would be required to comply with SCA-HAZ-2: Hazardous Materials Related to Construction (#39), which requires that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health which could occur as a result of hazardous materials handling and storage.

Exposure to Hazardous Materials in the Subsurface (Criterion 7.a)

The project site has been the subject of environmental investigations and cleanup actions in association with releases from former gasoline underground storage tanks,[49] and is therefore included on the list of hazardous materials release sites compiled pursuant to Government Code Section 65962.5 (i.e., the Cortese List). Alameda County Environmental Health (ACEH) is currently overseeing the investigation and cleanup activities associated with the former USTs located on the eastern side of the project site. A substantial amount of cleanup has already occurred, including enhanced biodegradation, in situ chemical oxidation, and operation of an air sparing/soil vapor extraction system from approximately 2007 to 2010. A recent Phase II Environmental Site Assessment (ESA)[50] indicated that residual contaminated soil and groundwater remain beneath the eastern portion of the project site. Construction related excavation of residual contaminated soil and groundwater removal will be overseen by ACEH. The Phase II ESA recommended the preparation of a Soil and Groundwater Management Plan establishing procedures to ensure protection of workers and the environment, and that if new

[49] AECOM, 2016. Phase II Environmental Site Assessment Report, Douglas Parking Company Property, 1721 Webster Street, Oakland, California, July 22.

[50] AECOM, 2016. Phase II Environmental Site Assessment Report, Douglas Parking Company Property, 1721 Webster Street, Oakland, California, July 22.

or more significant contamination is encountered during site redevelopment earthwork, any cleanup actions be performed consistent with applicable laws and local agency requirements.

The proposed project would be required to comply with SCA-HAZ-1: Hazardous Building Materials and Site Contamination (#40), which would replace the requirement for implementation of 1998 LUTE EIR Mitigation Measure M.5, and requires the project applicant to implement recommendations of the Phase II ESA and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, State, or federal regulatory agency. The project applicant would be required to submit a Health and Safety Plan for the review and approval by the City, and implement the approved plan to protect project construction workers from risks associated with hazardous materials. The project applicant would be required to ensure that BMPs are implemented by the contractor during construction to minimize potential hazards related to contaminated soil and groundwater.

Hazardous Materials within a ¼-Mile of a School (Criterion 7b)

The Oakland School for the Arts at 530 18th Street is approximately ⅕-mile northwest of the project site. No other schools are located within a ¼-mile of the project site.[51] The proposed project would not involve the handling of acutely hazardous materials. Consistent with the findings of the 2011 Renewal Plan EIR, compliance with SCAs described above that address potential emissions of hazardous materials during construction, would reduce potential impacts from the proposed project related to hazardous emissions or the handling of hazardous materials, substances, or waste within ¼-mile of a school to a less-than-significant level.

Emergency Access Routes (Criteria 7.c)

The proposed project may require temporary closure of a portion of Webster Street. Consistent with the findings of the 2011 Renewal Plan EIR, the proposed project would not alter roadways in the area, and therefore would not impact the emergency access routes or impair implementation of an emergency response plan or emergency evacuation plan. The Safety Element of the City of Oakland General Plan[52] indicates that the emergency evacuation routes in the vicinity of the project site include Harrison Street, Broadway, and 14th Street. Construction of the proposed project would not impact these nearby designated evacuation routes. Traffic control requirements imposed by the City for the permitting of temporary closure of streets areas would ensure that appropriate emergency access is maintained at all times during construction activities.

[51] California Department of Education, 2016. California School Directory. Accessed March 3. http://www.cde.ca.gov/re/sd/

[52] City of Oakland, 2004. General Plan, Safety Element, Figure 7.2. Amended 2012. http://www2.oaklandnet.com/government/o/PBN/OurServices/GeneralPlan/DOWD009020, accessed November 18.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the Program EIRs, and the review of recent reports regarding hazardous materials conditions at the project site, implementation of the proposed project would not increase the severity of potentially significant impacts identified in the Program EIRs, nor would it result in new potentially significant impacts related to hazards and hazardous materials that were not identified in the Program EIRs. The proposed project would comply with the applicable regulations and SCAs related to contaminated soil and groundwater, hazardous materials handling, and removal of hazardous building materials prior to demolition, as identified in Attachment A at the end of the CEQA Checklist. For reference, these SCAs are: SCA-HAZ-1: Hazardous Building Materials and Site Contamination (#40), SCA-HAZ-2: Hazardous Materials Related to Construction (#39), and SCA-AIR-3: Asbestos in Structures (#23).

H. Hydrology and Water Quality

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Violate any water quality standards or waste discharge requirements; Result in substantial erosion or siltation on or off site that would affect the quality of receiving waters; Create or contribute substantial runoff which would be an additional source of polluted runoff; Otherwise substantially degrade water quality; Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect hydrologic resources.	■	☐	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or proposed uses for which permits have been granted);	■	☐	☐
c. Create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems; Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course, or increasing the rate or amount of flow, of a creek, river, or stream in a manner that would result in substantial erosion, siltation, or flooding, both on or off site.	■	☐	☐

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
d. Result in substantial flooding on or off site; Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, that would impede or redirect flood flows; Place within a 100-year flood hazard area structures which would impede or redirect flood flows; or Expose people or structures to a substantial risk of loss, injury, or death involving flooding.	■	☐	☐

Program EIR Findings

Hydrology and water quality were analyzed in the Program EIRs, and the impacts were found to be less than significant and no mitigation measures were required. The 2011 Renewal Plan EIR cited applicable SCAs that would ensure less-than-significant effects to hydrology and water quality. The 2010 Housing Element EIR and 2014 Addendum identified less-than-significant hydrology or water quality impacts and therefore no mitigation measures or equivalent SCAs were cited.

Project Analysis

Water Quality and Creek Protection (Criterion 8.a)

The proposed project is located within a highly urbanized environment and there are no lakes, creeks or other surface waters in the immediate proximity. Lake Merritt, which is the nearest surface water body, is approximately 1,100 feet to the east and is separated from the project site by urban development and Snow Park. Stormwater runoff from the project site is conveyed to Lake Merritt via underground storm drains and culverts.

Construction of the proposed project would involve demolition, grading, and construction, all of which could result in pollution of stormwater runoff, erosion and/or sedimentation, and adverse effects on downstream receiving waters. Additionally, direct discharge of contaminated dewatering effluent during construction of below-ground facilities could result in impacts to the environment from the discharge of sediment and chemical compounds to receiving waters. As discussed under Chapter VI.G, Hazards and Hazardous Materials, the proposed project would be required to comply with SCA-HAZ-1: Hazardous Building Materials and Site Contamination (#40) and SCA-HAZ-2: Hazardous Materials Related to Construction (#39) which require Best Management Practices (BMPs) to be implemented during construction to minimize potential negative effects on groundwater and receiving waters which could result from inappropriate handling of construction related hazardous materials (e.g., fuels, oils, and paints) and contaminated soil and groundwater during construction.

Any groundwater dewatering would be subject to permits from East Bay Municipal Utility District (EBMUD) or the Regional Water Quality Control Board (RWQCB), depending if the discharge were to the sanitary or storm sewer system. If the water is not suitable for discharge to the storm drain (receiving water), dewatering effluent may be discharged to EBMUD's sanitary sewer system if special discharge criteria are met. These include, but are not limited to, application of treatment technologies or BMPs which would result in achieving compliance with the wastewater discharge limits. Discharges to EBMUD's facilities must occur under a Special Discharge Permit. In addition, per the EBMUD Wastewater Ordinance, "all dischargers, other than residential, whose wastewater requires special regulation or contains industrial wastes requiring source control shall secure a wastewater discharge permit" (Title IV, Section 1). EBMUD also operates its wastewater treatment facilities in accordance with Waste Discharge Requirements issued by the RWQCB, which require rigorous monitoring of effluent to ensure discharges do not adversely impact receiving water quality.

The proposed project would require a grading permit and therefore would be required to comply with SCA-HYD-1: Erosion and Sedimentation Control Plan for Construction (#45) which requires preparation and implementation of an Erosion and Sedimentation Control Plan to manage stormwater runoff and minimize erosion and sedimentation through measures such as barriers and devices to trap, store and filter runoff. In addition, because the proposed project would involve replacement of over 10,000 square feet of impervious surfaces, the proposed project would be required to comply with Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) Municipal Regional Permit (MRP).[53] Regulated projects are required to incorporate post-construction stormwater management measures to reduce stormwater pollution from all new and replaced impervious surfaces. The proposed project may be qualified for treatment reduction credits based on criteria designated in Provision C.3 of the MRP, which includes: proximity to an existing transit hub, the density achieved by the project (expressed as floor area ratio and dwelling units per acre), and minimized surface parking. The proposed project is located in an area that is exempt from hydromodification[54] requirements of Provision C.3 of the MRP.[55]

The proposed project would be required to comply with SCA-HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects (#50), which requires compliance with provision C.3 of

[53] San Francisco Bay Regional Water Quality Control Board (RWQCB), 2015. San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049, NPDES Permit No. CAS612008, November 19.

[54] Hydromodification is defined as the modification of a stream's hydrograph, caused in general by increases in flows and durations that result when land is developed (e.g., made more impervious). The effects of hydromodification include, but are not limited to, increased bed and bank erosion, loss of habitat, increased sediment transport and deposition, and increased flooding.

[55] San Francisco Bay Regional Water Quality Control Board (RWQCB), 2015. San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049, NPDES Permit No. CAS612008, November 19.

the MRP, and the preparation and implementation of a Post-Construction Stormwater Management Plan, which would include and identify stormwater control and treatment systems. Compliance with SCA-HYD-2 also requires the project applicant to enter into a maintenance agreement with the City, to ensure adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures.

Use of Groundwater (Criterion 8.b)

According to a preliminary geotechnical investigation prepared for the proposed project, excavation dewatering may be necessary during construction of the below-grade portion of the proposed building. Excavation for construction of the below-grade portion of the proposed building would extend to a depth of approximately 17 feet. Based on groundwater levels measured in the vicinity of the project site, a groundwater depth of approximately 14 feet was selected as the design high groundwater level, and groundwater level fluctuations on the order of 3 to 4 feet could occur between wet and dry periods.[56] Dewatering during construction would be temporary and have only a localized and short-term effect on groundwater levels. Therefore, depletion of groundwater resources associated with construction-period dewatering would be less than significant. Operation of the proposed project would not involve dewatering or the use of groundwater as potable water is supplied to the project site by EBMUD.

Stormwater Drainage and Drainage Patterns (Criterion 8c)

The project site is currently entirely covered with impervious surfaces of building roof tops, totaling 22,500 square feet. The total post-project impervious surface area would be reduced to 19,880 square feet. The reduction in impervious area would be achieved through construction and operation of roof top gardens, which would reduce the amount of stormwater runoff from the project site in comparison to the existing condition. As described above, stormwater runoff from the project site is currently conveyed to Lake Merritt via underground storm drains and culverts. Stormwater would continue to be conveyed through these same storm drains and culverts as part of the proposed project. Therefore, the proposed project would not increase runoff that could exceed the capacity of existing storm water drainage systems and would not substantially alter the existing drainage pattern of the site or increase the risk of flooding, erosion or sedimentation.

Flooding and Substantial Risks from Flooding (Criterion 8d)

Current floodplain mapping prepared by the Federal Emergency Management Agency (FEMA) indicates that the project site is located outside the 100-year flood hazard area.[57] Therefore, development of the proposed project would not be subject to significant impacts with respect to storm-related flooding.

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[56] Rockridge Geotechnical, 2016. Preliminary Geotechnical Investigation Due Diligence Evaluation for 1721 Webster Street, Oakland, California, June 13.

[57] Federal Emergency Management Agency, 2009. Flood Insurance Rate Map, Alameda County, California and Incorporated Areas, Panel 67 of 725, Map Number 06001C0067G, August 3.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the proposed project would not result in any new or more severe significant impacts related to hydrology and water quality than those identified in the Program EIRs. The proposed project would be required to comply with existing regulations and implement SCAs related to stormwater, drainages and drainage patterns, water quality, and groundwater dewatering and discharge, as identified in Attachment A at the end of the CEQA Checklist. For reference these SCAs are: SCA-HAZ-1: Hazardous Building Materials and Site Contamination (#40), SCA-HAZ-2: Hazardous Materials Related to Construction (#39), SCA-HYD-1: Erosion and Sedimentation Control Plan for Construction, and SCA-HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.

I. Land Use, Plans, and Policies

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Physically divide an established community;	■	☐	☐
b. Result in a fundamental conflict between adjacent or nearby land uses; or	■	☐	☐
c. Fundamentally conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect and actually result in a physical change in the environment.	■	☐	☐

Program EIR Findings

Land use, plans, and policies were analyzed in the Program EIRs, and impacts were found to less than significant and no mitigation measures were required. The 2011 Renewal Plan EIR and the 2010 Housing Element EIR and 2014 Addendum found all potential land use or policy impacts to be less than significant and therefore no mitigation measures or SCAs were required. The 1998 LUTE EIR cited a significant and unavoidable effect associated with policy inconsistencies with the Clean Air Plan (resulting from significant and unavoidable increases in criteria pollutants from increased traffic regionally). It identified mitigation measures, which largely align with current City of Oakland SCAs involving TDM and which apply to all projects within the City of Oakland.

Project Analysis

Division of Existing Community, Conflict with Land Uses, or Land Use Plans (Criteria 9.a through 9.c)

The General Plan designates the project site as Central Business District (CBD) which is intended to encourage, support, and enhance the downtown area as a high-density, mixed-use urban center of regional importance, and a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation.

The project site is zoned as Central Business District General Commercial (CBD-C). In this zone, ground floor commercial uses are permitted and upper story spaces are intended to be available for a wide range of office and residential activities. The project site is also in Height Area 7, which has no height limit; however, towers above 250 feet in height require a conditional use permit. In Height Area 7, the maximum building base height is 120 feet and the minimum height of any new building is 45 feet. Furthermore, the maximum dwelling unit density allowed by zoning is one unit per 90 square feet of lot area and the maximum non-residential FAR is 20.0. Based on the maximum density and FAR, up to 250 residential units and up to 450,000 square feet of non-residential uses are allowed on the 0.52-acre project site.

The proposed project would result in the development of a 25-story building that would include a mix of uses, including residential, commercial-retail, and parking. The proposed building would have a base height of 50 feet, which would be above the minimum base height and below the maximum base height. It would have a tower height of up to 262 feet. The maximum allowed residential units (250 units) are proposed for the site and less than the maximum commercial uses are proposed for the site (9,540 square feet).

Consistent with the findings of the Program EIRs, the proposed project would increase residential density and population in the downtown Oakland area, further enhancing the community integrity without physically dividing an established community. Furthermore, the proposed residential and commercial land uses on the project site are consistent and compatible with nearby commercial, office, and residential land uses. The proposed project is consistent with the General Plan land use designation as it will provide a mixed-use, residential high-rise building with a mix of commercial space and is consistent with the CBD-C zoning development standards.

Conclusion

Consistent with the findings of the Program EIRs, the proposed project would not result in any significant impacts related to land use or planning policies, division of a community or conflicts with other uses. Furthermore, based on an examination of the analysis, findings, and conclusions of the Program EIRs considered in this analysis, implementation of the proposed project would not substantially increase the severity of impacts identified in the Program EIRs. The EIRs did not identify any mitigation measures related to land use, and no City SCAs have been identified for the implementation of the project.

J. Noise

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding construction noise, except if an acoustical analysis is performed that identifies recommend measures to reduce potential impacts. During the hours of 7:00 p.m. to 7:00 a.m. on weekdays and 8:00 p.m. to 9:00 a.m. on weekends and federal holidays, noise levels received by any land use from construction or demolition shall not exceed the applicable nighttime operational noise level standard; Generate noise in violation of the City of Oakland nuisance standards (Oakland Municipal Code Section 8.18.020) regarding persistent construction-related noise;	■	☐	☐
b. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding operational noise;	■	☐	☐
c. Generate noise resulting in a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or, if under a cumulative scenario where the cumulative increase results in a 5 dBA permanent increase in ambient noise levels in the project vicinity without the project (i.e., the cumulative condition including the project compared to the existing conditions) and a 3-dBA permanent increase is attributable to the project (i.e., the cumulative condition including the project compared to the cumulative baseline condition without the project);	■	☐	☐
d. Expose persons to interior L_{dn} or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories and long-term care facilities (and may be extended by local legislative action to include single-family	■	☐	☐

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
dwellings) per California Noise Insulation Standards (CCR Part 2, Title 24); Expose the project to community noise in conflict with the land use compatibility guidelines of the Oakland General Plan after incorporation of all applicable Standard Conditions of Approval (see Figure 1); Expose persons to or generate noise levels in excess of applicable standards established by a regulatory agency (e.g., occupational noise standards of the Occupational Safety and Health Administration [OSHA]); or			
e. During either project construction or project operation expose persons to or generate ground-borne vibration that exceeds the criteria established by the Federal Transit Administration (FTA).	■	☐	☐

Program EIR Findings

Noise was analyzed in the Program EIRs. The 2011 Renewal Plan EIR and the 2010 Housing Element EIR and 2014 Addendum found impacts to be less than significant and no mitigation measures were required. The 1998 LUTE EIR identified significant and unavoidable impacts related to construction noise and vibration and cited applicable mitigation measures.

Project Analysis

Ambient Noise and Vibration Environment

The primary noise sources in the vicinity of the project site are traffic on Interstate 980 and traffic along major roadways near the project site. Sources of noise from major roadways include: 1) one-way traffic on Webster Street, which runs north to south adjacent to the eastern border of the project site; 2) one-way traffic on 17th Street, which runs west to east, approximately 80 feet south of the project site; 3) one-way traffic on Franklin Street, which runs south to north, approximately 160 feet west of the project site; and 4) one-way traffic on 19th Street, which runs east to west, approximately 180 feet north of the project site. Based on the roadway noise contours for the year 2025 in the City of Oakland General Plan, traffic noise levels range from 60 to 65 dBA Ldn at the project site and its vicinity.[58,59]

[58] City of Oakland, 2005. City of Oakland General Plan, Noise Element, March.

The local noise environment has been further characterized by noise measurements collected in 2015 for another project (1700 Webster Street in Oakland) located across Webster Street to the east of the project site.[60] Due to the proximity of the two projects, the results of the noise measurements in the 1700 Webster Street noise study can also be used to characterize ambient noise levels in the proposed project area. The study indicated that long-term noise levels in the project vicinity range from 59.2 to 66.8 dBA Ldn.[61] These site-specific noise measurement results are approximately consistent with the General Plan noise estimates discussed above.

There are no sources of ambient vibration at the project site or its vicinity.

Temporary Construction Noise Impact and Cumulative Construction Noise (Criterion 10.a)

An acoustical analysis was performed to evaluate potential noise impacts during construction of the proposed project. The findings of the acoustical analysis for project construction are summarized below.

Construction is expected to occur over a period of approximately 26 months and would temporarily increase noise levels in the vicinity of the project site. Construction noise levels would vary from day to day, depending on the quantity and condition of the equipment being used, the types and duration of activity being performed, the distance between the noise source and the receptor, and the presence or absence of barriers, if any, between the noise source and receptor. Demolition, excavation/grading, and foundation work are typically the noisiest phases of construction, and would occur during the first phases of construction. The later phases of construction include activities that are typically quieter and that occur within the building under construction, thereby providing a barrier for noise between the construction activity and any nearby receptors. Pile driving, which can generate extreme level of noise, is normally used to provide foundation support for buildings or other structures. However, pile driving is not proposed as part of this project. Drilled displacement columns or torque-down piles would likely be used for the proposed project, as described in Chapter IV, Project Description.

The nearest sensitive receptor[62] to the project site is the Mentone Arms apartment building located approximately 65 feet east of the project site across Webster Street. In addition,

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[59] The City of Oakland General Plan notes that existing traffic noise levels are not expected to change substantially over the 20-year period between 2005 and 2025 (i.e., changes in noise levels would not be distinguishable) given the minor changes expected to occur in traffic levels. Therefore, noise levels at the project site and its vicinity from traffic along Interstate 980 are assumed to be the same as what is indicated in the 2025 noise contours.

[60] Rosen Goldberg Der & Lewitz, Inc., 2015. Environmental Noise Study for 1700 Webster Street, Oakland, CA, May 22.

[61] The noise study prepared for 1700 Webster Street indicated that long-term (Ldn) noise levels in the project vicinity range from 59.2 to 66.8 dBA L_{dn} based on correlation of four short-term (15-minute) noise measurement with two long-term (24-hour) noise measurement.

[62] Legal residences, schools and childcare facilities, health care or nursing home, public open space, or similarly sensitive land uses are considered sensitive receptors.

adjacent land uses include commercial uses (Leamington Hotel, retail, restaurant, entertainment, and office buildings) to the south and west of the project site and surface parking lots to the north and approximately 65 feet east of the project site across Webster Street. The nearest walls of the Leamington Hotel building are primarily solid with two small windows facing the project site and the primary uses of the Leamington Hotel (commercial and retail) are located in the tower of the building and are set back from the project site by approximately 100 feet. The adjacent commercial buildings south and west of the project site have primarily solid walls with some windows facing the site.

Table 16 shows typical noise levels associated with various types of construction equipment that may be used during each phase of construction. Because noise increases at a rate of 6 dBA for each halving of distance, the noisiest heavy equipment used during construction of the proposed project could generate exterior noise levels greater than 90 dBA at the buildings located adjacent to the southern and western boundaries of the project site when the heavy equipment is operating at its nearest point. Based on Table 16, noise levels at the receptors located across Webster Street would be less than 90 dBA; however, exterior noise levels could exceed the 65 dBA long-term residential construction noise standard at the Mentone Arms apartment building and exceed the 70 dBA long-term commercial construction noise standard at the ground-floor restaurant in the Mentone Arms apartment building. Similarly, noise levels would be less than 90 dBA, but could exceed the 70 dBA long-term commercial construction noise standard at the Leamington Hotel (retail and commercial uses) and at other nearby commercial buildings to the south, west, and north of the project site. However, it should be noted that a typical building façade with windows closed reduces noise by 25 dBA, and a typical exterior wall with one layer of gypsum board on the interior and wood siding or stucco on the exterior reduces noise by about 40 dBA.[63] Therefore, as shown in Table 16, interior noise levels at nearby receptors would be substantially lower than exterior noise levels.

Also, it should be noted that the types and locations of heavy construction equipment would vary over time across the project site. Therefore, the duration and frequency that heavy construction equipment would operate at the closest possible proximity to an adjacent receptor would be limited on any given day and would not be expected to last more than a few days at a time. In addition, once the external structure has been erected, the noisiest phases of construction would be complete and noise from heavy construction equipment inside of the structure would be attenuated by the structure itself.

[63] Charles M. Salter Associates Inc., 1998. Acoustics – Architecture, Engineering, the Environment.

Table 16 Reference and Calculated Noise Levels from Construction Equipment

Equipment[a]	Reference Noise Level at 50 Feet (dBA)	Calculated Interior Noise Level at 50 Feet with Windows Closed/Solid Walls[b,c] (dBA)
Excavator	85	60/45
Steer Loader	80	55/40
Drill Rig	85	60/45
Grader	85	60/45
Dozer	85	60/45
Air Compressor	81	56/41
Generator	81	56/41
Backhoe	80	55/40
Line Pump	76	51/36
Paver	89	64/49
Roller	74	49/34
Welder	73	48/33
Crusher	85	60/45

Source: BASELINE Environmental Consulting, 2017[a] The types of construction equipment are based on information provided by the project sponsor (see Attachment H).
[b] Note that these noise levels do not take into account implementation of SCAs, which would result in further noise reductions.
[c] A typical building façade with windows closed provides a noise level reduction of approximately 25 dBA, and a typical exterior wall with one layer of gypsum board on the interior and wood siding or stucco on the exterior reduces noise by about 40 dBA. Therefore, interior noise levels with windows closed were calculated by reducing exterior noise levels by 25 dBA, and interior noise levels with solid walls were calculated by reducing exterior noise levels by 40 dBA.
Sources: FTA, 2006. *Transit Noise and Vibration Impact Assessment*. FTA-VA-90-1003-06. May. U.S. Department of Transportation, 2006. FHWA Highway Construction Noise Handbook (for construction equipment noise levels shown above).

Although construction-generated noise could temporarily result in the exposure of the nearby receptors to noise levels in excess of the Noise Ordinance Standards, the implementation of the City of Oakland's SCAs would lessen the impacts of construction period noise, as described below.

- SCA-NOI-1: Construction Days/Hours (#58) provides limits on the days and hours of construction to avoid generating noise when it would be most objectionable to neighboring residences and commercial operations. These limitations, which specify that construction activities would be limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday (among other restrictions), would prevent the disturbance of sleep for a majority of residents located close to the project site. This SCA also requires any extension of these work hours to be approved in advance by the City and requires property owners and occupants within 300 feet of the project site to be notified of such an extension.

- SCA-NOI-2: Construction Noise (#59) requires all construction projects to implement basic noise reduction measures during construction.
- SCA-NOI-3: Extreme Construction Noise (#60) requires that the project applicant prepare and implement a Construction Noise Management Plan that contains site-specific noise attenuation measures to reduce construction impacts associated with any anticipated extreme noise generating activities (i.e., activities generating noise levels greater than 90 dBA). Since the construction of the proposed project could generate noise levels greater than 90 dBA at the adjacent commercial buildings to the south and to the west, this measure would apply to the proposed project. The types of measures that would effectively reduce construction noise to less-than-significant levels that may be included in the Construction Noise Management Plan include the following:
  - Temporary noise barriers will be placed between the proposed construction activities and nearby receptors. The noise barriers may be constructed from plywood and installed on top of a portable concrete K-Rail system to be able to move and/or adjust the wall location during construction activities. A sound blanket system hung on scaffolding, or other noise reduction materials that result in an equivalent or greater noise reduction than plywood, may also be used. The composition, location, height, and width of the barriers during different phases of construction will be determined by a qualified acoustical consultant and incorporated into the Construction Noise Management Plan for the project.
  - Best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) will be used for project equipment and trucks during construction wherever feasible. For example, exhaust mufflers on pneumatic tools can lower noise levels by up to about 10 dBA and external jackets can lower noise levels by up to about 5 dBA.
  - Noise control blankets will be utilized on the building structure as the building is erected to reduce noise emission from the site. The use of noise control blankets will particularly be targeted to cover the levels of the building that have line of sight with the windows of nearby receptors;
  - Construction equipment will be positioned as far away from noise-sensitive receptors as possible. The project site is surrounded by hard surfaces, and therefore, for every doubling of the distance between a given receptor and construction equipment, noise will be reduced by approximately 6 dBA.
  - Monitoring the effectiveness of noise attenuation measures by taking noise measurements.
  - Notify property owners and occupants located within 300 feet of the construction activities prior to commencing extreme noise generating activities.
- SCA-NOI-4: Construction Noise Complaints (#62) provides additional measures to respond to and track construction noise complaints during construction to allow sources of potentially disruptive construction noise to be quickly controlled or eliminated.

The proximity of the project site to sensitive receptors, and the types of construction equipment that would be used as part of the proposed project, are similar to other projects in downtown Oakland and other urban areas. Because the project site and its vicinity are part of an established, urbanized area, periodic exposure to construction-related noise and vibration are part of the existing conditions. Implementation of the City of Oakland's SCAs will lessen the impacts of noise generated by construction to receptors in the vicinity of the project site. Therefore, with the implementation of the required SCAs, the impact of construction generated noise on nearby receptors would be reduced to a less-than-significant level.

Cumulative Construction Noise

There are two approved mixed-use residential building projects located approximately 65 feet east of the project site, across Webster Street: (1) 19th and Harrison; and (2) 1700 Webster. Receptors located in close proximity to the project site and to one or both of the cumulative projects could be exposed to noise from multiple construction sites. Because sound pressure levels are based on a logarithmic scale, they cannot be simply added or subtracted together. For instance, if one noise source emits a sound level of 90 dBA and a second source is placed beside the first and also emits a sound level of 90 dBA, the combined sound level is 93 dBA, not 180 dBA. When three sound sources emit a sound level of 90 dBA, the combined sound level is 95 dBA. Consequently, the exposure of a given receptor to noise from two or three construction sites could increase the construction noise they are exposed to by approximately 3 to 5 dBA.

As discussed above, demolition, excavation/grading, and foundation work are typically the noisiest phases of construction. The construction of both the proposed project and 19th and Harrison are anticipated to begin in late 2017 and take about 26 months. For the proposed project, the demolition, excavation/grading, and foundation work is anticipated to occur over 2 to 3 months. Due to the similar construction schedules, it is possible that portions of the nosiest phases of construction would overlap for these two projects. However, construction activities at the 1700 Webster site began in late 2016, and are anticipated to take about 20 months. Based on this construction schedule, the noisiest construction phases of the proposed project and the 1700 Webster project would not overlap.

Because noise sensitive receptors are located adjacent to both the 19th and Harrison and 1700 Webster projects, both cumulative projects will be required to comply with SCA NOI-1 through SCA NOI-4, and therefore both cumulative projects will be required to implement project specific noise reduction measures, as well as a Construction Noise Management Plan that contains site-specific noise attenuation measures to reduce construction impacts associated with extreme noise generating activities. These SCAs would reduce the potential exposure of nearby receptors from cumulative construction noise to a less-than-significant level. This is consistent with the findings of both the 2010 Housing Element EIR and in the 2011 Renewal Plan EIR, which found that construction noise impacts resulting from cumulative development would remain less than significant because all cumulative projects would be required to incorporate the appropriate SCAs regarding construction.

Operational Noise (Criterion 10b)

The primary noise generated by the long-term operation of the proposed project would occur as a result of the use of HVAC systems and delivery trucks for the commercial space. Noise generated from HVAC systems would be subject to SCA-NOI-5: Operational Noise (#64) that requires all operational noise to comply with the performance standards of Chapter 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. Noise from delivery trucks would not be a substantial new source of noise in the project area because the existing land uses at the project site include noise generated by similar delivery trucks and loading activities at nearby commercial land uses. Furthermore, the only loading space at the project site would be accessed from Webster Street and would be located within the parking structure on the ground floor; any noise generated within the parking structure would be shielded by the structure itself. For these reasons, the potential for noise generated by the HVAC systems and delivery trucks to violate the City of Oakland operational noise standards during the operational period of the proposed project would be less than significant.

Permanent Increase in Ambient Traffic Noise and Cumulative Noise Impact (Criterion 10c)

A project would generate a significant increase in ambient traffic noise if it results in a 5 dBA permanent increase in noise levels in the project vicinity. A project is considered to contribute to a significant cumulative impact if (1) the cumulative increase results in a 5 dBA permanent increase in ambient noise levels in the project vicinity, and (2) 3 dBA of the cumulative increase is attributable to the project.

The assessment of AM and PM peak hour traffic volumes at two intersections near the project site indicates that traffic volumes increase in surrounding roadways would range from approximately 0 to 15 percent (see Chapter VI.M, Transportation and Circulation). The highest traffic volume increase of 15 percent would occur along Webster Street between 17th and 19th Streets (AM peak hour). The existing and existing plus project traffic volumes and predicted traffic noise for this roadway segment are summarized in Table 17 below. Traffic noise is expected to increase by about 0.6 L_{eq} along Webster Street between 17th and 19th Streets. As this is the roadway segment with the greatest predicted increase in traffic, traffic noise increase along other roadway segments would be less than 0.6 L_{eq} (see Attachment H). This is well below the 5 dBA significance threshold for project-generated traffic noise. Consequently, the implementation of the proposed project would not result in a significant increase in traffic noise along local area roadways.

Table 17 Existing and Existing Plus Project Traffic Volumes and Predicted Traffic Noise

Roadway Segment	Existing Traffic Volume (Peak Hour Number of Vehicles)	Existing Plus Project Traffic Volume (Peak Hour Number of vehicles)	Existing Traffic Noise (dBA L_{eq} at 50 Feet)	Existing Plus Project Traffic Noise (dBA L_{eq} at 50 Feet)	Estimated Increase in Noise (dBA L_{eq})
Webster Street between 17th and 19th Streets (AM Peak)	427	492	61.0	61.6	0.6

Note: Traffic noise model outputs are included in Attachment H.
Source: BASELINE Environmental Consulting, 2017. FHWA TNM Version2.5 model was used for these results.

Under the cumulative condition, which considers traffic generated by past, present, and probable future projects, including the proposed project, traffic volume increases in surrounding roadways would range from approximately 10 to 39 percent. The highest traffic volume increase of 39 percent would occur along Webster Street between 17th and 19th Streets (PM peak hour). The existing and cumulative traffic volumes and predicted traffic noise for this roadway segment are summarized in Table 18 below. Traffic noise is expected to increase by about 1.4 L_{eq} along Webster Street between 17th and 19th Streets. As this is the roadway segment with the greatest predicted increase in traffic, traffic noise increases along other roadway segments would be less than 1.4 L_{eq}. This is well below the 5 dBA significance threshold for cumulative traffic noise. Consequently, the cumulative traffic noise increase along local area roadways is less than significant.

Table 18 Existing and Cumulative Traffic Volumes and Predicted Traffic Noise

Roadway Segment	Existing Traffic Volume (Peak Hour Number of Vehicles)	Cumulative (Including Proposed Project) Volume (Peak Hour Number of Vehicles)	Existing Traffic Noise (dBA L_{eq} at 50 Feet)	Cumulative (Including Proposed Project) Noise (dBA L_{eq} at 50 Feet)	Estimated Increase in Noise (dBA L_{eq})
Webster Street between 17th and 19th Streets (PM Peak)	562	782	62.2	63.6	1.4

Note: Traffic noise model outputs are included in Attachment H.
Source: BASELINE Environmental Consulting, 2017. FHWA TNM Version2.5 model was used for these results.

Noise Exposure during Construction and Operation (Criterion 10d)

Construction workers could be exposed to excessive noise from the heavy equipment used during construction of the proposed project as shown in Table 16. However, noise exposure of construction workers is regulated by the California Division of Occupational Safety and Health (Cal/OSHA). Title 8, Subchapter 7, Group 15, Article 105 of the California Code of Regulations (Control of Noise Exposure) sets noise exposure limits for workers, and requires employers who have workers that may be exposed to noise levels above these limits to establish a hearing conservation program, make hearing protectors available, and keep records of employee noise exposure measurements. The construction contractor for the proposed project would be subject to these regulations, and compliance with these Cal/OSHA regulations will ensure that the potential of construction workers to be exposed to excessive noise is less than significant.

Occupants of the proposed project would be subject to ambient outdoor noise levels that range from 60 to 65 dBA L_{dn}.[64] This noise environment is regarded as "conditionally acceptable" community noise exposure levels for residential and business commercial. The City of Oakland General Plan indicates that development within a "conditionally acceptable" environment requires an analysis of noise-reduction requirements, and if necessary, noise-mitigation features in the design.

The implementation of SCA-NOI-6: Exposure to Community Noise (#63) would enforce compliance with the City of Oakland General Plan. This SCA requires noise reduction measures to be incorporated into building design based upon the recommendations of a qualified acoustical engineer. The noise reduction measures would be required to reduce interior noise levels to 45 dBA Ldn for residential units and 50 dBA Leq for non-residential spaces (e.g., retail spaces and offices), in accordance with the 2016 California Building Standards Code. Sound Transmission Class (STC) rated windows, exterior doors (such as balcony doors), and exterior walls are commonly used to control interior noise from exterior sources. A STC rating roughly equals the decibel reduction in noise volume that a wall, window, or door can provide.[65] Given that the ambient noise environment at the project site currently ranges from about 60 to 65 dBA Ldn, the use of sound-rated windows, exterior doors, and exterior walls with STC ratings ranging from about STC 15 to about STC 20 would need to be used in order to reduce interior noise levels from exterior sources to about 45 dBA Ldn for residential units and 50 dBA Leq for non-residential spaces, thereby satisfying the interior noise standards for both residential and non-residential spaces. The noise control measures are required to be submitted to the City of Oakland for review and approval prior to the issuance of a construction-related permit. Compliance with SCA-NOI-6 would therefore reduce the potential of future occupants of the proposed project to be exposed to excessive or incompatible noise levels to a less-than-significant level.

Construction and Operational Vibration and Cumulative Vibration (Criterion 10e)

Construction activities can result in varying degrees of ground vibration, depending on the equipment, activity, and relative proximity to sensitive receptors. Typical vibration levels generated at a distance of 25 feet by construction equipment that could be used at the project site are summarized in Table 19. The potential construction-generated vibration levels at the

[64] City of Oakland, 2005. City of Oakland General Plan, Noise Element, March.
[65] U.S. Department of Housing and Urban Development, undated. Noise Notebook, Chapter 4 Supplement, Sound Transmission Class Guidance.

Table 19 Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 Feet (in/sec)	PPV at 10 Feet (in/sec)	PPV at 60 Feet (in/sec)	PPV at 65 Feet (in/sec)	RMS at 25 Feet (VdB)	RMS at 10 Feet (VdB)	RMS at 60 Feet (VdB)	RMS at 65 Feet (VdB)
Large bulldozer	0.089	0.244	0.034	0.031	87	99	76	75
Caisson drilling	0.089	0.244	0.034	0.031	87	99	76	75
Small bulldozer	0.003	0.008	0.001	0.001	58	70	47	46

Notes: Based on vibration levels at 25 feet, the following propagation adjustment was applied to estimate PPV vibration levels at 10 feet, 60 feet, and 65 feet assuming:

$PPV2 = PPV1 \times (D1/D2)^{1.1}$

Where: PPV1 is the reference vibration level at a specified distance.
PPV2 is the calculated vibration level.
D1 is the reference distance (in this case 25 feet).
D2 is the distance from the equipment to the receiver.

(Source of the equation: Caltrans, 2013. Transportation and Construction Vibration Guidance Manual. September.)

Based on vibration levels at 25 feet, the following propagation adjustment was applied to estimate RMS vibration levels at 10 feet, 60 feet, and 65 feet assuming:

$RMS2 = RMS1 - 30 \text{ Log}_{10} (D2/D1)$

Where: RMS1is the reference vibration level at a specified distance.
RMS2 is the calculated vibration level.
D1 is the reference distance (in this case 25 feet).
D2 is the distance from the equipment to the receiver.

(Source of the equation: FTA, 2006. *Transit Noise and Vibration Impact Assessment*. FTA-VA-90-1003-06, May.)

Source: FTA, 2006. *Transit Noise and Vibration Impact Assessment*. FTA-VA-90-1003-06, May. (for PPV and RMS vibration levels at 25 feet).

nearest receptors to the project site, located approximately 10, 60, and 65 feet from the project site, were calculated based on the reference levels at 25 feet.[66] These estimated vibration levels are also summarized in Table 19. Although the table provides one vibration level for each piece of equipment, it should be noted that there is considerable variation in reported ground vibration levels from construction activities, primarily due to variation in soil characteristics. It should also be noted that the project site's proximity to sensitive receptors, and the types of construction equipment that would be used as part of the proposed project, are similar to other projects in Downtown Oakland and other urban areas and are typical of urban infill projects.

Tables 20 and Table 21 summarize the vibration criteria to prevent disturbance of occupants and to prevent damage to structures, respectively. In this analysis, the Occasional Events disturbance criterion is applied because the same kind of vibration events are not expected to occur over 70 times per day due to the variance in the types and locations of construction equipment used during construction.

[66] Although the commercial buildings to the south and west of the project site are adjacent to the southern and western boundaries of the project site, vibration levels were calculated at 10 feet as an approximation.

Table 20 Vibration Criteria to Prevent Disturbance – RMS (Vdb)

Land Use Category	Frequent Events[a]	Occasional Events[b]	Infrequent Events[c]
Residences and buildings where people normally sleep	72	75	80
Institutional land uses with primarily daytime use	75	78	83

[a] More than 70 vibration events of the same kind per day or vibration generated by a long freight train.
[b] Between 30 and 70 vibration events of the same kind per day.
[c] Fewer than 30 vibration events of the same kind per day.
Source: FTA, 2006. Transit Noise and Vibration Impact Assessment. FTA-VA-90-1003-06, May.

Table 21 Vibration Criteria to Prevent Damage to Structures

Building Category	PPV (in/sec)	RMS (VdB)
Reinforced-concrete, steel or timber (no plaster)	0.5	102
Engineered concrete and masonry (no plaster)	0.3	98
Non-engineered timber and masonry buildings	0.2	94
Buildings extremely susceptible to vibration damage	0.12	90

Source: FTA, 2006. *Transit Noise and Vibration Impact Assessment*. FTA-VA-90-1003-06, May.

As indicated in Table 19, construction-generated vibration levels could be 82 RMS VdB at the Mentone Arms apartment building, which would exceed the 75 RMS VdB Occasional Events threshold of residences and buildings where people normally sleep. Vibration levels could be as high as 106 RMS VdB at the adjacent commercial buildings to the south and west of the project site and at the Leamington Hotel to the northwest of the project site, 83 RMS VdB at the commercial buildings to the north of the project site, and 82 RMS VdB at the ground-floor restaurant to the east of the project site. These vibration levels would exceed the 78 RMS VdB Occasional Events threshold of daytime use disturbance at institutional buildings.[67]

Although the nearest receptors surrounding the project site could be exposed to vibration levels above the 75 and 78 RMS VdB disturbance thresholds, the vibration would be temporary because the locations of grading, soil compaction, and other construction activities that would require the use of construction equipment with the potential to exceed the thresholds would vary over time across the site, and therefore the impacts of these activities on any given receptor would not be expected to last more than a few days at a time. In addition, SCA-NOI-1: Construction Days/Hours (#58) limits construction activities to the hours between 7:00 a.m. and 7:00 p.m. Monday through Friday, and limits construction with the potential to generate

[67] The disturbance threshold for institutional buildings is applied to surrounding commercial receptors, because commercial receptors have a primarily daytime use. The hotel is also considered a commercial receptor because most municipalities, including the City of Oakland, consider hotels to have noise sensitivity similar to commercial and office uses. This is reflected in the City of Oakland's land use compatibility standards.

extreme noise (which is often correlated with the potential to generate high vibration) to the hours between 8:00 a.m. and 4:00 p.m. This would limit any impacts to normal daytime hours, thereby reducing the likelihood of disturbing residents (i.e., through interfering with sleep). For these reasons, the potential for construction-generated vibration to disturb occupants of nearby buildings is less than significant. Furthermore, construction vibration is exempt from the standard indicated in Chapter 17.120.060 of City of Oakland's Municipal Code, and therefore, the vibration generated by construction would not have the potential to exceed any regulatory standards.

Construction-generated vibration would not have the potential to damage the commercial buildings to the north of the project site at 60 feet, or the Mentone Arms building to the east of the project site at 65 feet (the Mentone Arms Building is described as a historic property in Chapter VI.D, Cultural Resources). As indicated in Table 19, construction-generated vibration levels may reach 0.034 PPV in/sec at 60 feet and 0.031 PPV in/sec at 65 feet. These vibration levels are below the 0.12 PPV in/sec threshold at which damage could occur to buildings that are extremely susceptible to vibration damage (see Table 21). However, as described in Chapter VI.D and listed below, several historic or older buildings are located in close proximity of the project site:

- Immediately to the south of the project site is the Elvin Building commercial building at 1701-1709 Webster Street/350-370 17th Street
- Immediately to the west of the project site are:
  - 1708-1710 Franklin Street
  - 1714-1718 Franklin Street
  - 1724-1730 Franklin Street
- To the north of the project site are:
  - Leamington Hotel at 1800-1826 Franklin /365-385 19th Street and Hotel Annex commercial buildings 1736-1742 Franklin Street

The historic buildings listed above are all located within 10 feet of the project site. The vibration level estimates in Table 19 indicate that the use of heavy construction equipment such as bulldozers would have the potential to generate vibration levels of up to 0.244 PPV in/sec at 10 feet, which exceeds the threshold of 0.12 PPV in/sec at which damage could occur to buildings that are extremely susceptible to vibration damage (see Table 21).

Therefore, the proposed project would be required to implement SCA-NOI-7: Vibration Impacts on Adjacent Historic Structures or Vibration Sensitive Activities (#66), due to the proximity of construction activities to historic buildings. SCA-NOI-7 requires preparation of a Vibration Analysis to establish pre-construction baseline conditions and threshold levels of vibration, and identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The Vibration Analysis will specifically address the protection of the following structures: 1701-1709 Webster Street/350-370 17th Street, 1708-1710 Franklin Street, 1714-18 Franklin Street, 1724-1730 Franklin Street, and 1736-1742 Franklin Street – Leamington Hotel Annex.

Design considerations may include operating heavy-construction equipment as far away from vibration-sensitive sites as possible and not performing demolition, earth-moving, and other ground-impacting operations simultaneously. Implementation of the SCA would reduce the potential of construction-generated vibration to cause damage to adjacent buildings to a less-than-significant level.

The proposed project does not include any sources that would generated vibration that would be perceptible to people during the operational period.

<u>Cumulative Vibration</u>

As discussed above under Cumulative Construction Noise, the construction of the 19th and Harrison and 1700 Webster projects is anticipated to overlap with that of the proposed project. The vibration levels in Table 19 indicate that the use of typical construction equipment (not including pile drivers) would not result in a cumulative building damage impact on buildings adjacent to the project site because the project site is separated from the cumulative projects by Webster Street. Pile driving, which generates much higher vibration levels then typical construction equipment, will be used in the 1700 Webster project, and could contribute to a cumulative building damage impact on buildings adjacent to the project site; however, as discussed under Cumulative Construction Noise above, the foundation work for the 1700 Webster project, including pile driving, is anticipated to be complete before the start of construction of the proposed project. For these reasons, the cumulative construction-generated vibration damage impact to nearby buildings is less than significant.

The vibration levels in Table 19 indicate that a receptor located within 65 feet of the proposed project and one or both of the cumulative projects could be exposed to cumulative vibration disturbance impact. However, the exposure of a given receptor to disruptive levels of vibration will be limited to periods of time when construction equipment is simultaneously operating within 65 feet of that receptor on multiple project sites, which will be an unlikely occurrence based on the size of the project sites. Furthermore, all development within the City of Oakland is required to comply with the City's SCAs regarding construction noise and vibration. In particular, the implementation of SCA NOI-1—which restricts construction hours to 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturdays—would reduce the likelihood of disturbing nearby residential receptors.[68] For these reasons, with the implementation of the required SCAs, the cumulative construction-generated vibration disturbance impact would be reduced to a less-than-significant level.[69] This is consistent with the findings of both the 2010 Housing Element EIR and in the2011 Renewal Plan EIR, which found that construction vibration impacts resulting from cumulative development would be less than significant because all cumulative projects would be required to incorporate the appropriate SCAs regarding construction.

[68] Pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday. No construction is allowed on Sunday or federal holidays.

[69] City of Oakland. 2016. Planning Code. 17.120.050 , Noise.

Neither the proposed project nor the two cumulative projects include any sources that would generated vibration that would be perceptible to people during the operational period.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the proposed project would not result in any new or more severe significant impacts related to noise and vibration than those identified in the Program EIRs. The proposed project would be required to implement City of Oakland's SCAs to reduce construction noise, minimize potential adverse vibration effects from project-related construction activities, require compliance with City of Oakland operational noise standards including for noise generated by the HVAC systems, and require the incorporation of noise reduction measures into the building's design, as identified in Attachment A at the end of the CEQA Checklist. For reference, these are: SCA-NOI-1: Construction Days/Hours (#58), SCA-NOI-2: Construction Noise (#59), SCA-NOI-3: Extreme Construction Noise (#60), SCA-NOI-4: Construction Noise Complaints (#62), SCA-NOI-5: Operational Noise (#64), SCA-NOI-6: Exposure to Community Noise (#63), and SCA-NOI-7: Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities (#66).

K. Population and Housing

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Induce substantial population growth in a manner not contemplated in the General Plan, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extensions of roads or other infrastructure), such that additional infrastructure is required but the impacts of such were not previously considered or analyzed;	■	☐	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element; or Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element.	■	☐	☐

Program EIR Findings

Population, housing, and employment were analyzed in the Program EIRs. The 2011 Renewal Plan EIR and the 2010 Housing Element EIR and 2014 Addendum found all potential land use or policy impacts to be less than significant and therefor no mitigation measures or SCAs were required.

The 2010 Housing Element EIR and 2014 Addendum created an inventory of opportunity sites, which would include larger sites suitable for multiple-unit housing development.[70] In total these opportunity sites would be capable of accommodating a total of 10,032 additional housing units, using the current allowable densities permitted by the City's General Plan and Planning Code. The 1998 LUTE EIR cited a significant and unavoidable effect associated with increased employment in comparison to regional ABAG projections, and thus, an increase in housing demand. It identified mitigation measures that would require the City to maintain a data base of underutilized parcels to identify potential areas of growth that could accommodate housing for the future workforce.

[70] APN: 008-0624-007-00, one of the proposed project's parcels, is included in the 2010 Housing Element EIR and 2014 Addendum opportunity site inventory.

Project Analysis

Population Growth and Displacement of Housing and People (Criteria 11.a and 11.b)

The proposed project would demolish the existing building on the project site, and construct a new mixed-use building with up to 250 residential units and approximately 9,540 square feet of commercial space. The proposed project would not demolish or displace any existing housing units. The proposed project would result in an increase of approximately 525 new residents and approximately 28 jobs.[71]

The Housing Element identifies 1717 Webster as an opportunity site for additional housing; the project site includes this address. The construction of 250 residential units by the proposed project would contribute to the total anticipated housing stock intended to be developed on the identified opportunity sites.

Through infill growth and development, the proposed project would accommodate new residents or employees, as anticipated in the City's 2015-2023 Housing Element Update (2014), the 2011 Renewal Plan EIR, and the 1998 LUTE EIR. The proposed project aligns with the Oakland General Plan, as stated above, policies that support additional housing opportunities in proximity to employment centers and alternative transportation options, like Downtown Oakland.

Conclusion

Consistent with the findings of the Program EIRs, the proposed project would not result in any significant impacts related to population or housing. Further, based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the proposed project would not substantially increase the severity of impacts identified in the Program EIRs. Nor would it result in new significant impacts related to population or housing that were not previously identified in the Program EIRs. The Program EIRs did not identify any mitigation measures or SCAs related to population and housing, and none would be required for the project.

[71] The population associated with the proposed project is based on the 2014 Alameda County Transportation Commission Model used in the transportation analysis which assumes approximately 2.1 persons per residential unit, 3 persons per 1,000 square-feet of office, and 2.5 persons per 1,000 square-feet of retail.

L. Public Services, Parks, and Recreation Facilities

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: • Fire protection; • Police protection; • Schools; or • Other public facilities.	■	☐	☐
b. Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or Include recreational facilities or require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment.	■	☐	☐

Program EIR Findings

Public services, parks, and recreation were analyzed in the Program EIRs. The 2010 Housing Element EIR and 2014 Addendum and 2011 Renewal EIR found all potential public services impacts to be less than significant and therefore no mitigation measures or SCAs were required. Furthermore, the 2011 Renewal Plan EIR cited mitigation measures to address open space, requiring residential development to provide open space to comply with City regulations. These mitigation measures would reduce any potential impacts to be less than significant. The 1998 LUTE EIR cited a significant and unavoidable effect associated with firefighting and evacuation constraints. It identified a mitigation measure, which would require the construction of a fire station in the North Oakland Hills to address the increase in population and housing.

Project Analysis

Public Services and Parks and Recreation (Criteria 12.a and 12.b)

The proposed project would create demands on public services typical of a mixed-use building containing 250 residential units with approximately 9,540 square feet of commercial space. However, the development would occur in an urban area already served by public services and recreation facilities. Program EIRs have consistently determined that the anticipated growth would not impose a burden on existing public services and would not create a significant impact.

The proposed project is within the development envelope analyzed in the Program EIRs and the increase in demand for public services is consistent with that analysis. Compliance with standard City practices would further ensure the proposed project would have no significant impacts related to services. In addition, adherence to the General Plan's Open Space, Conservation and Recreation Element policies 3.1, 3.3, and 3.10 would ensure that any potential impacts to recreational facilities are not significant.

The proposed project would increase student enrollment at local schools. Pursuant to Senate Bill (SB) 50, the project sponsor would be required to pay school impact fees, which are established to offset potential impacts from new development on school facilities. This would be deemed full and complete mitigation. The proposed project could also cause a minor increase in demand for police and fire protection services; however, adherence to General Plan policies N.12.1, N.12.2, N.12.5, FI-1, and FI-2 would mitigate potential impacts to a less-than-significant level.

Conclusion

Consistent with the findings of the Program EIRs, the proposed project would not result in any significant impacts related to public services, parks, and recreation. Further, based on an examination of the Program EIRs, implementation of the proposed project would not substantially increase the severity of impacts previously identified in the Program EIRs. Nor would it result in new significant impacts related to public services, parks, and recreation that were not previously identified in the Program EIRs.

M. Transportation and Circulation

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle and pedestrian facilities (except for automobile level of service or other measures of vehicle delay); or	■	☐	☐
b. Cause substantial additional vehicle miles traveled (per capita, per service population, or other appropriate efficiency measure); or	■	☐	☐
c. Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas or by adding new roadways to the network.	■	☐	☐

Program EIR Findings

Transportation and circulation were analyzed in the Program EIRs. The 2011 Renewal Plan EIR concluded that impacts relating to transportation and circulation would be less than significant after mitigation. The 1998 LUTE EIR and 2010 Housing Element EIR and 2014 Addendum identified significant and unavoidable impacts related to level of service (LOS) on several roadway segments.

Project Analysis

On September 21, 2016, the City of Oakland's Planning Commission directed staff to update the City of Oakland's CEQA Thresholds of Significance Guidelines related to transportation impacts consistent with SB 743. The revised thresholds remove 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. This section describes the potential impacts of the proposed project on the transportation system. It includes a discussion of significant topics under CEQA and planning-related non-CEQA issues.

Vehicle Miles Travelled (Criteria 13.b and 13.c)

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 employee ratio than the nine-county San Francisco Bay Area. In addition, some neighborhoods of the city have lower VMT ratios than other areas of the city.

Estimating Vehicle Miles Travelled

Neighborhoods within Oakland are expressed geographically in transportation analysis zones (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, to, or from the nine-county San Francisco Bay Area 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.

The MTC Travel Model estimates travel behavior 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 miles under 2020 conditions and 13.8 miles under 2040 conditions; the regional average daily VMT per worker is 21.8 miles under 2020 conditions and 20.3 miles under 2040 conditions.

Thresholds of Significance for Vehicle Miles Travelled

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 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
3. Near Transit Stations: The project is located in a Transit Priority Area or within a ½ mile of a Major Transit Corridor or Stop,[72] and satisfies the following:
   - Has a Floor Area Ratio (FAR) of more than 0.75
   - Does not include more parking for use by residents, customers, or employees of the project than other typical nearby uses, or more than required by the City (if parking minimums pertain to the site) or allowed without a conditional use permit (if minimums and/or maximums pertain to the site)
   - Is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the MTC)

[72] 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.

Impact Analysis

The section below describes how the proposed project would meet the VMT screening criteria. Specifically, the proposed project satisfies the Low-VMT Area (#2) and Near Transit Stations (#3) criteria.

- Criterion #1: Small Projects – The proposed project would generate more than 100 trips per day and therefore does not meet criterion #1.
- Criterion #2: Low-VMT Area – Table 22 describes the 2020 and 2040 VMT for TAZ 971, the TAZ in which the project site is located as well as applicable VMT thresholds of 15 percent below the regional average. As shown in Table 22, the 2020 and 2040 average daily VMT per capita and VMT per worker in the project TAZ is more than 15 percent below the regional averages. 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.

Table 22 Daily Vehicle Miles Traveled per Capita

	Bay Area				TAZ 971[c]	
	2020		2040			
Land Use	**Regional Average**	**Regional Average Minus 15%**	**Regional Average**	**Regional Average Minus 15%**	**2020**	**2040**
Residential (VMT per capita)[a]	15.0	12.8	13.8	11.7	4.5	4.1
Office and Commercial (VMT per worker)[b]	21.8	18.5	20.3	17.3	12.7	12.0

Note: The project site is located in TAZ 971.
[a] MTC Model results at analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerCapita and accessed in November 2016.
[b] MTC Model results at analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerWorker and accessed in November 2016.
Source: Fehr & Peers, 2017.

- Criterion #3: Near Transit Stations – The proposed project would be located about 0.2 mile from the 19th Street BART Station and within ½-mile of frequent bus service along Broadway and 20th Street. The proposed project would satisfy Criterion #3 because it would also meet the following three conditions for this criterion:
  - The proposed project would have an FAR of 12.1 (including both residential and commercial uses), which is greater than 0.75.
  - The proposed project would include 250 parking spaces for the project residents, employees, visitors, and customers. Approximately 210 vehicular parking spaces would be provided for the residential uses and 40 parking spaces would be made available to the public. All parking would be unbundled and parking that is not used by the residents would be available to the public to rent. Per the City of Oakland Municipal Code Sections 17.116.060 and 17.116.080 for the CBD-C zone, the project is required to provide between minimum of zero and maximum of 341 parking spaces (see Table 24) and all spaces must be unbundled. The proposed parking supply is within the

supply range allowed by the Municipal Code. Therefore, the project would not provide more parking for use by residents, customers, or employees than other typical nearby uses, nor would it provide more parking than required by the City Code.

- The proposed project is located within the Downtown Priority Development Area (PDA) as defined by Plan Bay Area, and is therefore consistent with the region's Sustainable Communities Strategy.

<u>Vehicle Miles Travelled Screening Conclusion</u>

The proposed project would satisfy the Low-VMT Area (#2) and the Near Transit Stations (#3) criteria and is therefore presumed to have a less–than-significant impact on VMT.

Consistency with Plan, Ordinances, or Policies addressing the Safety or Performance of the Circulation System (Criterion 13.a)

The proposed project is consistent with applicable plans, ordinances, and policies, and would not cause a significant impact by conflicting with adopted plans, ordinances, or policies addressing the safety and performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile level of service or other measures of vehicle delay).

The LUTE, as well as the City's Public Transit and Alternative Mode and Complete Streets policies, states a strong preference for encouraging the use of non-automobile transportation modes, such as transit, bicycling, and walking. The proposed project would encourage the use of non-automobile transportation modes by providing residential and commercial uses in a dense, walkable urban environment that is well-served by local and regional transit.

The proposed project is consistent with both the City's Pedestrian Master Plan and Bicycle Master Plan as it would not make major modifications to existing pedestrian or bicycle facilities in the surrounding areas and would not adversely affect installation of future facilities. Further, because the proposed project would generate more than 50 peak hour trips, preparation and implementation of a TDM Plan is required for the proposed project (see SCA-TRANS-1: Transportation and Parking Demand Management (#71) in Attachment A).

Overall, the proposed project would not conflict with adopted plans, ordinances, or policies addressing the safety and performance of the circulation system. This is a less-than-significant impact; no mitigation measures are required.

Planning-Related Non-CEQA Issues Discussion

This section discusses transportation-related topics that are not considerations under CEQA but are evaluated to inform decision makers and the public about these issues.

Project Access and Circulation

Access and circulation for various travel modes in and around the site are described below.

Vehicle Access and On-Site Circulation Impacts

The proposed project would include a six-level parking garage which would be accessed through a driveway on Webster Street, approximately 100 feet north of 17th Street. The garage would provide 250 parking spaces. A gate at the driveway would restrict access into and out of the garage. The inbound gate would provide queuing space for about one car before the queue would spill-back onto the sidewalk on Webster Street.

The proposed project driveway would provide adequate sight distance between exiting motorists and pedestrians on the adjacent sidewalk because it would provide a clear line-of-sight between a motorist ten feet back from the sidewalk and a pedestrian 10 feet away on each side of the driveway. However, the project driveway may not provide adequate sight distance between exiting motorists and both automobiles and bicycles traveling on Webster Street.

Recommendation 1: While not required to address a CEQA impact, the following should be considered as part of the final design for the proposed project:

- Relocate the inbound garage gate further into the garage to increase automobile storage capacity and minimize automobile queues spilling back and blocking the sidewalk and bike lane on Webster Street.
- To ensure adequate sight distance for vehicles, prohibit on-street parking along project frontage on Webster Street for 20 feet on the north side of the driveway.

Bicycle Access and Bicycle Parking

Chapter 17.117 of the Oakland Municipal Code requires long-term and short-term bicycle parking for new buildings. Long-term bicycle parking includes lockers or locked enclosures and short-term bicycle parking includes bicycle racks. The Code requires one long-term space for every four multi-family dwelling units and one short-term space for every 20 multi-family dwelling units. Code requires the minimum level of bicycle parking, two long and short-term spaces, for the retail and office component of the project.

Table 23 summarizes the bicycle parking requirement for the project. The proposed project is required to provide 67 long-term and 17 short-term parking spaces. Chapter 17.117.070 of the Oakland Municipal Code specifies location and design standards of required bicycle parking. Long-term bicycle parking must be on-site, or within 500-feet of the building entrance, and short-term parking must be within 50-feet of the building entrance. The bicycle parking areas should be well-lit and not impede pedestrian accessibility.

An existing southbound Class 2 bicycle lane is provided on Webster Street adjacent to project site.

Table 23 Bicycle Parking Requirements

		Long-Term		Short-Term	
Land Use	**Size[a]**	**Spaces per Unit[b]**	**Spaces**	**Spaces per Unit[b]**	**Spaces**
Residential	250 DU	1:4 DU	63	1:20 DU	13
Retail (Assumed Restaurant)	2.5 KSF	minimum	2	minimum	2
Office	10.0 KSF	minimum	2	minimum	2
Total Required Bicycle Spaces			67		17
Total Bicycle Parking Provided			67		17
Bicycle Parking Deficit			**0**		**0**

Note: Land uses conservatively represent the maximum project development scenario per land use type, which may be greater than the proposed project as analyzed for most topics in this checklist.
[a] DU = dwelling unit; KSF = 1,000 square feet.
[b] Based on Oakland Municipal Code Sections 17.117.090 and 17.117.110.
Source: Fehr & Peers, 2017.

Pedestrian Access and On-Site Circulation Impacts

The residential, retail, and office uses would have separate entrances, each on Webster Street. The retail space would have direct access on Webster Street. The residential and office components of the proposed project would be accessed through separate lobbies on Webster Street. Each lobby would include elevators and stairwells that connect to the respective spaces, as well as the garage. Webster Street currently has a 12-foot-wide sidewalk along the east side of the street, adjacent to the project site. Signs and parking meters adjacent to the street narrow the through-passage zone to a minimum of 9 feet. The proposed project does not propose any changes to the Webster Street sidewalk.

Currently, diagonal curb ramps are provided on all corners and marked crosswalks are provided across all approaches of the two study intersections. The 19th Street/Webster Street intersection currently provides count-down pedestrian signal heads in both directions of all four pedestrian crossings at the intersection, while the 17th Street/ Webster Street intersection does not provide any pedestrian signal heads.

Recommendation 2: While not required to address a CEQA impact, the following should be considered as part of the final design for the project (consistent with SCA-TRANS-4: Transportation Improvements (#70):

- Explore the feasibility of installing directional curb ramps at all four corners at the Webster Street/19th Street and Webster Street/17th Street intersections. Considering that fire hydrants, signal poles, and/or light poles are provided at all the corners, which may obstruct installing the directional curb ramps, construction of curb extensions (bulbouts) may also be required to relocate to provide directional curb ramps.

- Install pedestrian signal heads in both directions of all four pedestrian crossings at the 17th Street/ Webster Street intersection, if feasible without upgrading the entire signal equipment at the intersection.

Transit Access Impacts

Transit service providers in the project vicinity include BART and Alameda Contra-Costa Transit District (AC Transit). BART provides regional rail service throughout the east bay and across the San Francisco Bay. The nearest BART station to project site is 19th Street BART Station, about 0.2 mile west of the project site. The proposed project would not modify access between the project site and the BART station.

AC Transit is the primary bus service provider in the City of Oakland. AC Transit operates routes 6, 11, 12, 18, 51A, 72, 72M, 72R, 800, 802, 805, 851, and NL along Broadway with stops between 17th and 20th Streets, approximately 0.2 mile from the project site.

No changes to the bus routes operating in the vicinity of the proposed project are planned and access between these bus stops and the proposed project would not modify access between the project site and these bus stops.

Emergency Access Impacts

The proposed project is not expected to result in inadequate emergency access because it would not interfere with vehicle traffic and emergency access off of the public street. Therefore, the proposed project is not expected to cause a change to the emergency access points for the project site and surrounding parcels.

Automobile Parking

Although parking is not an environmental impact required for evaluation under CEQA, this section summarizes parking requirements, supply and demand for automobiles. The proposed project would provide 250 spaces as follows: 210 parking spaces would be provided to residents and 40 parking spaces would be provided for public use. The parking spaces would be unbundled—leased separately from the residential units. The project is also exploring making the unleased residential parking spaces and the leased residential spaces when residents are not parked available to the public.

Parking Requirements

The City of Oakland Municipal Code established minimum and maximum parking requirements. According to the code Section 17.116.060, the residential component of the proposed project would require a minimum of zero and a maximum of one and one quarter parking space per residential unit. According to the code Section 17.116.080, the office and restaurant component of the proposed project would require a minimum of zero and a maximum of one parking space per 300 square feet of ground floor and one parking space per 500 square feet of above ground floor. Table 24 presents the off-street automobile parking requirements for the proposed project per City Code. The proposed project is required to provide a minimum of zero and a maximum of 341 parking spaces. The project proposes 250 parking spaces. The proposed parking supply is within the range of City of Oakland Municipal Code requirements.

Table 24 Automobile Parking Code Requirements

Land Use	Size[a]	Required Parking Supply		Provided Parking Supply	Within Range?
		Minimum	Maximum		
Residential[b]	250 DU	0	313		
Retail (Assumed Restaurant)[c]	2.5 KSF	0	8		
Office[c]	10.0 KSF	0	20		
Total		**0**	**341**	**250**	**Yes**

Note: Land uses conservatively represent the maximum project development scenario per land use type, which may be greater than the proposed project as analyzed for most topics in this checklist.
[a] DU = dwelling unit; KSF = 1,000 square feet
[b] City of Oakland off-street parking requirement for residential in zone CBD-C is a minimum of zero space and a maximum of one and one quarter spaces per unit (section 17.116.060).
[c] City of Oakland off-street parking requirement for office and restaurant uses in zone CBD-C is a minimum of zero space and a maximum of one space per 300 square foot of ground level and one space per 500 square foot of above ground level for restaurant or office spaces (Section 17.116.080).
Source: Fehr & Peers, 2016.

Estimated Parking Demand

This analysis compares proposed parking supply to project parking demand estimated using Institute of Transportation Engineer's (ITE) Parking Generation, 4th Edition; Urban Land Institute's Shared Parking, 2nd Edition; and American Community Survey data. Where applicable, a non-auto adjustment of 43 percent (Oakland City guidelines for mode split adjustment within ½-mile from BART) is applied to the rates to account for non-auto trips.

Table 25 summarizes parking demand for the project. The parking demand values represent average parking demand. Assuming that parking demand for all project components would peak at the same time and that all project uses would use the parking garage, the project peak parking demand would be about 179 spaces, resulting in a surplus of 71 spaces.

The parking demand estimate presents a reasonable worst-case scenario in that it assumes most of the retail visitors would be new to the area. Although specific retail uses have not been determined, this assessment conservatively assumes that it would be a restaurant. Further, the proposed project would adhere to City of Oakland SCAs that would require the preparation and implementation of a TDM Plan because the proposed project would generate more than 50 peak hour trips (see SCA-TRANS-1: Transportation and Parking Demand Management (#71) in Attachment A).

Table 25 Project Parking Supply and Demand

Land Use	Units[a]	Parking Demand Per Unit	Demand
Apartment (Residents)	250 DU	0.50[b]	125
Apartment (Visitors)	250 DU	0.09[c]	23
Restaurant	2.5 KSF	6.04[d]	15
Office	10.0 KSF	1.62[e]	16
Total Parking Demand			**179**
Parking Supply			*250*
Parking Surplus			**71**

Note: Land uses conservatively represent the maximum project development scenario per land use type, which may be greater than the proposed project as analyzed for most topics in this checklist.
[a] DU = Dwelling Unit; KSF = 1,000 square-feet.
[b] Based on average vehicle ownership data for census tract 4029 from the 2013 American Community Survey.
[c] Based on ULI's *Shared Parking* rate for visitors and applying a non-auto reduction of 43%.
[d] Based ITE *Parking Generation*, *4th Edition* land use category 932 (High-Turnover (Sit-Down) Restaurant, Weekday, Suburban) and applying a 43% non-auto reduction.
[e] Based on ITE *Parking Generation*, *4th Edition* land use category 701 (Office Building; weekday suburban) and applying a 43% non-auto reduction.
Source: Fehr & Peers, 2017.

Recommendation 3: While not required to address a CEQA impact, consider the following strategy to reduce project parking demand and manage the available supply:

- Establish a policy of no monthly permits for commercial parking uses, and minimum price floor for public parking, in coordination with Douglas Parking.

Loading Requirements

City Municipal Code Section 17.116.120 requires off-street loading facilities for residential uses and City Municipal Code Section 17.116.140 requires off-street loading facilities for commercial uses. The requirement for residential facilities that have more than 50,000 square feet of floor area is one off-street loading berth. The City Municipal Code Section 17.116.30 requires no loading berth for office and retail uses less than 10,000 square feet. Based on City Code, the proposed project is required to provide one off-street loading berth for the residential component of the proposed project and no berth for the office and retail components. The proposed project would provide one truck loading space that can be accessed from the project driveway on Webster Street. The project site plan would accommodate the truck to maneuver and back into the loading space. Trucks would head out of the loading space and exit through the main driveway.

Conclusion

The proposed project's potential impacts related to pedestrian, bicycle, transit, emergency access, and design and incompatible use considerations would be less than significant. The proposed project would not result in any other transportation related significant impacts.

Further, implementation of SCA-TRANS-1: Transportation and Parking Demand Management (#71) would be applicable to the proposed project and would ensure that transportation and circulation-related impacts associated with the proposed project would be less than significant (see Attachment A).

Based on the analysis and the findings and conclusions of the Program EIRs, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to transportation and circulation that were not identified in the Program EIRs. The proposed project would be required to implement SCA-TRANS-1: Transportation and Parking Demand Management (#71) to ensure no significant CEQA impacts related to transit occur. Additionally, independent of CEQA, the City will require implementation of SCA-TRANS-2: Construction Activity in the Public Right-of-Way (#68), SCA-TRANS-3: Bicycle Parking (#69), SCA-TRANS-4: Transportation Improvements (#70) as identified in Attachment A; implementation of these SCAs would further minimize the already less-than-significant transportation impacts.

N. Utilities and Service Systems

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board; Require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects; Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new wastewater treatment facilities or expansion of existing facilities, construction of which could cause significant environmental effects;	■	☐	☐
b. Exceed water supplies available to serve the project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects;	■	☐	☐
c. Be served by a landfill with insufficient permitted capacity to accommodate the project’s solid waste disposal needs and require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects; Violate applicable federal, state, and local statutes and regulations related to solid waste;	■	☐	☐

Would the project:	Equal or Less Severity of Impact Previously Identified in Program EIRs	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
d. Violate applicable federal, state and local statutes and regulations relating to energy standards; or Result in a determination by the energy provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.	■	☐	☐

Program EIR Findings

Utilities and service systems were analyzed in the Program EIRs. The 2011 Renewal Plan EIR and the 2010 Housing Element EIR and 2014 Addendum found all potential utilities and service system impacts to be less then significant and therefore no mitigation measures or SCAs were required. The 1998 LUTE EIR found potential impacts from heightened water demand, sewer flows, and drainage problems to be less than significant. The 1998 LUTE EIR also identified a significant and unavoidable impact associated with increased population in areas where firefighting and evacuation are constrained. Downtown Oakland was not an area identified as a constrained area.

Project Analysis

Water, Wastewater, and Stormwater (Criteria 14.a and 14.b)

The proposed project does not include any new, less efficient water uses than what was previously evaluated in the Program EIRs, therefore impacts would remain less than significant. City SCAs that would address potential impacts on water, wastewater and stormwater include: SCA-UTIL 1: Sanitary Sewer System (#79) and SCA-UTIL-2: Storm Drain System (#80).

Wastewater generated by the proposed project would be subject to both primary and secondary treatment and would not violate the wastewater treatment requirements of the San Francisco Bay RWQCB. The Program EIRs determined that development would have less-than-significant impacts related to stormwater. Much of the analyzed area is composed of impervious surfaces, and new development would likely decrease storm-drain runoff, because projects would be required to incorporate additional pervious areas through landscaping, in compliance with City of Oakland requirements.

Solid Waste Services (Criterion 14.c)

As described in the Program EIRs, impacts associated with solid waste would be less than significant. Nonhazardous solid waste in the analyzed area is ultimately hauled to the Altamont Landfill and Resource Facility. The Altamont Landfill would have sufficient capacity to accept waste generated by development under the project. In addition, implementation of SCA-UTIL-3: Construction and Demolition Waste Reduction and Recycling (#74) and SCA-UTIL-4: Recycling Collection and Storage Space (#76), pertain to waste reduction and recycling collection. Implementation of these SCAs would ensure no significant impacts related to solid waste would occur.

Energy (Criterion 14.d)

Development under the proposed project would result in less-than-significant impacts related to energy standards and use. Developments would be required to comply with the standards of Title 24 of the California Code of Regulations. The implementation of SCA-UTIL-5: Underground Utilities (#75) requires all projects to relocate all new gas, electric, cable, and telephone facilities underground. SCA-UTIL-6: Green Building Requirements (#77) requires compliance with the green building ordinance.

Conclusion

Consistent with the findings of the Program EIRs, the proposed project would not result in any significant impacts related to utilities or service systems. Further, based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the Program EIRS. Nor would it result in new significant impacts related to utilities and service systems that were not identified in the Program EIRs. The Program EIRs did not identify any mitigation measures related to utilities and service systems, and none would be required for the project. Implementation of SCA-UTIL-1: Sanitary Sewer System (#79), SCA-UTIL-2: Storm Drain System (#80), SCA-UTIL-3: Construction and Demolition Waste Reduction and Recycling (#74), SCA-UTIL-4: Recycling Collection and Storage Space (#76), SCA-UTIL-5: Underground Utilities (#75), SCA-UTIL-6: Green Building Requirements (#77) to ensure no significant CEQA impacts related to sewer capacity, stormwater drainage facilities, solid waste services, and energy occur. Additionally, independent of CEQA, the City will require implementation of SCA-HYD-1: Erosion and Sedimentation Control Plan for Construction (#45), and SCA-HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects (#50) as identified in Attachment A and in compliance with Title 24 and CALGreen requirements; implementation of these SCAs would further minimize the already less-than-significant utilities and service system impacts.

Attachment A: Standard Conditions of Approval and Reporting Program

The City of Oakland's Uniformly Applied Development Standards adopted as Standard Conditions of Approval (Standard Conditions of Approval, or SCAs) were originally adopted by the City in 2008 (Ordinance No. 12899 C.M.S.) pursuant to Public Resources Code section 21083.3) and have been incrementally updated over time. The SCAs incorporate development policies and standards from various adopted plans, policies, and ordinances (such as the Oakland Planning and Municipal Codes, Oakland Creek Protection, Stormwater Water Management and Discharge Control Ordinance, Oakland Tree Protection Ordinance, Oakland Grading Regulations, National Pollutant Discharge Elimination System (NPDES) permit requirements, Housing Element-related mitigation measures, Green Building Ordinance, historic/Landmark status, California Building Code, and Uniform Fire Code, among others), which have been found to substantially mitigate environmental effects.

These SCAs are incorporated into projects as conditions of approval, regardless of the determination of a project's environmental impacts. 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, avoid or substantially reduce a project's environmental effects.

In reviewing project applications, the City determines which SCAs apply based upon the zoning district, community plan, and the type of permits/approvals required for the project. The City also will determine which SCAs apply to a specific project based on the specific project type and/or project site characteristics. Because these SCAs are mandatory City requirements imposed on a city-wide basis, environmental analyses assume these SCAs will be implemented by the project, and these SCAs are not imposed as mitigation measures under CEQA.

All SCAs identified in the CEQA Analysis—which is consistent with the measures and conditions presented in the City of Oakland General Plan, Land Use and Transportation EIR (LUTE EIR, 1998), the 2010 Housing Element EIR and 2014 Addendum, and the 2011 Renewal Plan EIR — are included herein. To the extent that any SCA identified in the CEQA Analysis was inadvertently omitted, it is automatically incorporated herein by reference.

- The first column identifies the SCA applicable to that topic in the CEQA Analysis.
- The second column identifies the monitoring schedule or timing applicable to the project.
- The third column names the party responsible for monitoring the required action for the project.

In addition to the SCAs identified and discussed in the CEQA Analysis, other SCAs that are applicable to the project are included herein.

The project sponsor is responsible for compliance with any recommendations in approved technical reports and with all SCAs set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific SCA, and subject to the review and approval of the

City of Oakland. Overall monitoring and compliance with the SCAs will be the responsibility of the Planning and Zoning Division. Prior to the issuance of a demolition, grading, and/or construction permit, the project sponsor shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

Note that the SCAs included in this document are referred to using an abbreviation for the environmental topic area and are numbered sequentially for each topic area—i.e., **SCA-AIR-1**, **SCA-AIR-2**, etc. The SCA title are also provided—i.e., **SCA-AIR-1: Construction-Related Air Pollution (Dust and Equipment Emissions) (#19).**

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	**Initial Approval**	**Monitoring/ Inspection**
Aesthetics, Shadow and Wind			
SCA-AES-1 *Graffiti Control* (#16). a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation: i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces. ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces. iii. Use of paint with anti-graffiti coating. iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED). v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement. b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include: i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system. ii. Covering with new paint to match the color of the surrounding surface. iii. Replacing with new surfacing (with City permits if required).	Ongoing	N/A	Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring When Required	Initial Approval	Monitoring/ Inspection
SCA-AES-2: *Landscape Plan* (#17). a. *Landscape Plan Required* The project applicant shall submit a final Landscape Plan for City review and approval that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code. b. *Landscape Installation* The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of $2,500 or the estimated cost of implementing the Landscape Plan based on a licensed contractor's bid. c. *Landscape Maintenance* All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.	Prior to approval of construction-related permit Prior to building permit final Ongoing	Bureau of Planning Bureau of Planning N/A	N/A Bureau of Building Bureau of Building
SCA-AES-3: *Lighting* (#18). Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties.	Prior to building permit final	N/A	Bureau of Building
Air Quality			
SCA-AIR-1: *Construction-Related Air Pollution Controls (Dust and Equipment Emissions) (#19).* The project applicant shall implement all of the following applicable air pollution control measures during construction of the project: a. Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible. b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. d. Pave all roadways, driveways, sidewalks, etc. within one month of site grading or as soon as feasible. In	During construction	N/A	Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
addition, building pads should be laid within one month of grading or as soon as feasible unless seeding or soil binders are used. e. Enclose, cover, water twice daily, or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.). f. Limit vehicle speeds on unpaved roads to 15 miles per hour. g. Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points. h. Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations (California Air Resources Board Off-Road Diesel Regulations). i. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. j. Portable equipment shall be powered by electricity if available. If electricity is not available, propane or natural gas shall be used if feasible. Diesel engines shall only be used if electricity is not available and it is not feasible to use propane or natural gas. k. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. l. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph. m. Install sandbags or other erosion control measures to prevent silt runoff to public roadways. n. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more). o. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust off-site. Their duties shall include holidays and weekend periods when work may not be in progress. p. Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind-blown dust. Wind breaks must have a maximum 50 percent air porosity.			

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	**Initial Approval**	**Monitoring/ Inspection**
q. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. r. Activities such as excavation, grading, and other ground-disturbing construction activities shall be phased to minimize the amount of disturbed surface area at any one time. s. All trucks and equipment, including tires, shall be washed off prior to leaving the site. t. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel. u. All equipment to be used on the construction site and subject to the requirements of Title 13, Section 2449, of the California Code of Regulations (California Air Resources Board Off-Road Diesel Regulations) must meet emissions and performance requirements one year in advance of any fleet deadlines. Upon request by the City, the project applicant shall provide written documentation that fleet requirements have been met. v. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings). w. All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM. x. Off-road heavy diesel engines shall meet the California Air Resources Board's most recent certification standard. y. Post a publicly-visible large on-site sign that includes the contact name and phone number for the project complaint manager responsible for responding to dust complaints and the telephone numbers of the City's Code Enforcement unit and the Bay Area Air Quality Management District. When contacted, the project complaint manager shall respond and take corrective action within 48 hours.			
Note: Screening analysis demonstrated that the proposed project would be below the applicable threshold. No further action is required under this SCA. **SCA-AIR-2:** *Stationary Sources of Air Pollution (Toxic Air Contaminants) (#21).* The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to on-site stationary sources of toxic air contaminants.	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building
SCA-AIR-3: *Asbestos in Structures* (#23). The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health	Prior to approval of construction-related permit	Applicable regulatory agency with jurisdiction	Applicable regulatory agency with jurisdiction

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	**Initial Approval**	**Monitoring/ Inspection**
and Safety Code Sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request.			
Cultural Resources			
SCA-CUL-1: *Archaeological and Paleontological Resources – Discovery During Construction* (#29). Pursuant to CEQA Guidelines Section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented. In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense. In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall	During construction	N/A	Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	**Initial Approval**	**Monitoring/ Inspection**
be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.			
SCA-CUL-2: *Human Remains – Discovery During Construction* (#31). Pursuant to CEQA Guidelines Section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.	During construction	N/A	Bureau of Building
Geology, Soils and Geohazards			
SCA-GEO-1: *Construction-Related Permit(s)* (#33). The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building
SCA-GEO-2: *Soils Report* (#34). The project applicant shall submit a soils report prepared by a registered geotechnical engineer for City review and approval. The soils report shall contain, at a minimum, field test results and observations regarding the nature, distribution and strength of existing soils, and recommendations for appropriate grading practices and project design. The project applicant shall implement the recommendations contained in the approved report during project design and construction.	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building
Hazards and Hazardous Materials			
SCA-HAZ-1: *Hazardous Building Materials and Site Contamination* (#40). a. Hazardous Building Materials Assessment Requirement: The project applicant shall submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACMs), lead-based	Prior to approval of construction-related permit Prior to approval of construction-related permit During	Oakland Fire Department Bureau of Building N/A	Oakland Fire Department Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
paint, polychlorinated biphenyls (PCBs), and any other building materials or stored materials classified as hazardous materials by State or federal law. If lead-based paint, ACMs, PCBs, or any other building materials or stored materials classified as hazardous materials are present, the project applicant shall submit specifications signed by a qualified environmental professional, for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. b. Environmental Site Assessment Required: The project applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. Consistent with the Phase II ESA prepared for the project, a site management plan shall be prepared by the project sponsor, and shall set out procedures to ensure protection of workers and the environment. In addition, if new or more significant contamination is encountered during site redevelopment earthwork, the project sponsor shall confirm that any cleanup actions are performed consistent with applicable laws and local agency requirements as required. c. Health and Safety Plan Required: The project applicant shall submit a Health and Safety Plan for review and approval by the City to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan. d. Best Management Practices Required for Contaminated Sites: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following: i. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an	construction		

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements. ii. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building.			
SCA-HAZ-2: *Hazardous Materials Related to Construction* (#39). The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following: a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction; b. Avoid overtopping construction equipment fuel gas tanks; c. During routine maintenance of construction equipment, properly contain and remove grease and oils; d. Properly dispose of discarded containers of fuels and other chemicals; e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and f. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.	During construction	N/A	Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring: When Required	Implementation/Monitoring: Initial Approval	Implementation/Monitoring: Monitoring/ Inspection
Hydrology and Water Quality			
SCA-HYD-1: *Erosion and Sedimentation Control Plan for Construction* (#45). *a. Erosion and Sedimentation Control Plan Required* The project applicant shall submit an Erosion and Sedimentation Control Plan to the City for review and approval. The Erosion and Sedimentation Control Plan shall include all necessary measures to be taken to prevent excessive stormwater runoff or carrying by stormwater runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading and/or construction operations. The Plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and stormwater retention basins. Off-site work by the project applicant may be necessary. The project applicant shall obtain permission or easements necessary for off-site work. There shall be a clear notation that the plan is subject to changes as changing conditions occur. Calculations of anticipated stormwater runoff and sediment volumes shall be included, if required by the City. The Plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment. *b. Erosion and Sedimentation Control During Construction* The project applicant shall implement the approved Erosion and Sedimentation Control Plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Bureau of Building.	Prior to approval of construction-related permit During construction	Bureau of Building N/A	N/A Bureau of Building
SCA-HYD-2: *NPDES C.3 Stormwater Requirements for Regulated Projects* (#50). *a. Post-Construction Stormwater Management Plan Required* The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following: i. Location and size of new and replaced impervious surface;	Prior to approval of construction-related permit Prior to building permit final	Bureau of Planning; Bureau of Building Bureau of Building	Bureau of Building Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
ii. Directional surface flow of stormwater runoff; iii. Location of proposed on-site storm drain lines; iv. Site design measures to reduce the amount of impervious surface area; v. Source control measures to limit stormwater pollution; vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff. *b. Maintenance Agreement Required* The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following: i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.			
Noise			
SCA-NOI-1: *Construction Days/Hours* (#58). The project applicant shall comply with the following restrictions concerning construction days and hours: a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed	During construction	N/A	Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
on Saturday. c. No construction is allowed on Sunday or federal holidays. Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.			
SCA-NOI-2: *Construction Noise* (#59). The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following: a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. c. Applicant shall use temporary power poles instead of generators where feasible. d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be	During construction	N/A	Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring: When Required	Implementation/Monitoring: Initial Approval	Implementation/Monitoring: Monitoring/ Inspection
muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction. e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.			
SCA-NOI-3: Extreme Construction Noise (#60). a. Construction Noise Management Plan Required Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following: i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; ii. Implement quiet pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions; iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site; iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and v. Monitor the effectiveness of noise attenuation measures by taking noise measurements. b. Public Notification Required The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.	Prior to approval of construction-related permit During construction	Bureau of Building Bureau of Building	Bureau of Building Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
SCA-NOI-4: *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: a. Designation of an on-site construction complaint and enforcement manager for the project; b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit; c. Protocols for receiving, responding to, and tracking received complaints; and d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request.	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building
SCA-NOI-5: *Operational Noise* (#64). Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City.	Ongoing	N/A	Bureau of Building
SCA-NOI-6: *Exposure to Community Noise* (#63). The project applicant shall submit a Noise Reduction Plan prepared by a qualified acoustical engineer for City review and approval that contains noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the land use compatibility guidelines of the Noise Element of the Oakland General Plan. The applicant shall implement the approved Plan during construction. To the maximum extent practicable, interior noise levels shall not exceed the following: a. 45 dBA: Residential activities, civic activities, hotels b. 50 dBA: Administrative offices; group assembly activities c. 55 dBA: Commercial activities d. 65 dBA: Industrial activities	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building
SCA-NOI-7: *Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities* (#66). The project applicant shall submit a vibration analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located at 1701-1709 Webster Street/350-370 17th	Prior to construction	Bureau of Building	Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
Street, 1708-1710 Franklin Street, 1714-18 Franklin Street, 1724-1730 Franklin Street, and 1736-1742 Franklin Street – Leamington Hotel Annex. The vibration analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction.			
Transportation and Circulation			
SCA-TRANS-1: *Transportation and Parking Demand Management* (#71). Transportation and Parking Demand Management (TDM) Plan Required The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City. i. The goals of the TDM Plan shall be the following: • Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable, consistent with the potential traffic and parking impacts of the project. • Achieve the following project vehicle trip reductions (VTR): o Projects generating 50-99 net new AM or PM peak hour vehicle trips: 10 percent VTR o Projects generating 100 or more net new AM or PM peak hour vehicle trips: 20 percent VTR • Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate. • Enhance the City's transportation system, consistent with City policies and programs. ii. TDM strategies to consider include, but are not limited to, the following: • Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement. • Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority bikeways, on-site signage and bike lane striping. • Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project. • Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan. • Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements.	Prior to approval of construction-related permit Prior to building permit final Ongoing	Bureau of Planning Bureau of Building Bureau of Planning	N/A Bureau of Building Bureau of Planning

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
• Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency). • Provision of a transit subsidy to employees or residents, determined by the project applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes. • Provision of an ongoing contribution to transit service to the area between the project and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle service; and 3) Establishment of new shuttle service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario 3). • Guaranteed ride home program for employees, either through 511.org or through separate program. • Pre-tax commuter benefits (commuter checks) for employees. • Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants. • On-site carpooling and/or vanpool program that includes preferential (discounted or free) parking for carpools and vanpools. • Distribution of information concerning alternative transportation options. • Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive or transit pass alternative to a free parking space in commercial properties. • Parking management strategies including attendant/valet parking and shared parking spaces. • Requiring tenants to provide opportunities and the ability to work off-site. • Allow employees or residents to adjust their work schedule in order to complete the basic work requirement of five eight-hour workdays by adjusting their schedule to reduce vehicle trips to the worksite (e.g., working four, ten-hour days; allowing employees to work from home two days per week). • Provide or require tenants to provide employees with staggered work hours involving a shift in the set work hours of all employees at the workplace or flexible work hours involving individually determined work hours. The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report.			

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
TDM Implementation – Physical Improvements For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project. TDM Implementation – Operational Strategies For projects that generate 100 or more net new AM or PM peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved.			
SCA-TRANS-2: *Construction Activity in the Public Right-of-Way* (#68). *a. Obstruction Permit Required* The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets and sidewalks.	Prior to Approval of Construction Related Permit	Bureau of Building	Bureau of Building
b. Traffic Control Plan Required In the event of obstructions to vehicle or bicycle travel lanes, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian detours, including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The project applicant shall implement the approved Plan during construction.	Prior to Approval of Construction Related Permit	Public Works Department, Transportation Services Division	Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
c. Repair City Streets The project applicant shall repair any damage to the public right-of way, including streets and sidewalks caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.	Prior to Building Permit Final	N/A	Bureau of Building
SCA-TRANS-3: *Bicycle Parking* (#69)**.** The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building
SCA-TRANS-4: *Transportation Improvements* (#70)**.** The project applicant shall implement the recommended on- and off-site transportation-related improvements contained within the Transportation Impact Study for the project (e.g., signal timing adjustments, restriping, signalization, traffic control devices, roadway reconfigurations, and pedestrian and bicyclist amenities). The project applicant is responsible for funding and installing the improvements, and shall obtain all necessary permits and approvals from the City and/or other applicable regulatory agencies such as, but not limited to, Caltrans (for improvements related to Caltrans facilities) and the California Public Utilities Commission (for improvements related to railroad crossings), prior to installing the improvements. To implement this measure for intersection modifications, the project applicant shall submit Plans, Specifications, and Estimates (PS&E) to the City for review and approval. All elements shall be designed to applicable City standards in effect at the time of construction and all new or upgraded signals shall include these enhancements as required by the City. All other facilities supporting vehicle travel and alternative modes through the intersection shall be brought up to both City standards and ADA standards (according to Federal and State Access Board guidelines) at the time of construction. Current City Standards call for, among other items, the elements listed below: a. 2070L Type Controller with cabinet accessory b. GPS communication (clock) c. Accessible pedestrian crosswalks according to Federal and State Access Board guidelines with signals (audible and tactile) d. Countdown pedestrian head module switch out e. City Standard ADA wheelchair ramps f. Video detection on existing (or new, if required) g. Mast arm poles, full activation (where applicable) h. Polara Push buttons (full activation) i. Bicycle detection (full activation) j. Pull boxes k. Signal interconnect and communication with trenching	Prior to building permit final or as otherwise specified	Bureau of Building; Public Works Department, Transportatio n Services Division	Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
(where applicable), or through existing conduit (where applicable), 600 feet maximum l. Conduit replacement contingency m. Fiber switch n. PTZ camera (where applicable) o. Transit Signal Priority (TSP) equipment consistent with other signals along corridor p. Signal timing plans for the signals in the coordination group			
Utilities and Service Systems			
SCA-UTIL-1: *Sanitary Sewer System* (#79). The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system.	Prior to approval of construction-related permit	Public Works Department, Department of Engineering and Construction	N/A
SCA-UTIL-2: *Storm Drain System* (#80). The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building
SCA-UTIL-3*: Construction and Demolition Waste Reduction and Recycling* (#74). The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.	Prior to approval of construction-related permit	Public Works Department, Environmental Services Division	Public Works Department, Environmental Services Division
SCA-UTIL-4: *Recycling Collection and Storage Space* (#76). The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring: When Required	Initial Approval	Monitoring/ Inspection
recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet.			
SCA-UTIL-5: *Underground Utilities* (#75). The project applicant shall place underground all new utilities serving the project and under the control of the project applicant and the City, including all new gas, electric, cable, and telephone facilities, fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities. The new facilities shall be placed underground along the project's street frontage and from the project structures to the point of service. Utilities under the control of other agencies, such as PG&E, shall be placed underground if feasible. All utilities shall be installed in accordance with standard specifications of the serving utilities.	During construction	N/A	Bureau of Building
SCA-UTIL-6: *Green Building Requirements* (#77). *a. Compliance with Green Building Requirements During Plan-Check.* The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code). i. The following information shall be submitted to the City for review and approval with the application for a building permit: • Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards. • Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit. • Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit. • Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below. • Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance. • Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. • Other documentation as deemed necessary by the	Prior to approval of construction-related permit During construction After project completion as specified	Bureau of Building N/A Bureau of Planning	N/A Bureau of Building Bureau of Building

Standard Conditions of Approval	Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
City to demonstrate compliance with the Green Building Ordinance. ii. The set of plans in subsection (i) shall demonstrate compliance with the following: • CALGreen mandatory measures. • All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable Hardship Exemption granted during the review of the Planning and Zoning permit. • Minimum of 23 points per the appropriate checklist approved during the Planning entitlement process. • All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted. • The required green building point minimums in the appropriate credit categories. *b. Compliance with Green Building Requirements During Construction* The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project. The following information shall be submitted to the City for review and approval: i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit. ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance. iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. *c. Compliance with Green Building Requirements After Construction* Within sixty (60) days of the final inspection of the building permit for the project, the Green Building Certifier shall submit the appropriate documentation to Build It Green and attain the minimum required certification/point level. Within one year of the final inspection of the building permit for the project, the applicant shall submit to the Bureau of Planning the Certificate from the organization listed above demonstrating certification and compliance with the minimum point/certification level noted above.			

Attachment B: Project Consistency with Community Plan or Zoning, Per CEQA Guidelines Section 15183

Section 15183(a) of the California Environmental Quality Act (CEQA) Guidelines states that "…projects which are consistent with the development density established by the existing zoning, community plan, or general plan policies for which an Environmental Impact Report (EIR) was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site."

Proposed Project

The project would be located in developed, urbanized Downtown Oakland. The proposed project would develop a 25-story, approximately 262-foot-tall building with an additional 10 feet in mechanical. The proposed project includes up to 250 residential units, approximately 2,080 square feet of retail space, and approximately 7,460 square feet of commercial space. It would demolish an existing two-story building and construct a new mixed-use building with approximately 365,469 gross square feet.

Project Consistency

The City of Oakland completed an update of the General Plan LUTE in March 1998. The LUTE includes the City's current Land Use and Transportation Diagram as well as strategies, policies, and priorities for Oakland's development and enhancement during a two-decade period. The EIR certified for the LUTE is used to simplify the task of preparing environmental documents on later projects that occur as a result of LUTE implementation.

Section 15183(a) of the CEQA Guidelines states that "…projects which are consistent with the development density established by the existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site."

As discussed in detail in Chapter II of this document, the analysis in the 1998 LUTE EIR and the 2010 Housing Element EIR and 2014 Addendum, are considered the qualified planning level CEQA documents for this assessment, pursuant to CEQA Guidelines Section 15183.

1998 General Plan Land Use and Transportation Element and EIR

As determined by the City of Oakland Bureau of Planning, the proposed land uses are permitted in the zoning district in which the proposed project is located, making the project consistent with the bulk, density, and land uses envisioned for the project site, as outlined below.

- The General Plan land use designation for the site is Commercial Business District. This classification is intended to encourage, support, and enhance the downtown area as a high-density, mixed-use urban center of regional importance, and a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation. The proposed project would provide for a variety of commercial and residential uses on the project site that would be pedestrian-oriented and be neighborhood-serving.
- The site is zoned Central Business District General Commercial Zone (CBD-C). The proposed project would be consistent with the purposes of this district, which is generally intended to create, maintain, and enhance areas of the Commercial Business District appropriate for a range of ground-floor commercial activities. Upper-story spaces are intended to be available for residential uses. The proposed project would develop ground-floor commercial retail/restaurant space.
- The proposed building would have a base height of 50 feet, which would be above the minimum base height of 45 feet and below the maximum base height of 120 feet. The proposed building would be up to approximately 262 feet in height with an additional 10 feet in mechanical use and is within Height Area 7, which has no maximum height limit.
- The maximum dwelling unit density allowed by zoning is one unit per 90 square feet of lot area and the maximum non-residential FAR is 20.0; based on the project site size (0.52 acre), up to 250 residential units and up to 450,000 square feet of non-residential uses are allowed.

The City of Oakland's 2015-2023 Housing Element

The City of Oakland's 2015-2023 Housing Element indicates that there are as many as 10,400 new housing units that are allowable within the downtown under current zoning designations, with a likely number of 4,310 housing units to be developed within the Downtown without rezoning or further General Plan Amendments, through opportunity sites and with projects either built, under construction, approved or in predevelopment. The project site meets the Housing Element's criteria of sites suitable for new housing development, including:

- It is an underutilized site with outmoded facilities and/or marginal existing use.
- It is within downtown, which accounts for the largest number of potential housing units, as the densities of permitted development are higher than most other areas.
- It is located in close proximity to a major commercial corridor, and provides ground floor commercial space with housing above, as encouraged by zoning and development guidelines to maximize residents' access to services including retail opportunities, transportation alternatives and civic activities, while reducing the need for automobiles, thus increasing the sustainability of such development.
- As demonstrated above, the proposed project is consistent with the development density established by existing zoning and General Plan policies for the site, and there are no

peculiar aspects, other than those evaluated herein, that would increase the severity of any of the previously identified significant cumulative effects in the 1998 LUTE EIR.

Therefore, the proposed project is eligible for consideration of an exemption under California Public Resources Code Section 21083.3 and Section 15183 of the CEQA Guidelines.

Attachment C: Infill Performance Standards, Per CEQA Guidelines Section 15183.3

California Environmental Quality Act (CEQA) Guidelines Section 15183.3(b) and CEQA Guidelines Appendix M establish eligibility requirements for projects to qualify as infill projects. Table C-1, on the pages following, shows how the proposed project satisfies each of the applicable requirements.

Table C-1
Project Infill Eligibility

	CEQA Eligibility Criteria	**Eligible?/Notes for Proposed Project**
1.	Be located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least 75 percent of the site's perimeter. For the purpose of this subdivision, adjoin means the infill project is immediately adjacent to qualified urban uses, or is only separated from such uses by an improved right-of-way. (CEQA Guidelines Section 15183.3[b][1])	Yes The project site has been previously developed with commercial uses and adjoins existing urban uses, as described in Chapter IV, Project Description, above.
2.	Satisfy the performance Standards provided in Appendix M (CEQA Guidelines Section 15183.3[b][2]) as presented in 2a and 2b below:	—
	2a. *Performance Standards Related to Project Design.* All projects must implement **all** of the following:	—
	Renewable Energy. *Non-Residential Projects.* All nonresidential projects shall include on-site renewable power generation, such as solar photovoltaic, solar thermal, and wind power generation, or clean back-up power supplies, where feasible. *Residential Projects.* Residential projects are also encouraged to include such on-site renewable power generation.	Not Applicable According to Section IV (G) of CEQA Appendix M, for mixed-use projects "...the performance standards in this section that apply to the predominant use shall govern the entire project." Because the predominant use is residential, the proposed project is not required to include on-site renewable power generation.
	Soil and Water Remediation. If the project site is included on any list compiled pursuant to Section 65962.5 of the Government Code, the project shall document how it has remediated the site, if remediation is completed. Alternatively, the project shall implement the recommendations provided in a preliminary endangerment assessment or comparable document that identifies remediation appropriate for the site.	Yes As stated in Chapter VI.G, Hazards and Hazardous Materials, of the CEQA Checklist, a review of available environmental databases was conducted for the project. The project site has been the subject of environmental investigations and cleanup actions in association with releases from former gasoline underground storage tanks,[1] and is therefore included on the list of hazardous materials release sites compiled pursuant to Government Code Section 65962.5 (i.e., the Cortese List). Alameda County Environmental Health (ACEH) is currently

[1] AECOM, 2016. Phase II Environmental Site Assessment Report, Douglas Parking Company Property, 1721 Webster Street, Oakland, California, July 22.

Table C-1
Project Infill Eligibility

	CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project
		overseeing the investigation and cleanup activities at the project site. The Phase I ESA and Phase II ESA prepared for the project site included recommendations for the site, and consistent with SCA-HAZ-2, the project applicant shall implement the [City] approved [Phase I/II] recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. See Section 7 for additional information.
	Residential Units Near High-Volume Roadways and Stationary Sources. If a project includes residential units located within 500 feet, or other distance determined to be appropriate by the local agency or air district based on local conditions, of a high volume roadway or other significant sources of air pollution, the project shall comply with any policies and standards identified in the local general plan, specific plan, zoning code, or community risk reduction plan for the protection of public health from such sources of air pollution. If the local government has not adopted such plans or policies, the project shall include measures, such as enhanced air filtration and project design, that the lead agency finds, based on substantial evidence, will promote the protection of public health from sources of air pollution. Those measures may include, among others, the recommendations of the California Air Resources Board, air districts, and the California Air Pollution Control Officers Association.	Yes For projects that include residential units, the BAAQMD recommends evaluating the cumulative health risks to the residents from mobile and stationary sources of TAC emissions within 1,000 feet of the project. Based on a screening level analysis, the proposed project would be required to implement the health risk reduction measures under SCA-AIR-1: Construction-Related Air Pollution Controls (Dust and Equipment Emissions) (#19), SCA-AIR-2: Stationary Sources of Air Pollution (Toxic Air Contaminants) (#21), and SCA-AIR-3: Asbestos in Structures (#23). These SCAs are included in Attachment A. See the discussion in Chapter VI.B on Air Quality in this CEQA Analysis.
	2b. *Additional Performance Standards by Project Type.* In addition to implementing all the features described in criterion 2a above, the project must meet eligibility requirements provided below by project type.[a]	
	Residential. A residential project must meet **one** of the following: A. *Projects achieving below average regional per capita vehicle miles traveled.* A residential project is eligible if it is located in a low vehicle travel area within the region; B. *Projects located within ½-mile of an Existing Major Transit Stop or High Quality Transit Corridor.* A residential project is eligible if it is located within ½-mile of an existing major transit stop or an existing stop along a high quality transit corridor; **or** C. *Low – Income Housing.* A residential or mixed-use project consisting of 300 or fewer	Yes The proposed project is eligible under Section (B). The project site is well-served by multiple transit providers, including numerous Alameda-Contra Costa Transit District (AC Transit) routes. The project site is also approximately 0.2-mile north of the 19th Street Oakland Bay Area Rapid Transit (BART) station. Broadway qualifies as a High Quality Transit Corridor, as defined by CEQA, with fixed route bus service at intervals no longer than 15 minutes during peak commute hours. The AC Transit Line 51A runs along Broadway near the project site, and has service intervals no longer than 15 minutes during peak commute hours. Other bus routes in the project vicinity further satisfy this

Table C-1
Project Infill Eligibility

	CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project
	residential units all of which are affordable to low income households is eligible if the developer of the development project provides sufficient legal commitments to the lead agency to ensure the continued availability and use of the housing units for lower income households, as defined in Section 50079.5 of the Health and Safety Code, for a period of at least 30 years, at monthly housing costs, as determined pursuant to Section 50053 of the Health and Safety Code.	criterion.
	Commercial/Retail. A commercial/retail project must meet **<u>one</u>** of the following: A. *Regional Location.* A commercial project with no single-building floor-plate greater than 50,000 square feet is eligible if it locates in a low vehicle travel area; **<u>or</u>** B. *Proximity to Households.* A project with no single-building floor-plate greater than 50,000 square feet located within ½-mile of 1,800 households is eligible.	Not Applicable According to Section IV (G) of CEQA Appendix M, for mixed-use projects "…the performance standards in this Section that apply to the predominant use shall govern the entire project." Because the predominant use is residential, the requirements for commercial/ retail projects do not apply.
	Office Building. An office building project must meeting **<u>one</u>** of the following: A. *Regional Location.* Office buildings, both commercial and public, are eligible if they locate in a low vehicle travel area; **<u>or</u>** B. *Proximity to a Major Transit Stop.* Office buildings, both commercial and public, within ½-mile of an existing major transit stop, or ¼-mile of an existing stop along a high quality transit corridor, are eligible.	Not Applicable
	Schools. Elementary schools within 1 mile of 50 percent of the projected student population are eligible. Middle schools and high schools within 2 miles of 50 percent of the projected student population are eligible. Alternatively, any school within ½-mile of an existing major transit stop or an existing stop along a high quality transit corridor is eligible. Additionally, to be eligible, all schools shall provide parking and storage for bicycles and scooters, and shall comply with the requirements of Sections 17213, 17213.1, and 17213.2 of the California Education Code.	Not Applicable
	Transit. Transit stations, as defined in Section 15183.3(e)(1), are eligible.	Not Applicable

Table C-1
Project Infill Eligibility

	CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project
	Small Walkable Community Projects. Small walkable community projects, as defined in Section 15183.3, subdivisions (e)(6), that implement the project features in 2a above are eligible.	Not Applicable
3.	Be consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy, **<u>except</u>** as provided in CEQA Guidelines Sections 15183.3(b)(3)(A) or (b)(3)(B) below: (b)(3)(A). Only where an infill project is proposed within the boundaries of a metropolitan planning organization for which a sustainable communities strategy or an alternative planning strategy will be, but is not yet in effect, a residential infill project must have a density of at least 20 units per acre, and a retail or commercial infill project must have a floor area ratio of at least 0.75; **<u>or</u>** (b)(3)(B). Where an infill project is proposed outside of the boundaries of a metropolitan planning organization, the infill project must meet the definition of a "small walkable community project" in CEQA Guidelines §15183.3(f)(5). (CEQA Guidelines Section 15183.3[b][3])	Yes (see explanation below table)

[a] Where a project includes some combination of residential, commercial and retail, office building, transit station, and/or schools, the performance standards in this section that apply to the predominant use shall govern the entire project.

Explanation for Eligibility Criteria 3 – The adopted Plan Bay Area (2013)[2] serves as the Sustainable Communities' Strategy for the Bay Area, per Senate Bill (SB) 375. As defined by the Plan, Priority Development Areas (PDAs) are areas where new development will support the needs of residents and workers in a pedestrian-friendly environment served by transit. The proposed project is consistent with the land use designation, density, and building intensity specified in the General Plan as described in Chapter VI.I, Land Use, Plans, and Policies, of this document and summarized below.

The General Plan land use designation for the site is Central Business District (CBD); this classification is intended to encourage, support, and enhance the downtown area as a high-density mixed-use urban center of regional importance, and a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation. The proposed mixed-use project would be consistent with this designation.

[2] Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), 2013. Plan Bay Area, Strategy for a Sustainable Region, July 18.

The project site is zoned as Central Business District General Commercial (CBD-C). In this zone, ground floor commercial uses are permitted and upper story spaces are intended to be available for a wide range of office and residential activities. The project site is also in Height Area 7, which has no height limit; however, towers above 250 feet in height require a conditional use permit. In Height Area 7, the maximum building base height is 120 feet and the minimum height of any new building is 45 feet. Furthermore, the maximum dwelling unit density is one dwelling unit per 90 square feet of lot area and the maximum non-residential FAR is 20.0. Based on the maximum density and FAR, up to 250 residential units and up to 450,000 square feet of non-residential uses are allowed on the 0.52-acre project site.

The proposed project would result in the development of a 25-story building that would include a mix of uses, including residential, commercial-retail, and parking. The proposed building would have a base height of 50 feet, which would be above the minimum base height and below the maximum base height, and a tower height of up to 262 feet. The maximum allowed residential units (250 units) are proposed for the site and less than the maximum commercial uses are proposed for the site (9,540 square feet). As such, the proposed project would be consistent with the General Plan, zoning code, and density and intensity requirements.

Attachment D: Shadow Study for the 1721 Webster Street Project prepared by Prevision Design

PREVISION DESIGN

EXHIBIT A

1721 WEBSTER STREET

SHADING DIAGRAMS ON THE SUMMER SOLSTICE

Shading diagrams at 9am, 12 noon, and 3pm reflecting shading conditions with:

- 1721 Webster Street Project
- 1721 Webster Street Project + Cumulative Projects

PREVISION DESIGN

1721 WEBSTER STREET

Shading diagrams on the Summer Solstice

A1

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project

Historic Resource Sites
1. 2525 Broadway (Paramount Theatre)
2. 1800 Franklin (Leamington Hotel)
3. 1803 Webster
4. 1830 Webster
5. 1st Church of Christ Scientist
6. 1700 Franklin
7. 1701 Webster / 372 17th
8. 1732 Webster
9. 1635 Webster
10. 1628 Webster

Solar Collector Sites
1. 555 19th
2. 540 17th
3. 733 Broadway
4. 285 17th
5. 1560 Alice
6. 150 17th
7. 1525 Jackson

Public Parks
1. Henry J. Kaiser Memorial Park
2. Snow Park
3. Frank H. Ogawa Plaza
4. Lakeview Park

PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading diagrams on the Summer Solstice

A1-C

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project
- New Shading from Cumulative Projects

Historic Resource Sites
1. 2525 Broadway (Paramount Theatre)
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Cumulative Projects
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2. 2016 Telegraph
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4. 1640 Broadway
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6. 222 19th Street
7. 1510 Webster
8. 1433 Webster
9. 1314 Franklin
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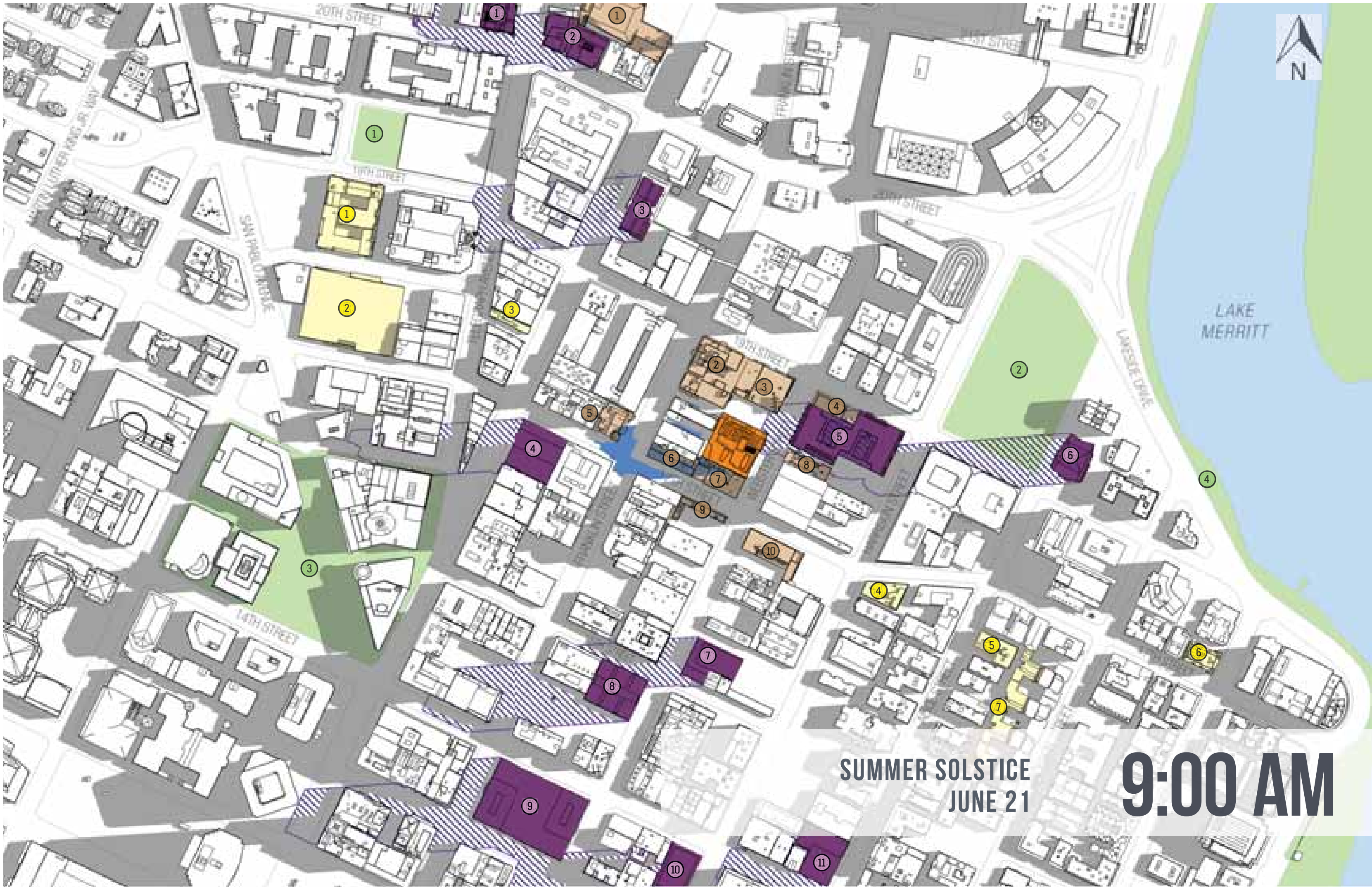
11. 14th & Alice



SUMMER SOLSTICE
JUNE 21

9:00 AM

PREVISION DESIGN

1721 WEBSTER STREET

Shading diagrams on the Summer Solstice

A2

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project

Historic Resource Sites
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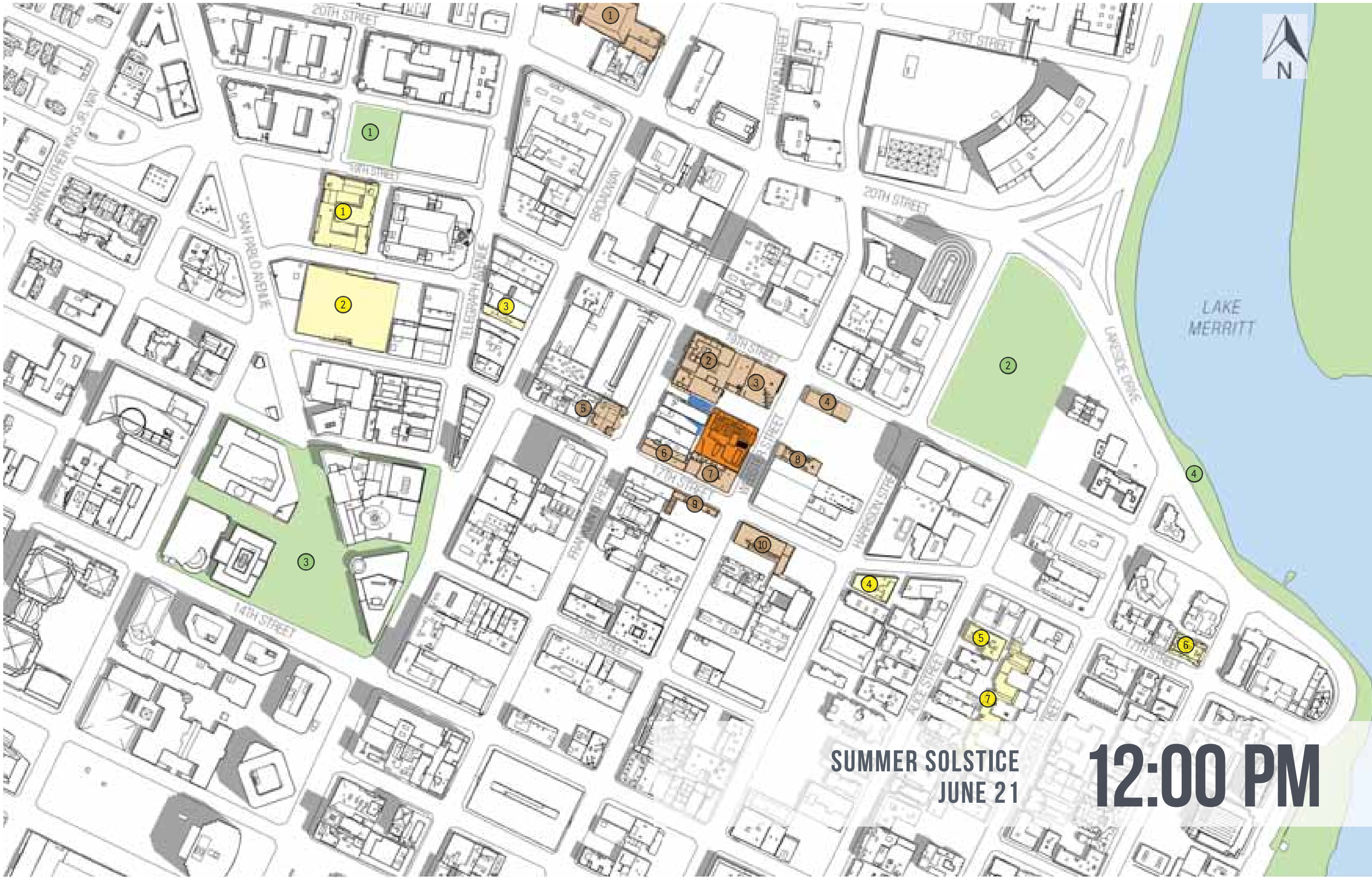
4. Lakeview Park



SUMMER SOLSTICE
JUNE 21

12:00 PM

PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading diagrams on the Summer Solstice

A2-C

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project
- New Shading from Cumulative Projects

Historic Resource Sites
1. 2525 Broadway (Paramount Theatre)
2. 1800 Franklin (Leamington Hotel)
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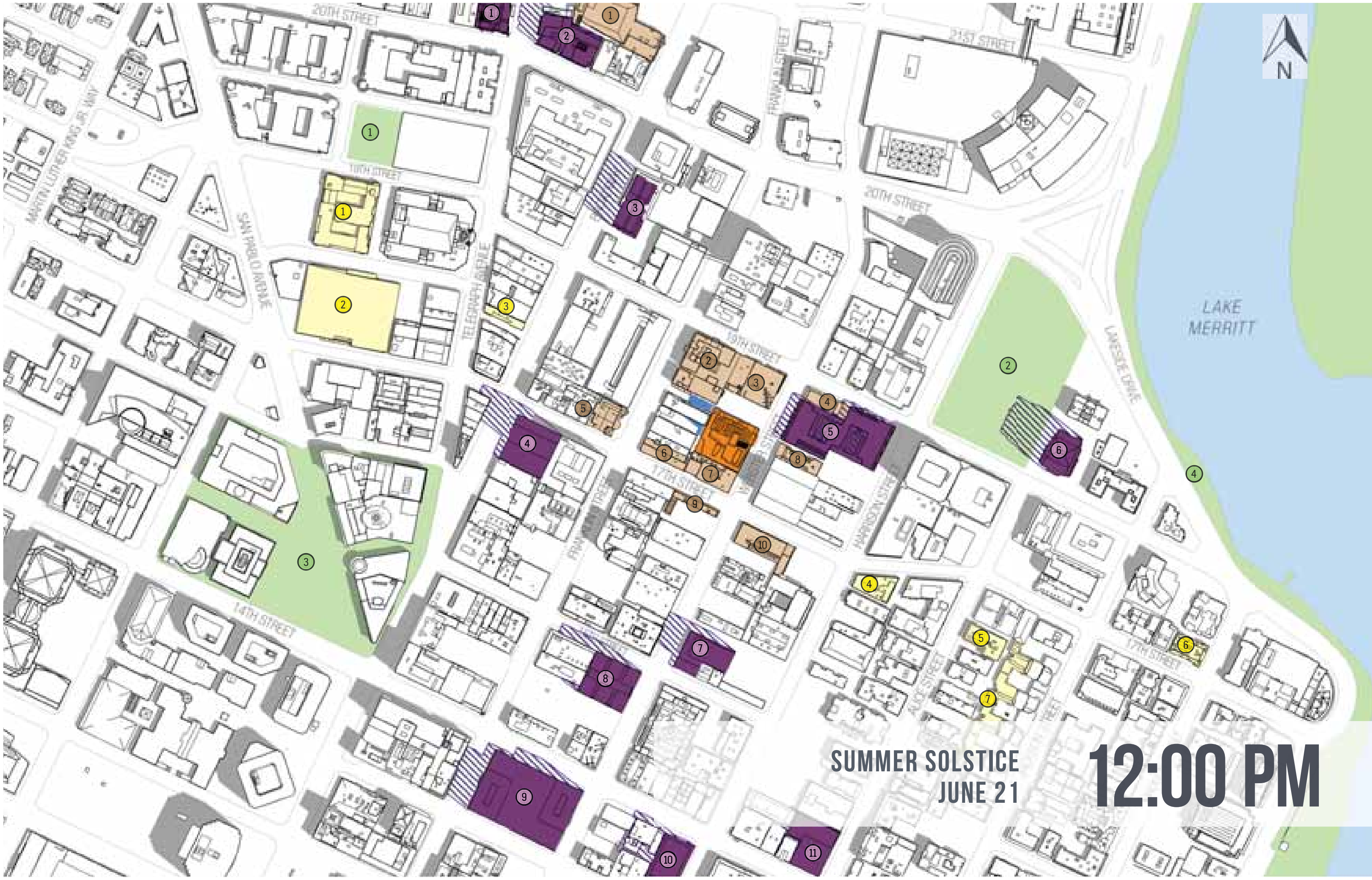

SUMMER SOLSTICE
JUNE 21

12:00 PM

PREVISION DESIGN

1721 WEBSTER STREET

Shading diagrams on the Summer Solstice

A3

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project

Historic Resource Sites

1. 2525 Broadway (Paramount Theatre)
2. 1800 Franklin (Leamington Hotel)
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Solar Collector Sites

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7. 1525 Jackson

Public Parks

1. Henry J. Kaiser Memorial Park
2. Snow Park
3. Frank H. Ogawa Plaza
4. Lakeview Park

SUMMER SOLSTICE
JUNE 21

3:00 PM

PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading diagrams on the Summer Solstice

A3-C

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project
- New Shading from Cumulative Projects

Historic Resource Sites

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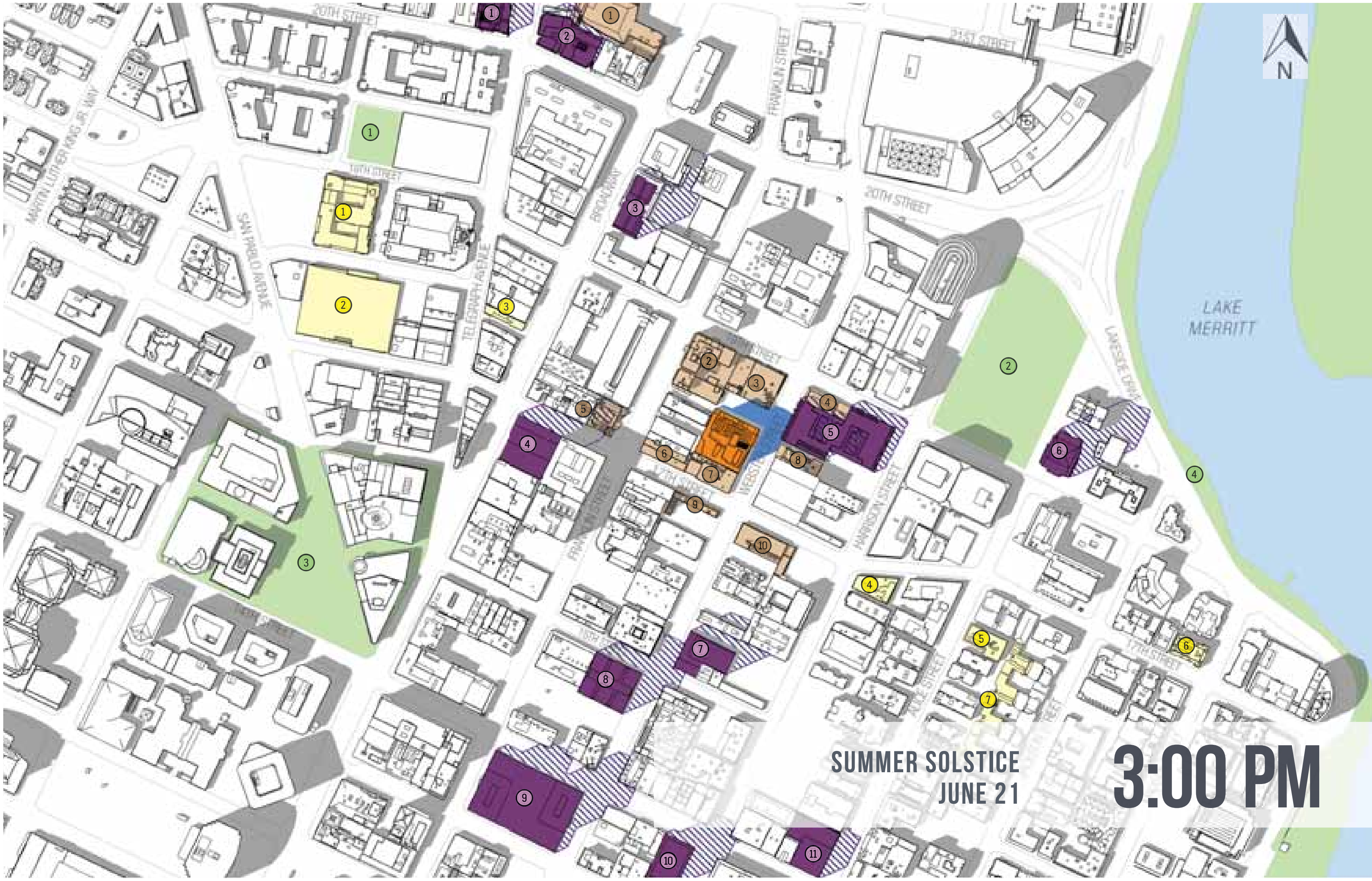

SUMMER SOLSTICE
JUNE 21

3:00 PM

PREVISION DESIGN

EXHIBIT B

1721 WEBSTER STREET

SHADING DIAGRAMS ON THE VERNAL/AUTUMNAL EQUINOX

Shading diagrams at 9am, 12 noon, and 3pm reflecting shading conditions with:

- 1721 Webster Street Project
- 1721 Webster Street Project + Cumulative Projects

PREVISION DESIGN

1721 WEBSTER STREET

Shading diagrams on the Vernal/Autumnal Equinoxes

B1

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project

Historic Resource Sites

1. 2525 Broadway (Paramount Theatre)
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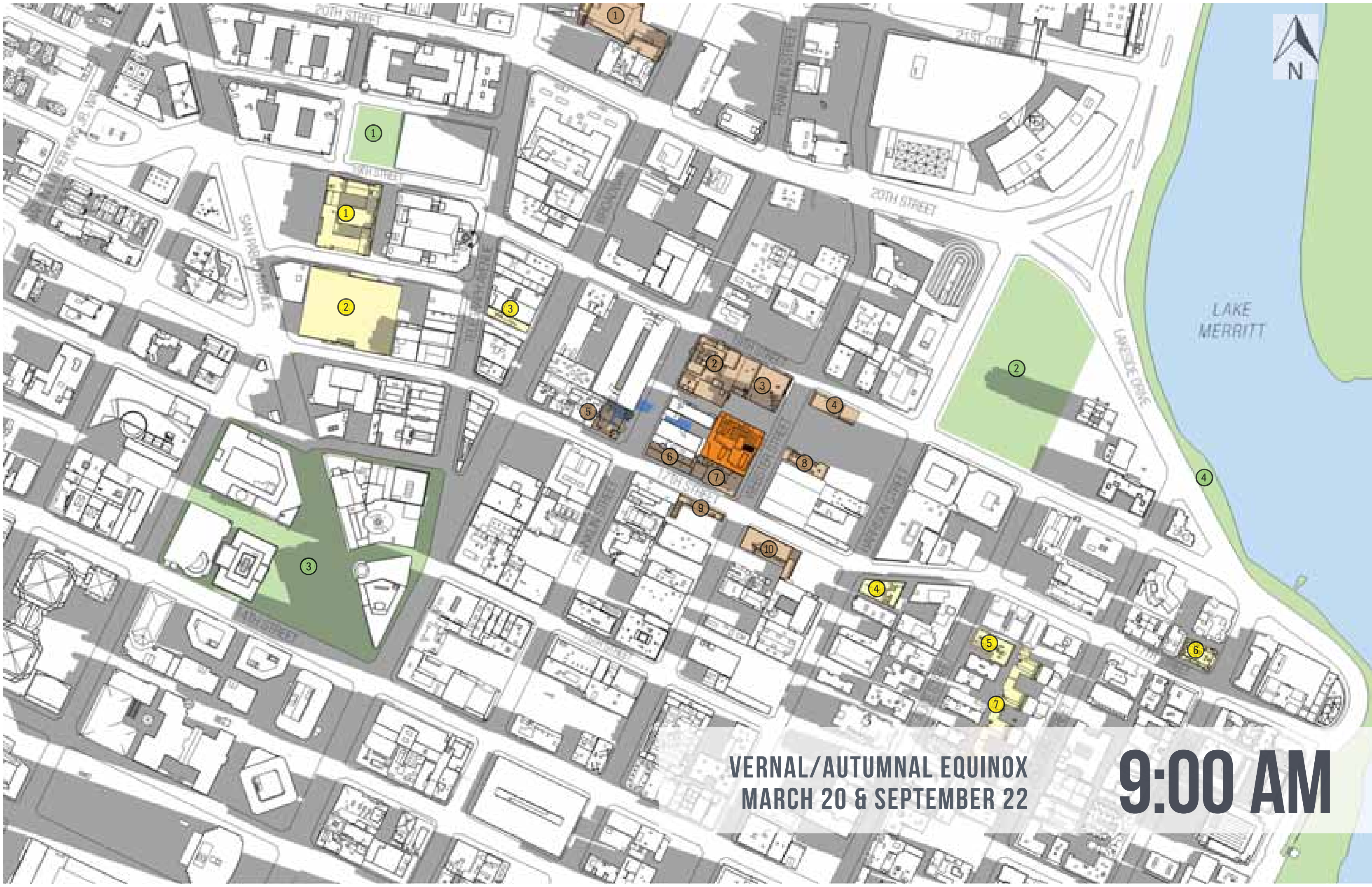

PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading diagrams on the Vernal/Autumnal Equinoxes

B1-C

LEGEND

- Proposed Project
- Existing (current) Shadows
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- New Shading from Cumulative Projects

Historic Resource Sites
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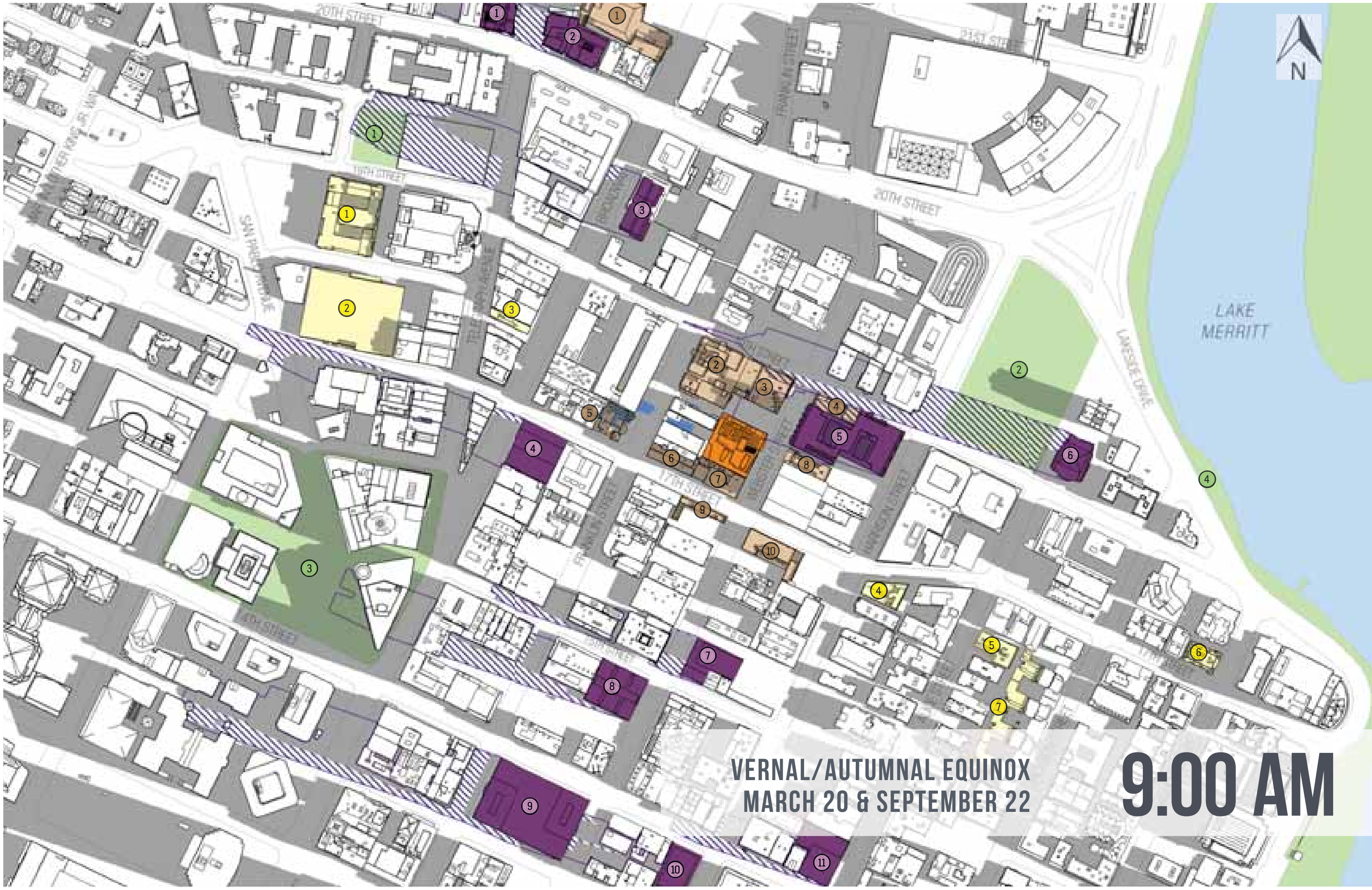

VERNAL/AUTUMNAL EQUINOX
MARCH 20 & SEPTEMBER 22

9:00 AM

PREVISION DESIGN

1721 WEBSTER STREET

Shading diagrams on the Vernal/Autumnal Equinoxes

B2

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project

Historic Resource Sites

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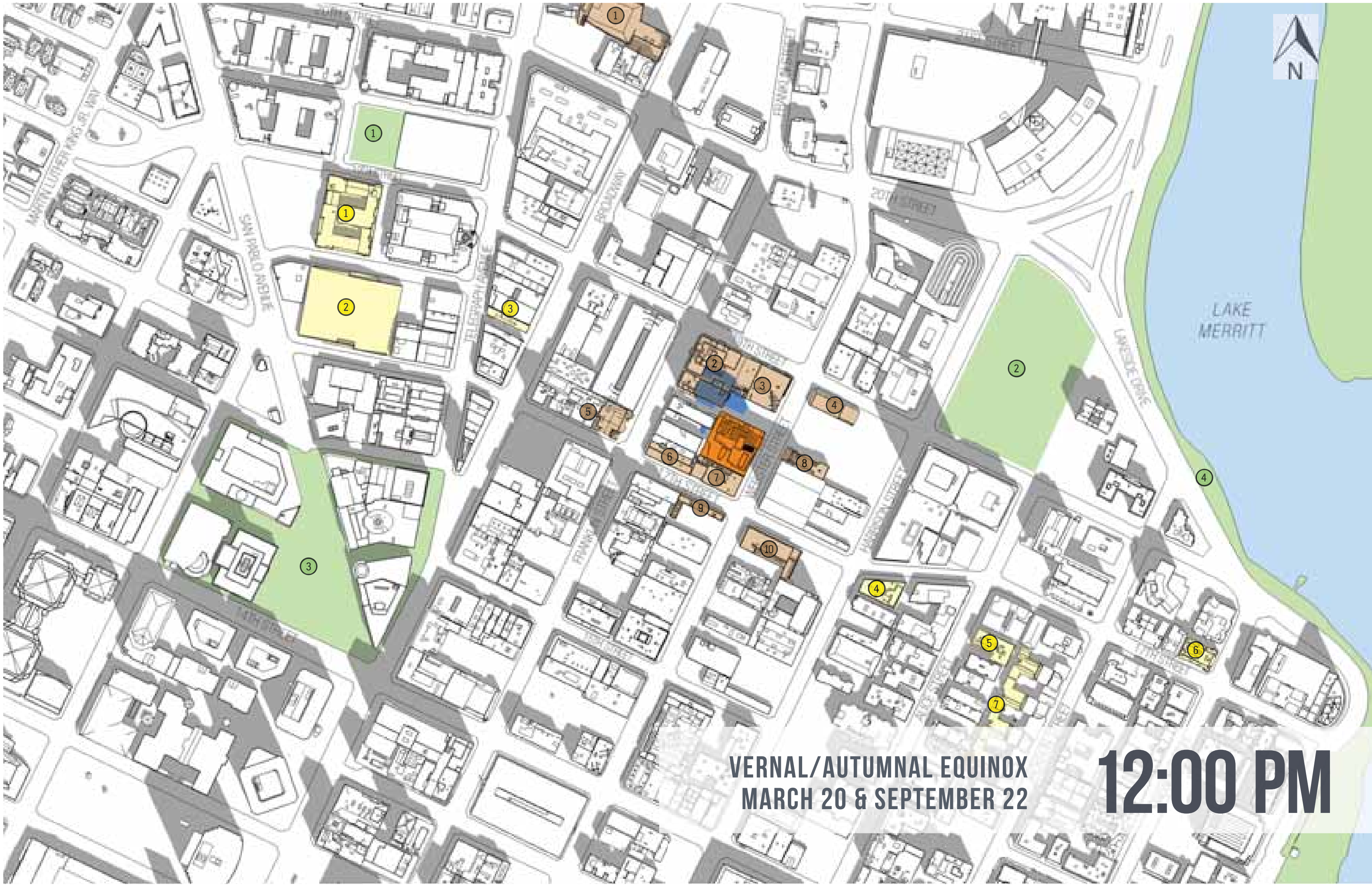

PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading diagrams on the Vernal/Autumnal Equinoxes

B2-C

LEGEND

- Proposed Project
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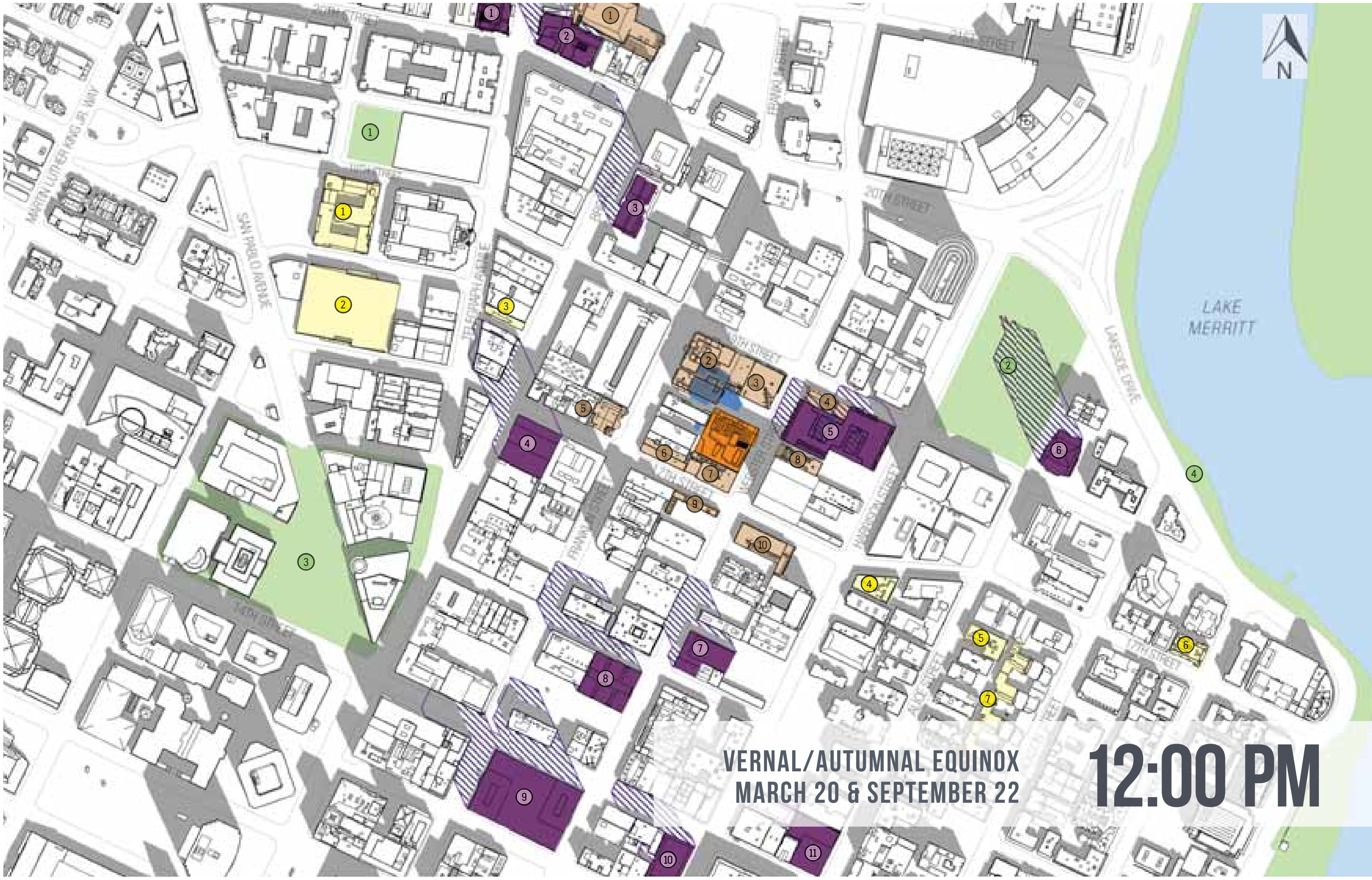

PREVISION DESIGN

1721 WEBSTER STREET

Shading diagrams on the Vernal/Autumnal Equinoxes

B3

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project

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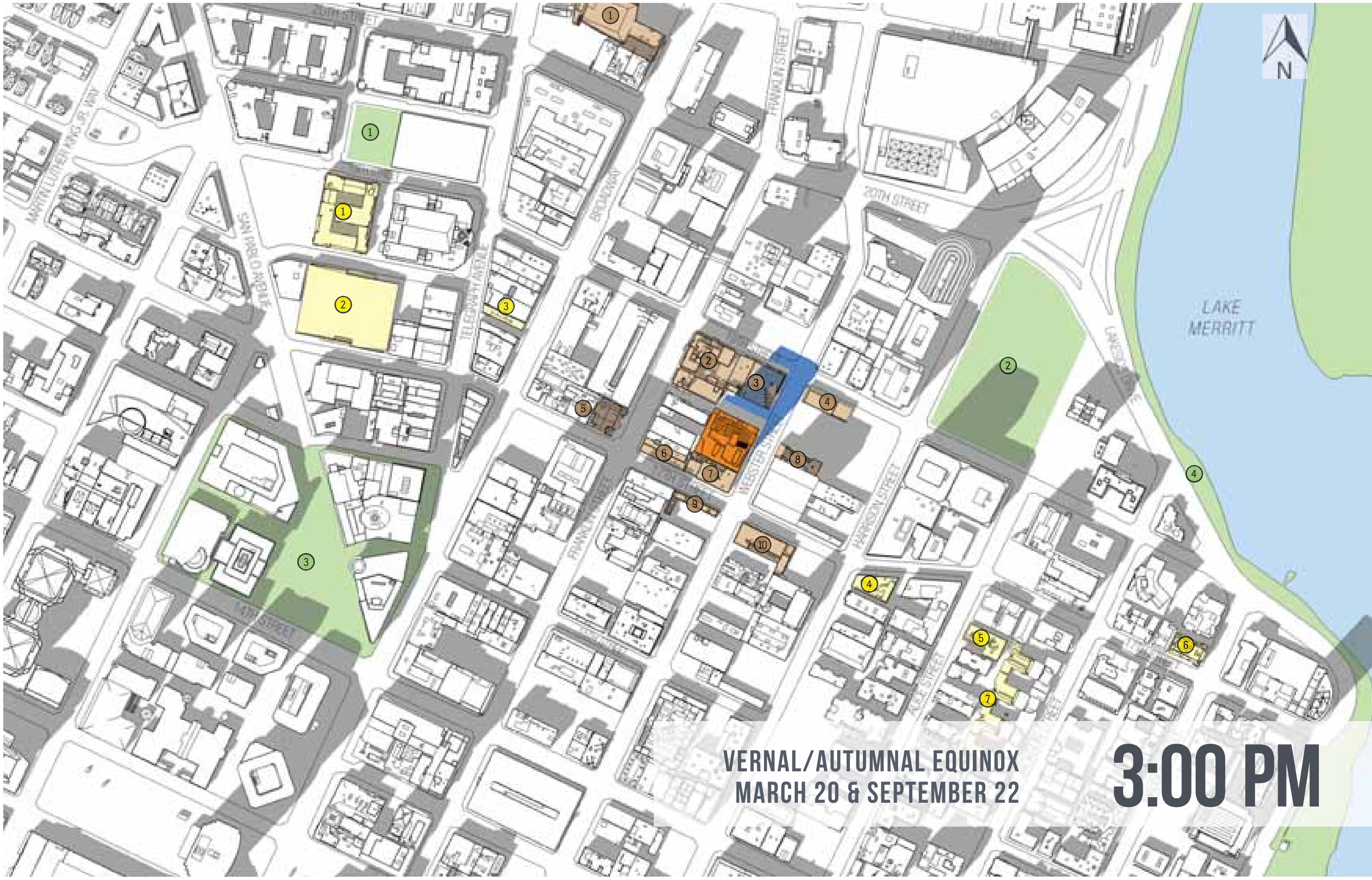

PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading diagrams on the Vernal/Autumnal Equinoxes

B3-C

LEGEND

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- New Shading from Cumulative Projects

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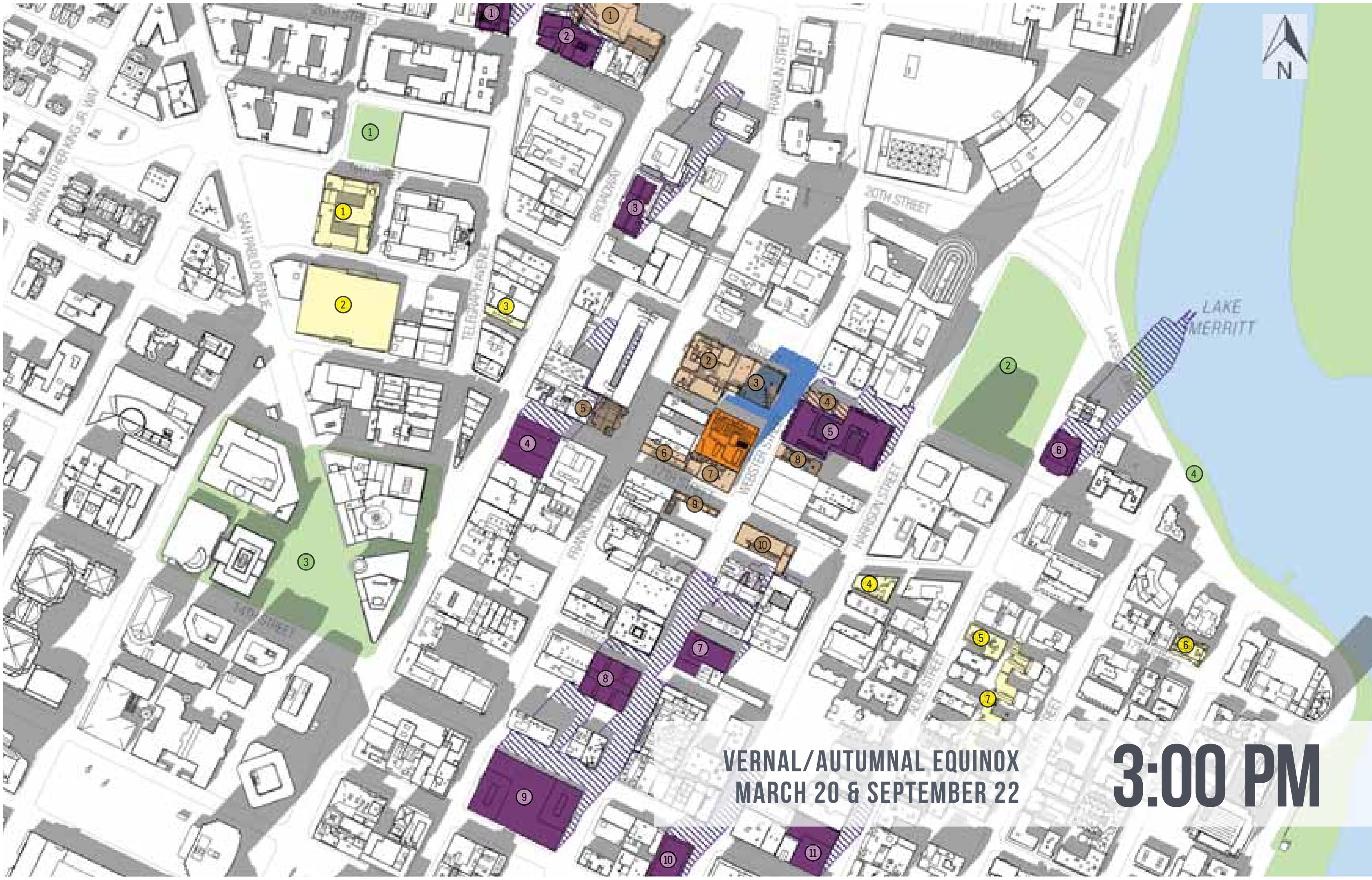

EXHIBIT C

1721 WEBSTER STREET
SHADING DIAGRAMS ON THE WINTER SOLSTICE

Shading diagrams at 9am, 12 noon, and 3pm reflecting shading conditions with:

- 1721 Webster Street Project
- 1721 Webster Street Project + Cumulative Projects

PREVISION DESIGN

1721 WEBSTER STREET

Shading diagrams on the Winter Solstice

C1

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project

Historic Resource Sites
1. 2525 Broadway (Paramount Theatre)
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PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading diagrams on the Winter Solstice

C1-C

LEGEND

- Proposed Project
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- New Shading from Cumulative Projects

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10. 1331 Harrison
11. 14th & Alice

PREVISION DESIGN

1721 WEBSTER STREET

Shading diagrams on the Winter Solstice

C2

LEGEND

Proposed Project
Existing (current) Shadows
New Shading by Proposed Project

Historic Resource Sites
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7. 1525 Jackson

Public Parks
1. Henry J. Kaiser Memorial Park
2. Snow Park
3. Frank H. Ogawa Plaza
4. Lakeview Park

PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading diagrams on the Winter Solstice

C2-C

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project
- New Shading from Cumulative Projects

Historic Resource Sites

1. 2525 Broadway (Paramount Theatre)
2. 1800 Franklin (Leamington Hotel)
3. 1803 Webster
4. 1830 Webster
5. 1st Church of Christ Scientist
6. 1700 Franklin
7. 1701 Webster / 372 17th
8. 1732 Webster
9. 1635 Webster
10. 1628 Webster

Solar Collector Sites

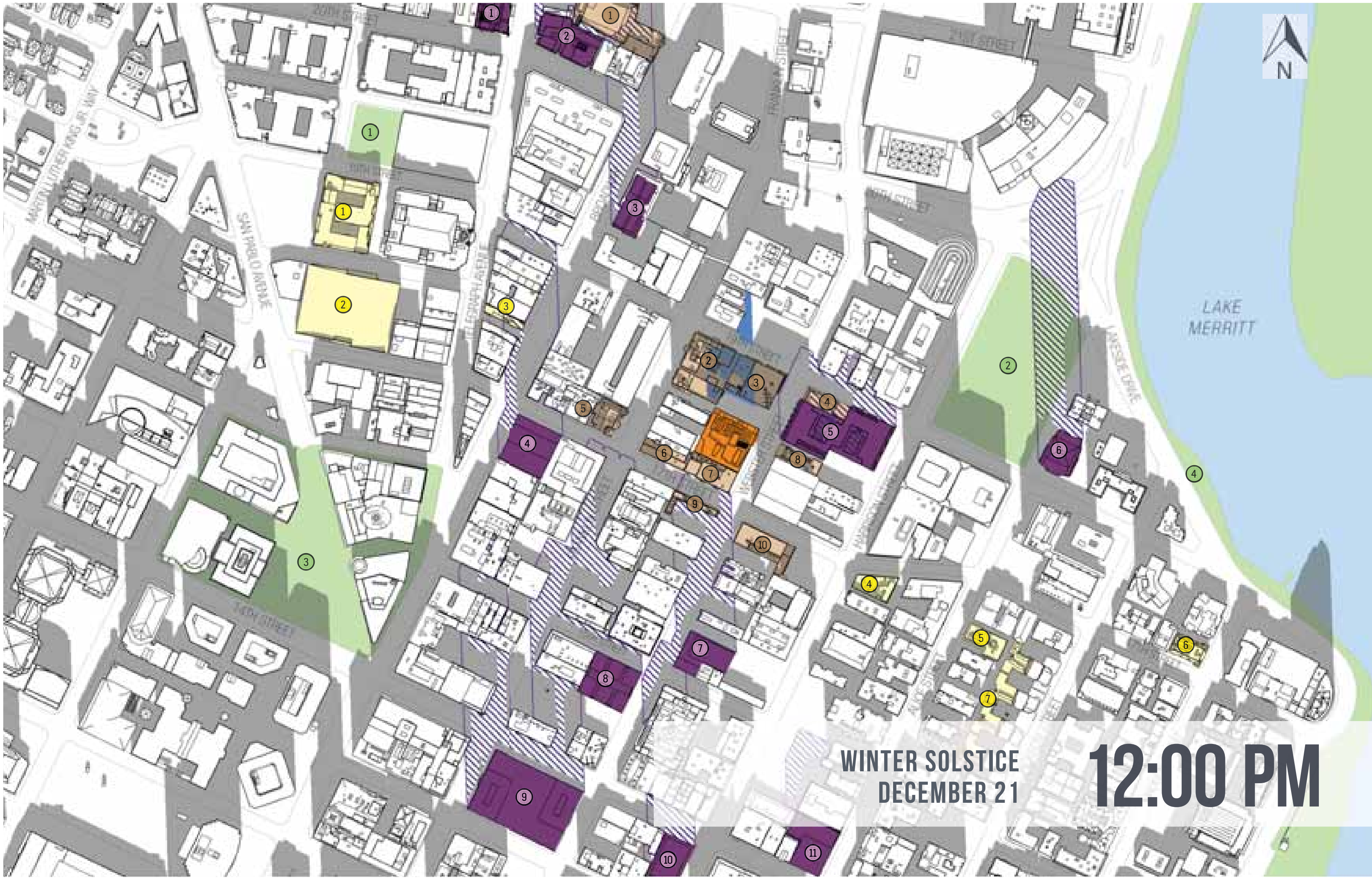
1. 555 19th
2. 540 17th
3. 733 Broadway
4. 285 17th
5. 1560 Alice
6. 150 17th
7. 1525 Jackson

Public Parks

1. Henry J. Kaiser Memorial Park
2. Snow Park
3. Frank H. Ogawa Plaza
4. Lakeview Park

Cumulative Projects

1. 2015 Telegraph
2. 2016 Telegraph
3. 1900 Broadway
4. 1640 Broadway
5. 19th & Harrison
6. 222 19th Street
7. 1510 Webster
8. 1433 Webster
9. 1314 Franklin
10. 1331 Harrison
11. 14th & Alice



PREVISION DESIGN

1721 WEBSTER STREET

Shading diagrams on the Winter Solstice

C3

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project

Historic Resource Sites

1. 2525 Broadway (Paramount Theatre)
2. 1800 Franklin (Leamington Hotel)
3. 1803 Webster
4. 1830 Webster
5. 1st Church of Christ Scientist
6. 1700 Franklin
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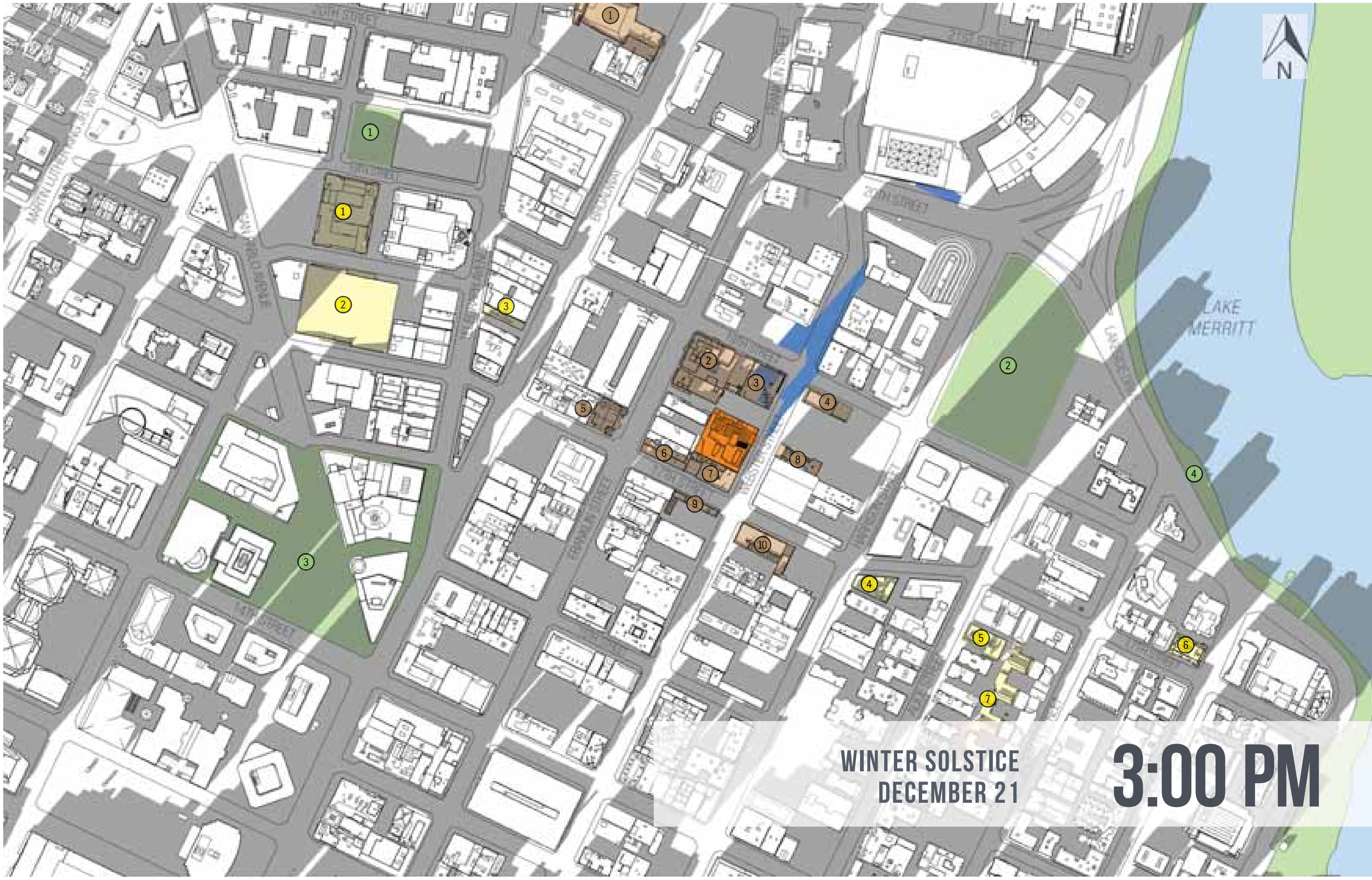

PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading diagrams on the Winter Solstice

C3-C

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project
- New Shading from Cumulative Projects

Historic Resource Sites
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7. 1701 Webster / 372 17th
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3. 1900 Broadway
4. 1640 Broadway
5. 19th & Harrison
6. 222 19th Street
7. 1510 Webster
8. 1433 Webster
9. 1314 Franklin
10. 1331 Harrison
11. 14th & Alice

PREVISION DESIGN

EXHIBIT D

1721 WEBSTER STREET

SHADING DIAGRAMS ON SEPTEMBER 2ND:

DATE WHERE MAX AFTERNOON SHADING CAST ON SNOW PARK

Shading diagrams at 6:15pm reflecting shading conditions with:

- 1721 Webster Street Project
- 1721 Webster Street Project + Cumulative Projects

PREVISION DESIGN

1721 WEBSTER STREET

Shading Diagrams on max afternoon shading on Snow Park

D1

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project

Historic Resource Sites
1. 2525 Broadway (Paramount Theatre)
2. 1800 Franklin (Leamington Hotel)
3. 1803 Webster
4. 1830 Webster
5. 1st Church of Christ Scientist
6. 1700 Franklin
7. 1701 Webster / 372 17th
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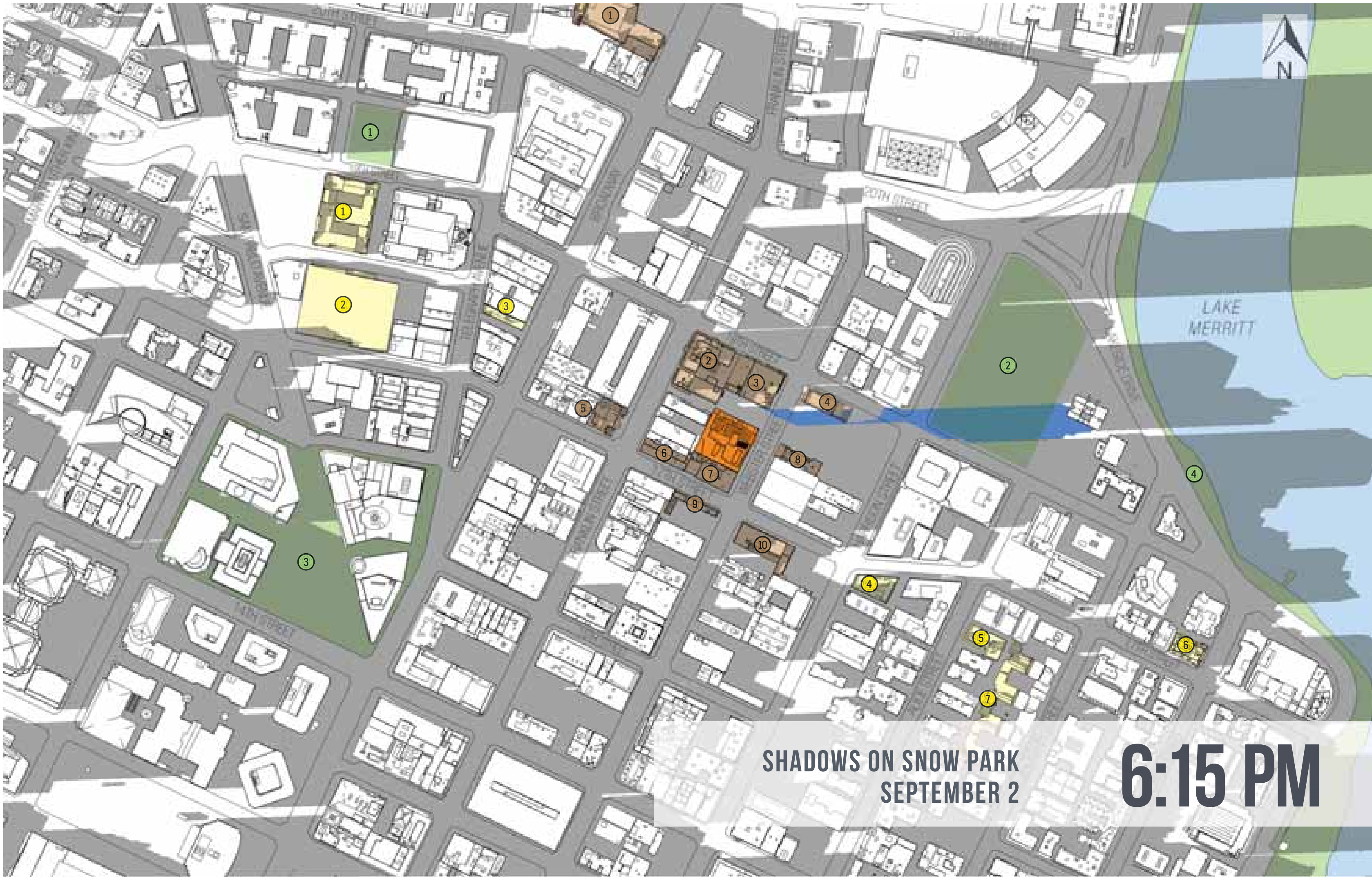

PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading Diagrams on max afternoon shading on Snow Park

D1-C

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project
- New Shading from Cumulative Projects

Historic Resource Sites

1. 2525 Broadway (Paramount Theatre)
2. 1800 Franklin (Leamington Hotel)
3. 1803 Webster
4. 1830 Webster
5. 1st Church of Christ Scientist
6. 1700 Franklin
7. 1701 Webster / 372 17th
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Public Parks

1. Henry J. Kaiser Memorial Park
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4. Lakeview Park

Cumulative Projects

1. 2015 Telegraph
2. 2016 Telegraph
3. 1900 Broadway
4. 1640 Broadway
5. 19th & Harrison
6. 222 19th Street
7. 1510 Webster
8. 1433 Webster
9. 1314 Franklin
10. 1331 Harrison
11. 14th & Alice

PREVISION DESIGN

EXHIBIT E

1721 WEBSTER STREET

SHADING DIAGRAMS ON OCTOBER 28:

MORNING SHADOW CAST ON 733 BROADWAY

Shading diagrams at 9am and 9:15am reflecting shading conditions with:

- 1721 Webster Street Project
- 1721 Webster Street Project + Cumulative Projects

PREVISION DESIGN

1721 WEBSTER STREET

Shading Diagrams showing shadow cast on 733 Broadway

E1

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project

Historic Resource Sites
1. 2525 Broadway (Paramount Theatre)
2. 1800 Franklin (Leamington Hotel)
3. 1803 Webster
4. 1830 Webster
5. 1st Church of Christ Scientist
6. 1700 Franklin
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5. 1560 Alice
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4. Lakeview Park

PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading Diagrams showing shadow cast on 733 Broadway

E1-C

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project
- New Shading from Cumulative Projects

Historic Resource Sites

1. 2525 Broadway (Paramount Theatre)
2. 1800 Franklin (Leamington Hotel)
3. 1803 Webster
4. 1830 Webster
5. 1st Church of Christ Scientist
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3. 1900 Broadway
4. 1640 Broadway
5. 19th & Harrison
6. 222 19th Street
7. 1510 Webster
8. 1433 Webster
9. 1314 Franklin
10. 1331 Harrison
11. 14th & Alice

PREVISION DESIGN

1721 WEBSTER STREET

Shading Diagrams showing shadow cast on 733 Broadway

E2

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project

Historic Resource Sites
1. 2525 Broadway (Paramount Theatre)
2. 1800 Franklin (Leamington Hotel)
3. 1803 Webster
4. 1830 Webster
5. 1st Church of Christ Scientist
6. 1700 Franklin
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PREVISION DESIGN

1721 WEBSTER STREET + CUMULATIVE PROJECTS

Cumulative shading Diagrams showing shadow cast on 733 Broadway

E2-C

LEGEND

- Proposed Project
- Existing (current) Shadows
- New Shading by Proposed Project
- New Shading from Cumulative Projects

Historic Resource Sites
1. 2525 Broadway (Paramount Theatre)
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1. 2015 Telegraph
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3. 1900 Broadway
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7. 1510 Webster
8. 1433 Webster
9. 1314 Franklin
10. 1331 Harrison
11. 14th & Alice

Attachment E: Wind Study for the 1721 Webster Street Project prepared by RWDI

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N1G 4P6

1721 Webster Street

Oakland, CA

Report

Pedestrian Wind Consultation

RWDI # 1700458
January 18, 2017

SUBMITTED TO

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1. INTRODUCTION

Rowan Williams Davies & Irwin Inc. (RWDI) was retained by Urban Planning Partners to consult on the pedestrian wind conditions for the proposed 1721 Webster Street in Oakland, CA. The purpose of the study was to assess the wind environment around the development in terms of pedestrian wind comfort and hazard relative to wind metrics specified in the City of Oakland Significant Wind Impact Criterion. This objective was achieved through wind tunnel testing of a 1:400 scale model of the proposed development for the following configurations:

A – Existing:	all existing buildings on-site and in the surroundings;
B – Project:	proposed 1721 Webster Street project present with existing and under construction surrounding buildings;
C – Project + Landscaping:	proposed 1721 Webster Street project present with existing and under construction surrounding buildings and street trees; and,
D – Cumulative + Landscaping:	proposed 1721 Webster Street project present with existing and under construction surrounding buildings, street trees and cumulative buildings in the area.

The photographs in Figures 1a through 1d show the test model in one of RWDI's boundary-layer wind tunnels. The proposed building is 262 ft high to the roof and 272 ft high to the top of mechanical, consisting of 25 levels with an amenity deck at Level 6 and accessible Roof Terrace with a pool. The test model was constructed using the design information and drawings listed in Appendix A. This report summarizes the methodology of wind tunnel studies for pedestrian wind conditions, describes the wind comfort and wind hazard criteria associated with wind force, as used in the current study, and presents the local wind conditions and their effects on pedestrians.

In addition to the list of Cumulative surrounding buildings to be included, the placement of wind measurement locations was based on our experience and understanding of the pedestrian usage for this site, and reviewed by Urban Planning Partners, Inc.

2. PRINCIPAL RESULTS

The wind conditions around the proposed 1721 Webster Street are discussed in detail in Section 5 of this report and may be summarized as follows:

- Wind speeds at all locations on and above ground met the hazard criterion in all four configurations.
- Most locations at grade level meet the wind comfort criterion in the Existing Configuration, and comfort conditions are similar or improved with the addition of the Project and Cumulative buildings, with or without landscaping.

- Wind speeds at most locations above ground also meet the comfort criterion, but are generally considered to be higher than desired for seating areas.

3. METHODOLOGY

3.1 Wind Tunnel Testing

As shown in Figures 1a through 1d, the wind tunnel model included the project site and all relevant surrounding buildings and topography within a 1600 ft radius of the study site. The mean speed profile and turbulence of the natural wind approaching the modelled area were simulated in RWDI's boundary-layer wind tunnel. The model was instrumented with 58 wind speed sensors to measure mean and gust wind speeds at a full-scale height of approximately 5 feet. These measurements were recorded for 36 equally incremented wind directions.

3.2 Local Climate

Wind statistics recorded at the Metropolitan Oakland International Airport between 1984 and 2014 were analyzed for annual wind conditions. Figure 2 graphically depicts the directional distributions of annual wind frequencies and speeds. Winds are frequent from the west-southwest through northwest directions throughout the year, as indicated by the wind rose. Strong winds of a mean speed greater than 15 mph measured at the airport (at an anemometer height of 33 feet) occur 11.1% of the time annually.

Wind statistics from the Metropolitan Oakland International Airport were combined with the wind tunnel data in order to predict the frequency of occurrence of full-scale wind speeds. The full-scale wind predictions were then compared with the City of Oakland Significant Wind Impact Criterion.

3.3 Planning Code Requirements

A wind analysis only needs to be done if the height of the project is 100 feet or greater (Measured to the roof) and one of the following conditions exists: (a) the project is located adjacent to a substantial water body (i.e. Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown. As the proposed project (262-272 feet tall) exceeds 100 feet in height and is located in Downtown, it is subject to the thresholds of significance.

For the purposes of this study, the City of Oakland considers a significant wind impact to occur if a project were to "Create winds exceeding 36 mph for more than one hour during daylight hours during the year". The Planning Code defines these wind speeds in terms of equivalent wind speeds, and average wind speed (mean velocity), adjusted to include the level of gustiness and turbulence. Equivalent wind speeds were calculated according to the specifications in the City of Oakland Significant Wind Impact Criterion, whereby the mean hourly wind speed is increased when the turbulence intensity is greater than 15% according to the following formula:

$$\boldsymbol{EWS} = \boldsymbol{V_m} \times (\boldsymbol{2} \times \boldsymbol{TI} + \boldsymbol{0.7})$$

where $\boldsymbol{EWS}$ = equivalent wind speed
$\boldsymbol{V_m}$ = mean pedestrian-level wind speed
$\boldsymbol{TI}$ = turbulence intensity

3.4 Pedestrian Comfort

Although not applicable towards the Significant Wind Impacts Criterion defined by the City of Oakland, wind comfort speeds have been calculated for informational purposes. The comfort criteria are that wind speeds do not exceed 11 mph for more than 10% of the time during the year, when calculated for daylight hours, in substantial pedestrian use areas. A lower wind speed threshold of 7 mph may be considered for public seating areas where calmer wind conditions are ideal.

3.5 Cumulative Buildings

Buildings in the surrounding area that are under construction and/or have been approved were modeled in accordance with the information received on November 3rd, 2016 from the project team and the City of Oakland Planning Department. Buildings approved and pending future buildings were included in the Project plus Cumulative Configuration only. These sites are shown in Image 1 and listed in the table following.

Image 1: In-construction and Cumulative Buildings (Numbered 1 - 9)

	CUMULATIVE
1	2016 Telegraph Avenue
2	1900 Broadway
3	19th and Harrison
4	1640 Broadway
5	1510 Webster
6	1433 Webster
7	14th and Alice
8	1331 Harrison Project
9	1314 Franklin Street

4. TEST RESULTS

This section presents the results of the wind tunnel measurements analyzed in terms of equivalent wind speeds as defined by the equation in Section 3.3. The text in the report simply refers to the data as wind speeds or wind speed.

Table 1, located in the tables section of this report, presents the wind comfort results for the four configurations tested. For each measurement point, the measured 10% exceeded (90th percentile) wind speed and the percentage of time that the wind speed exceeds 11 mph are shown for all areas. A letter "e" in the last column of each configuration indicates a wind comfort exceedance.

Table 2 presents the wind hazard results, and lists the predicted wind speed to be exceeded one hour per year. The predicted number of hours per year that the City of Oakland Significant Wind Impact Criterion (one-minute wind speed of 36 mph) is exceeded is also provided. A letter "e" in the last column of each configuration indicates a wind hazard exceedance.

4.1 Wind Comfort Conditions

Although the analysis of wind comfort conditions is not required by California Environmental Quality Act (CEQA), this section describes the wind comfort conditions on and around the project site and can be used as a reference for further understanding of the wind conditions.

4.1.1 Grade Level

For the Existing Configuration, the wind speeds in the vicinity of the project site are predicted to be generally moderate with 90th percentile wind speeds averaging 11.1 mph for all 48 measurement locations. Relatively low wind speeds are predicted along Webster Street to the north and south of the project site. The 11 mph comfort criterion is exceeded at 21 of the 48 test locations along 19th Street, 17th Street, Franklin Street and Webster Street (locations shown in red in Figure 3a). On average, wind speeds in the Existing Configuration exceed the 11 mph criterion 12.3% of the time (see page 3 of Table 1).

In the Project Configuration, with the addition of the proposed development, conditions are generally improved, with lower wind speeds predicted overall, averaging 10.7 mph across the 48 grade level locations. The 11 mph comfort criterion is exceeded at 14 locations along Franklin Street and the corner of 19th and Harrison Streets (Figure 3b). The frequency that the 11 mph criterion was exceeded decreases to 10.7% of the time (see page 3 of Table 1).

Comfort conditions are improved further with the addition of landscaping in the Project + Landscaping Configuration, with some locations along 17th Street becoming comfortable for sitting activities. The same number of locations exceed the 11mph comfort criterion (14) as the previous configuration, along Franklin Street and at the corner of 19th and Harrison Streets (Figure 3c). The average wind speed across all 48 grade level locations tested is reduced to 10.4 mph and the 11 mph criterion is exceeded 9.7% of the time.

Wind conditions are expected to improve for the Cumulative plus Landscaping Configuration. Wind speeds are anticipated to decrease with the average 90th percentile wind speed for all test locations averaging 9.5 mph. The 11 mph criterion is exceeded in only 6 of the 48 locations, 6% of the time (see Figure 3d and Table 1).

Overall, as indicated in Table 1, wind speeds are predicted to be similar or decrease from the Existing Configuration with the Proposed Project in place. There is a further reduction with the addition of existing landscaping in place. With the addition of the cumulative developments and existing landscaping, overall wind conditions are expected to be improved further.

4.1.2 Above Grade Level

Ten locations were tested above-grade to measure the wind speed conditions at the podium and roof levels.

For all three configurations, 3 out of 10 locations exceed the 11mph comfort threshold (Figures 3b, 3c and 3d and page 4 of Table 1). The average wind speed decreases with the addition of the cumulative developments from 11.5 mph to 11.3 mph.

4.2 Wind Hazard Conditions

Of the 48 grade level locations tested for the Existing Configuration, none currently exceed the hazard criterion (presented in Table 2 and Figure 4a). The number of locations exceeding the hazard criterion is expected to remain at zero for the Project, Project plus Landscaping and Cumulative plus Landscaping Configurations for all 58 grade and above-grade locations (Table 2 and Figures 4b, 4c and 4d). Therefore, the project does not create a significant wind impact (i.e., no grade level locations with wind speeds exceeding 36 mph for more than one hour during daylight hours during the year).

5. APPLICABILITY OF RESULTS

The wind conditions presented in this report pertain to the proposed 1721 Webster Street development as detailed in the architectural design drawings listed in Appendix A. Should there be any design changes that deviate from this list of drawings, the wind condition predictions presented may change. Therefore, if changes in the design are made, it is recommended that RWDI be contacted and requested to review their potential effects on wind conditions.

6. REFERENCES

1) ASCE Task Committee on Outdoor Human Comfort (2004). *Outdoor Human Comfort and Its Assessment*, 68 pages, American Society of Civil Engineers, Reston, Virginia, USA.

2) Williams, C.J., Hunter, M.A. and Waechter, W.F. (1990). "Criteria for Assessing the Pedestrian Wind Environment," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.36, pp.811-815.

3) Williams, C.J., Soligo M.J. and Cote, J. (1992). "A Discussion of the Components for a Comprehensive Pedestrian Level Comfort Criteria," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.41-44, pp.2389-2390.

4) Soligo, M.J., Irwin, P.A., and Williams, C.J. (1993). "Pedestrian Comfort Including Wind and Thermal Effects," *Third Asia-Pacific Symposium on Wind Engineering*, Hong Kong.

5) Soligo, M.J., Irwin, P.A., Williams, C.J. and Schuyler, G.D. (1998). "A Comprehensive Assessment of Pedestrian Comfort Including Thermal Effects," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.77&78, pp.753-766.

6) Williams, C.J., Wu, H., Waechter, W.F. and Baker, H.A. (1999). "Experiences with Remedial Solutions to Control Pedestrian Wind Problems," *Tenth International Conference on Wind Engineering*, Copenhagen, Denmark.

7) Lawson, T.V. (1973). "Wind Environment of Buildings: A Logical Approach to the Establishment of Criteria", *Report No. TVL 7321*, Department of Aeronautic Engineering, University of Bristol, Bristol, England.

8) Durgin, F. H. (1997). "Pedestrian Level Wind Criteria Using the Equivalent average", *Journal of Wind Engineering and Industrial Aerodynamics*, Vol. 66, pp. 215-226.

Wind Tunnel Study Model
Existing

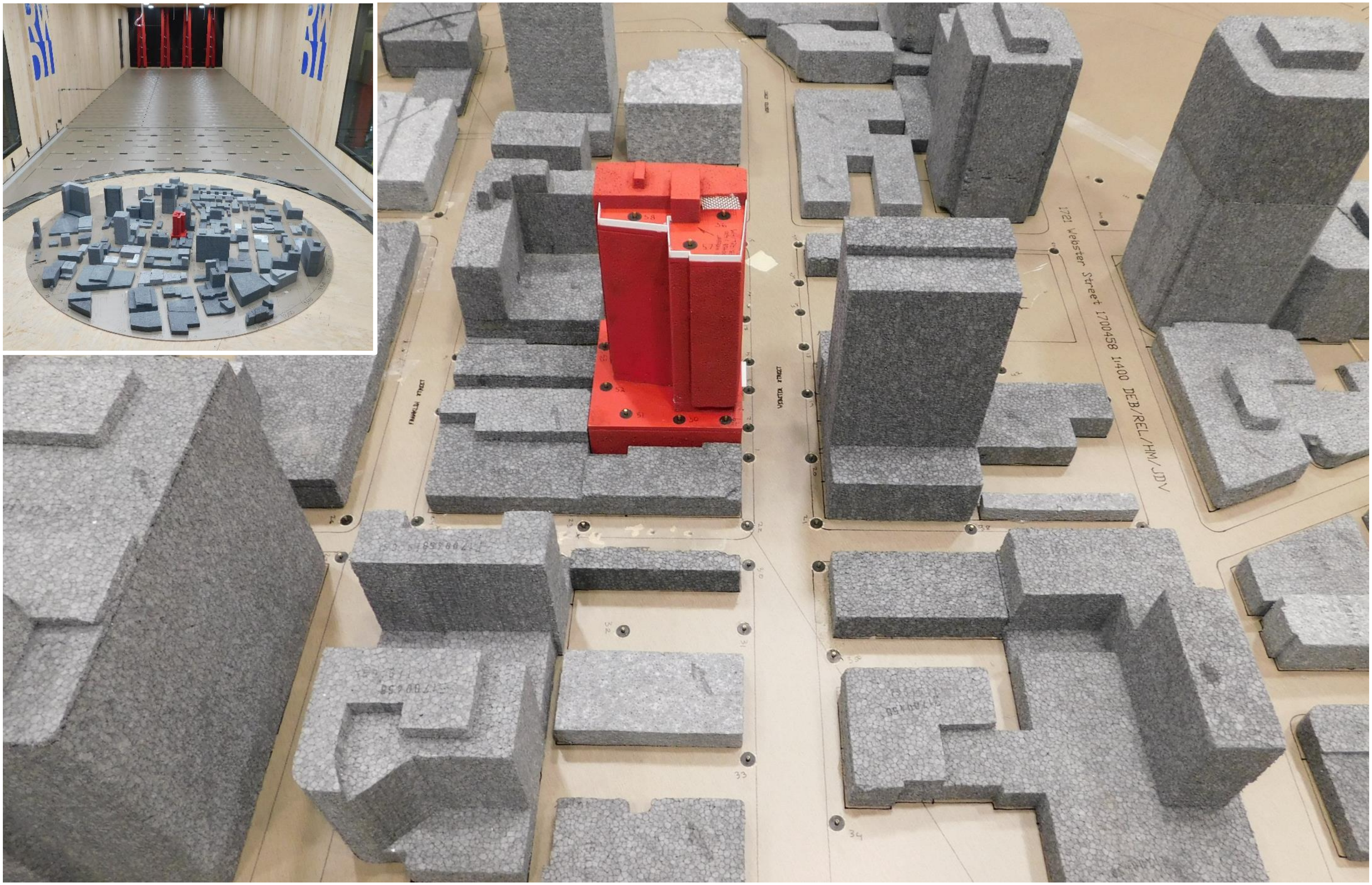
1721 Webster Street – Oakland, CA

Project #1700458

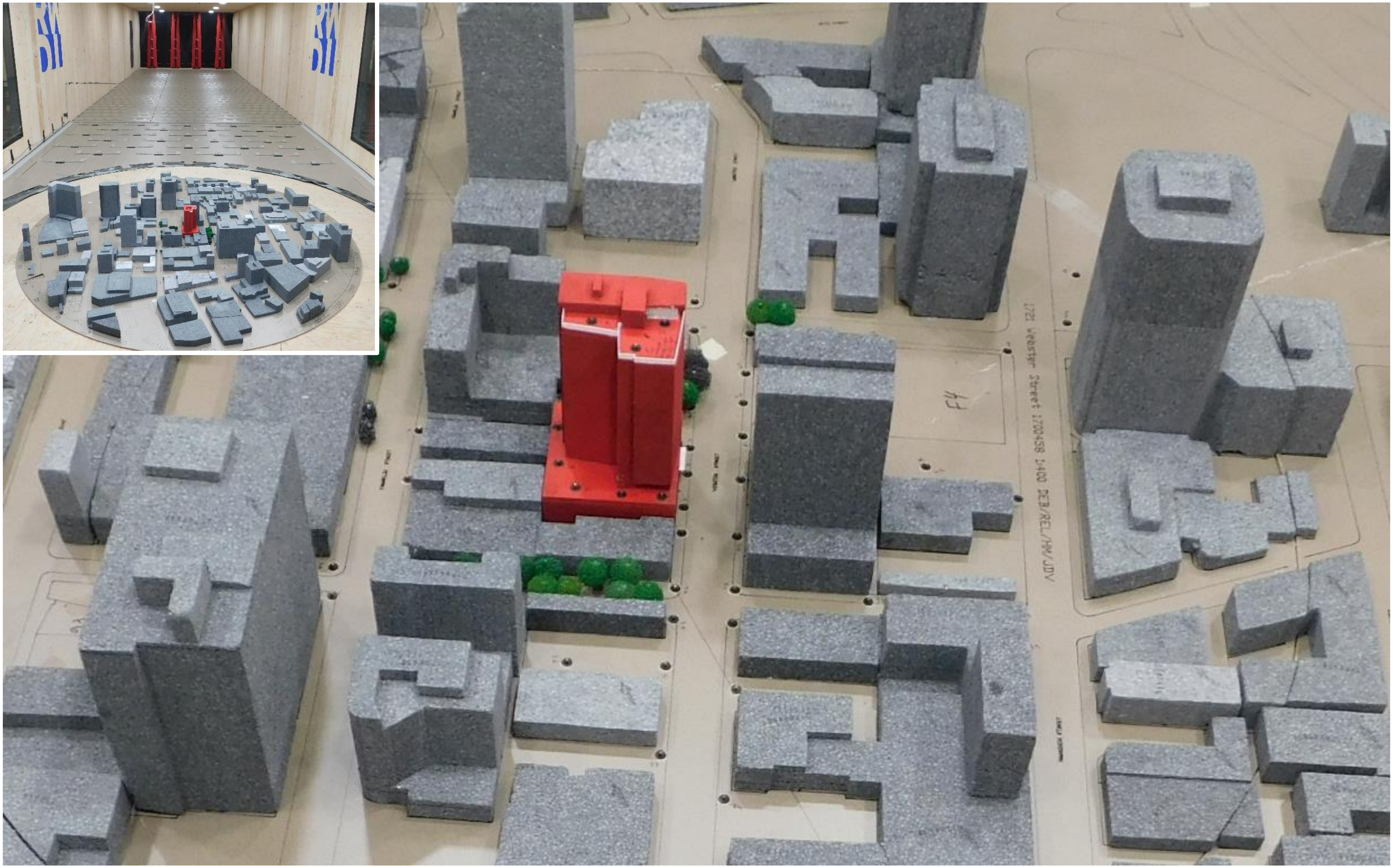
Figure No. 1a

Date: November 23, 2016

RWDI



Wind Tunnel Study Model **Project** 1721 Webster Street – Oakland, CA Project #1700458	Figure No. 1b Date: November 23, 2016	RWDI



Wind Tunnel Study Model
Project + Landscaping

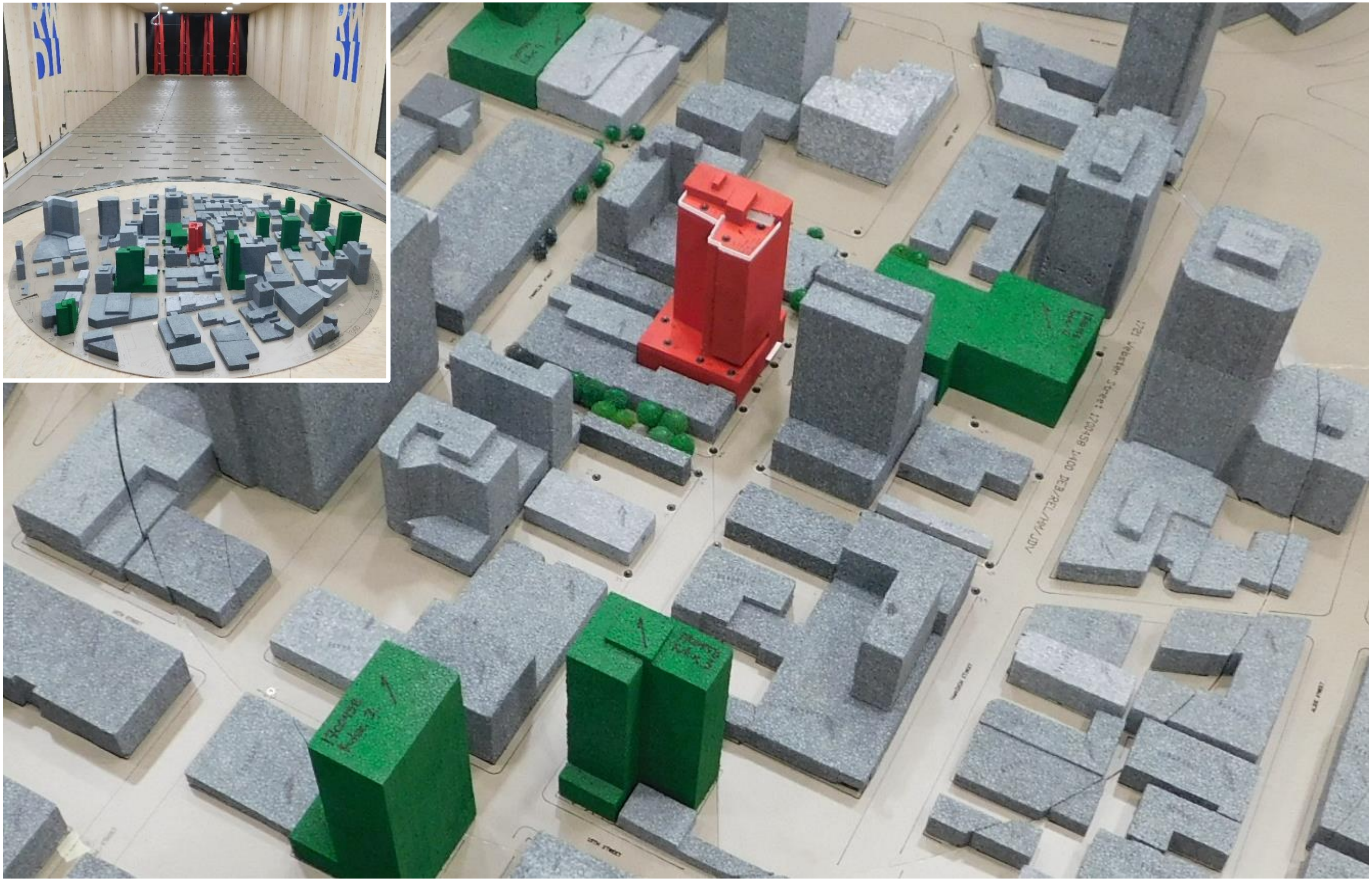
1721 Webster Street – Oakland, CA

Project #1700458

Figure No. 1c

Date: November 23, 2016

RWDI



Wind Tunnel Study Model
Cumulative + Landscaping

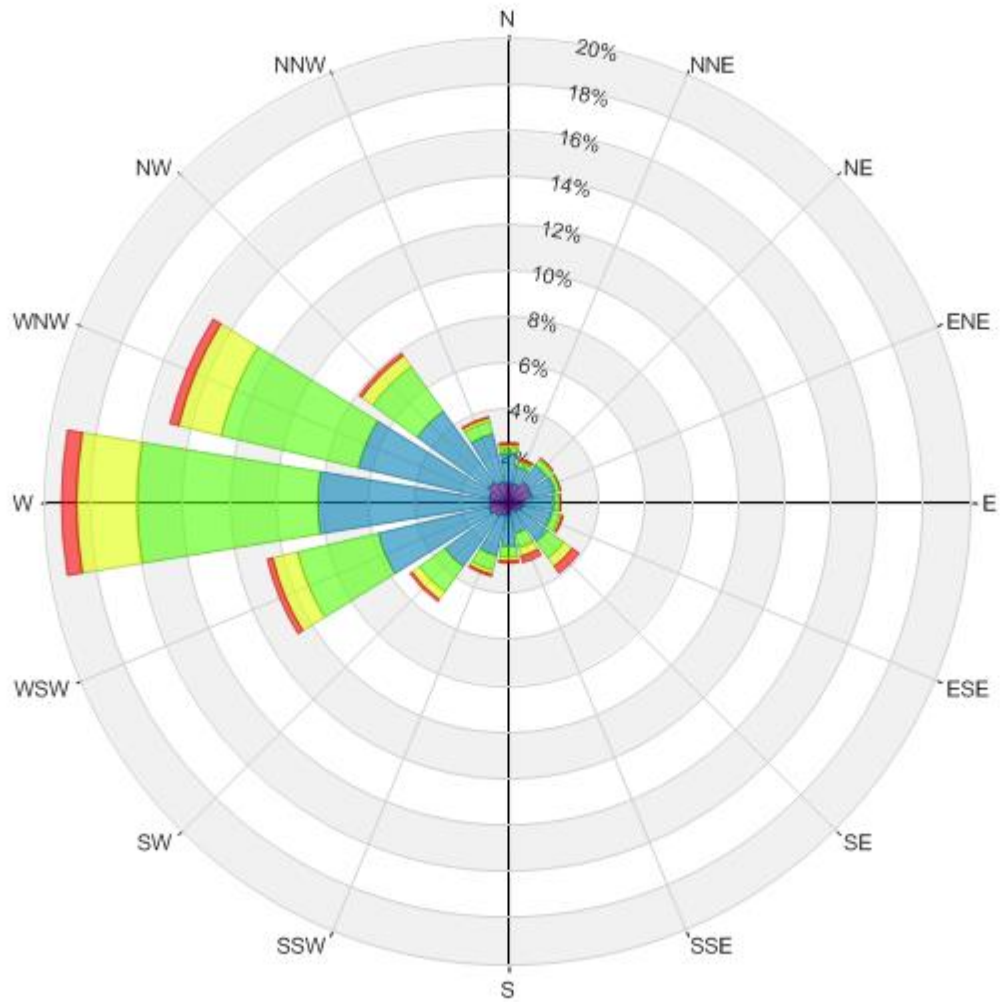
1721 Webster Street – Oakland, CA

Project #1700458

Figure No. 1d

Date: November 23, 2016

RWDI



Annual Winds

Wind Speed (mph)	Probability (%)
Calm	11.8
1-5	12.4
6-10	39.0
11-15	26.0
16-20	8.3
>20	2.6

Directional Distribution (%) of Winds (Blowing From)
Metropolitan Oakland International Airport (1984 - 2014)

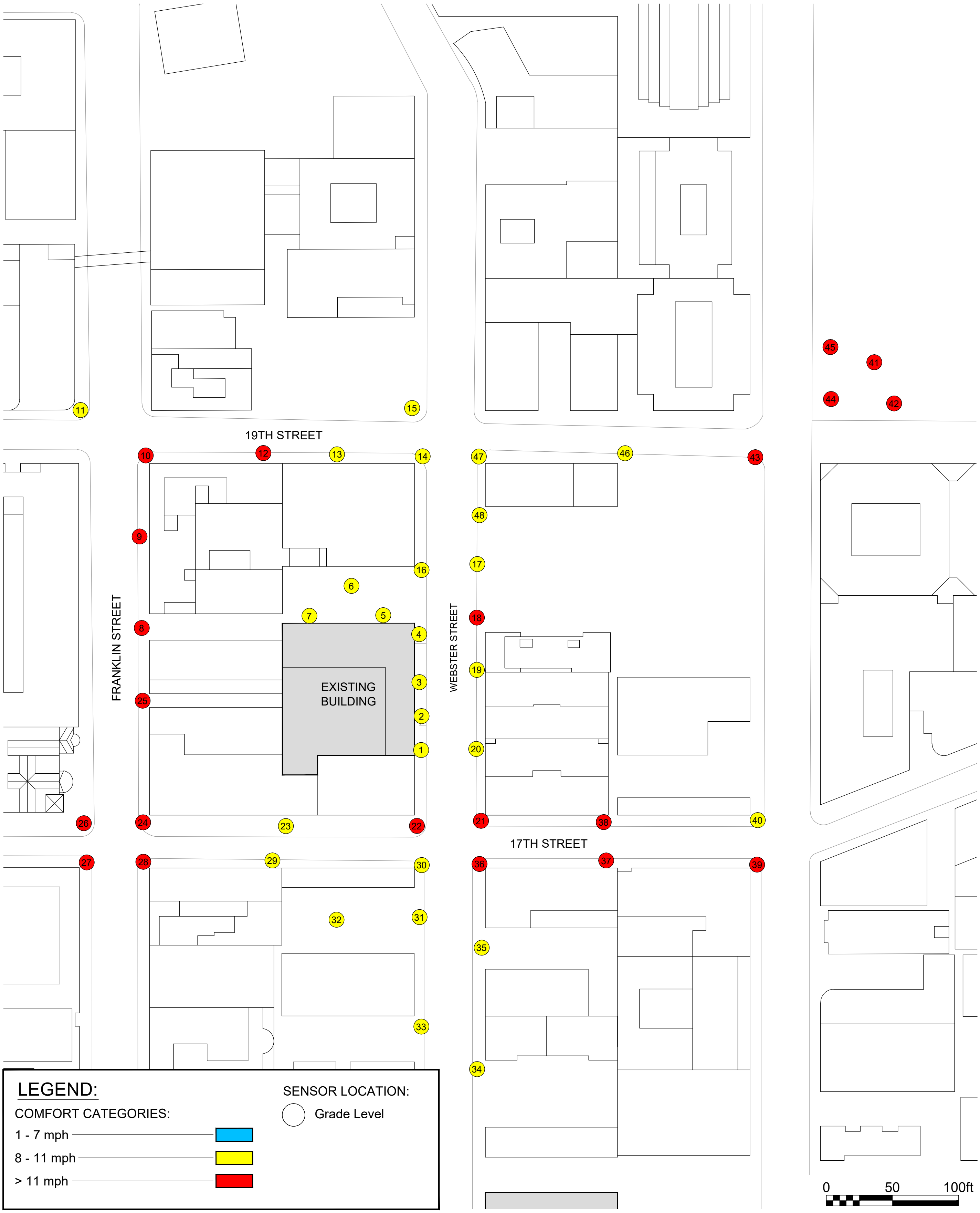
1721 Webster Street – Oakland, CA

Project #1700458

Figure No. 2

Date: November 23, 2016

RWDI



Pedestrian Wind Comfort Conditions - Existing

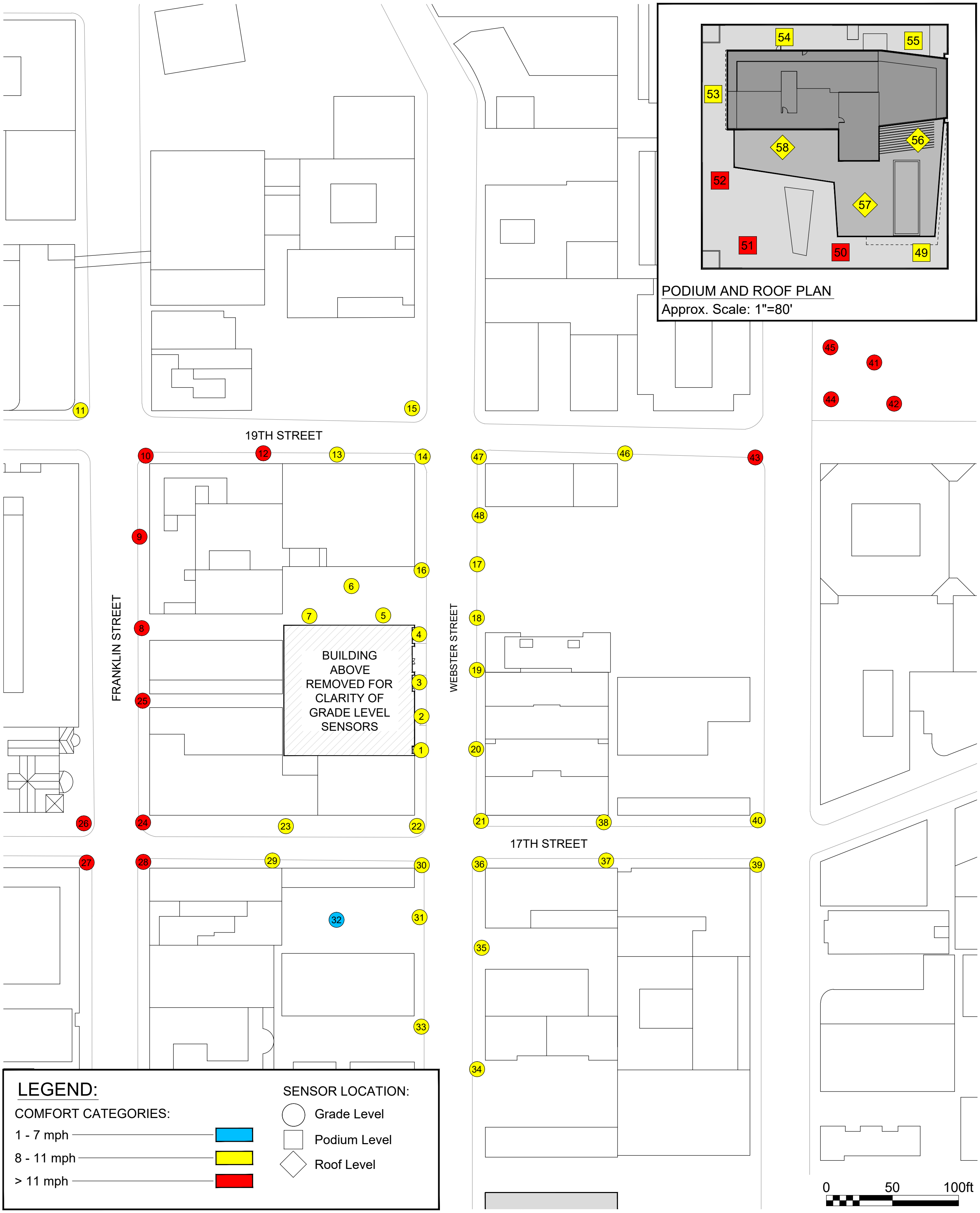
Annual (January to December)

1721 Webster Street - Oakland, CA

Project #1700458

True North

Drawn by: ck	Figure: 3a	RWDI
Approx. Scale: 1"=150'		
Date Revised: Nov. 22, 2016		



Pedestrian Wind Comfort Conditions - Project

Annual (January to December)

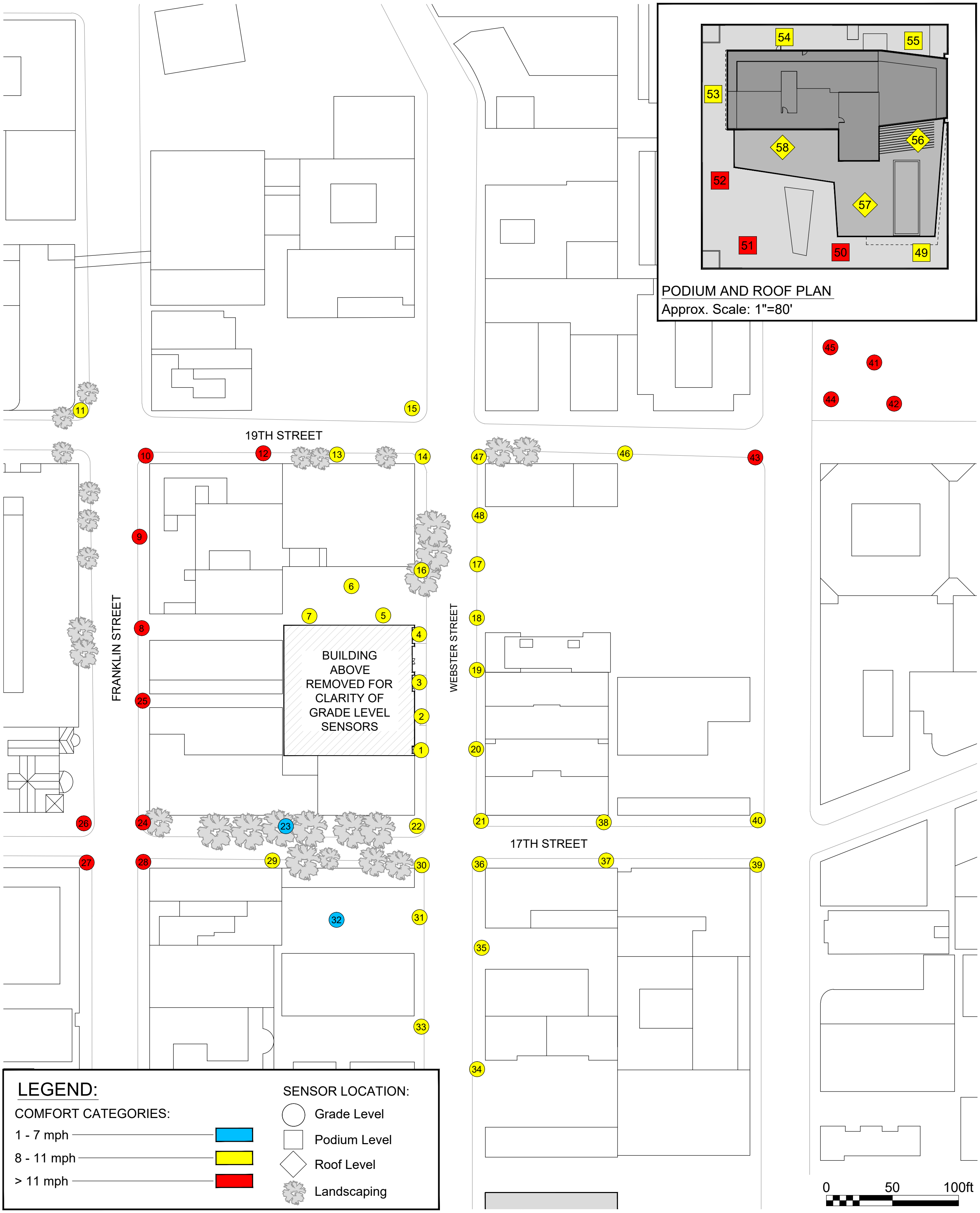
1721 Webster Street - Oakland, CA

Project #1700458

True North

Drawn by: ck	Figure: 3b
Approx. Scale:	1"=150'
Date Revised:	Nov. 22, 2016

RWDI



Pedestrian Wind Comfort Conditions - Project + Landscaping

Annual (January to December)

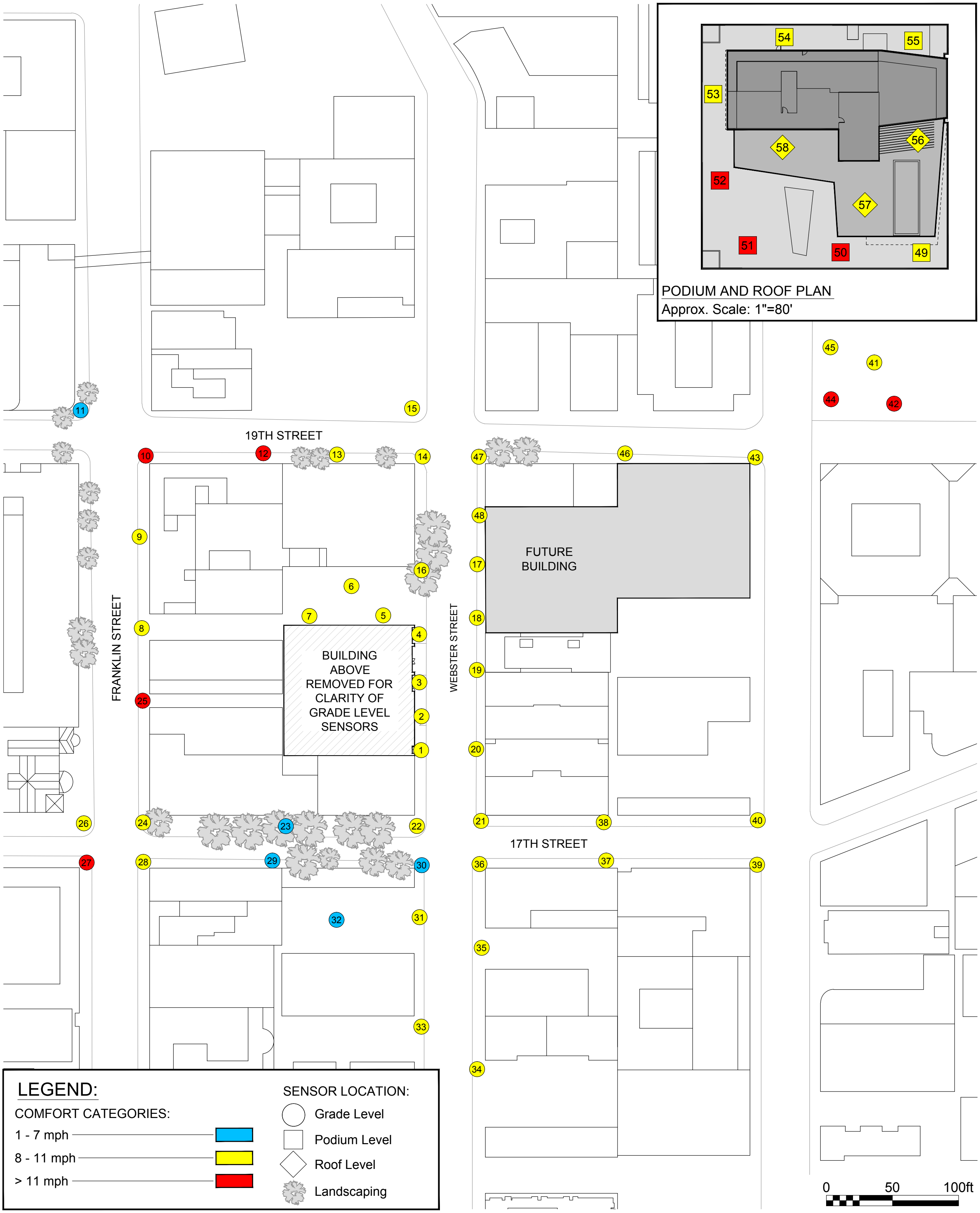
1721 Webster Street - Oakland, CA

Project #1700458

True North

Drawn by:	ck	Figure:	3c
Approx. Scale:	1"=150'		
Date Revised:	Nov. 22, 2016		

RWDI



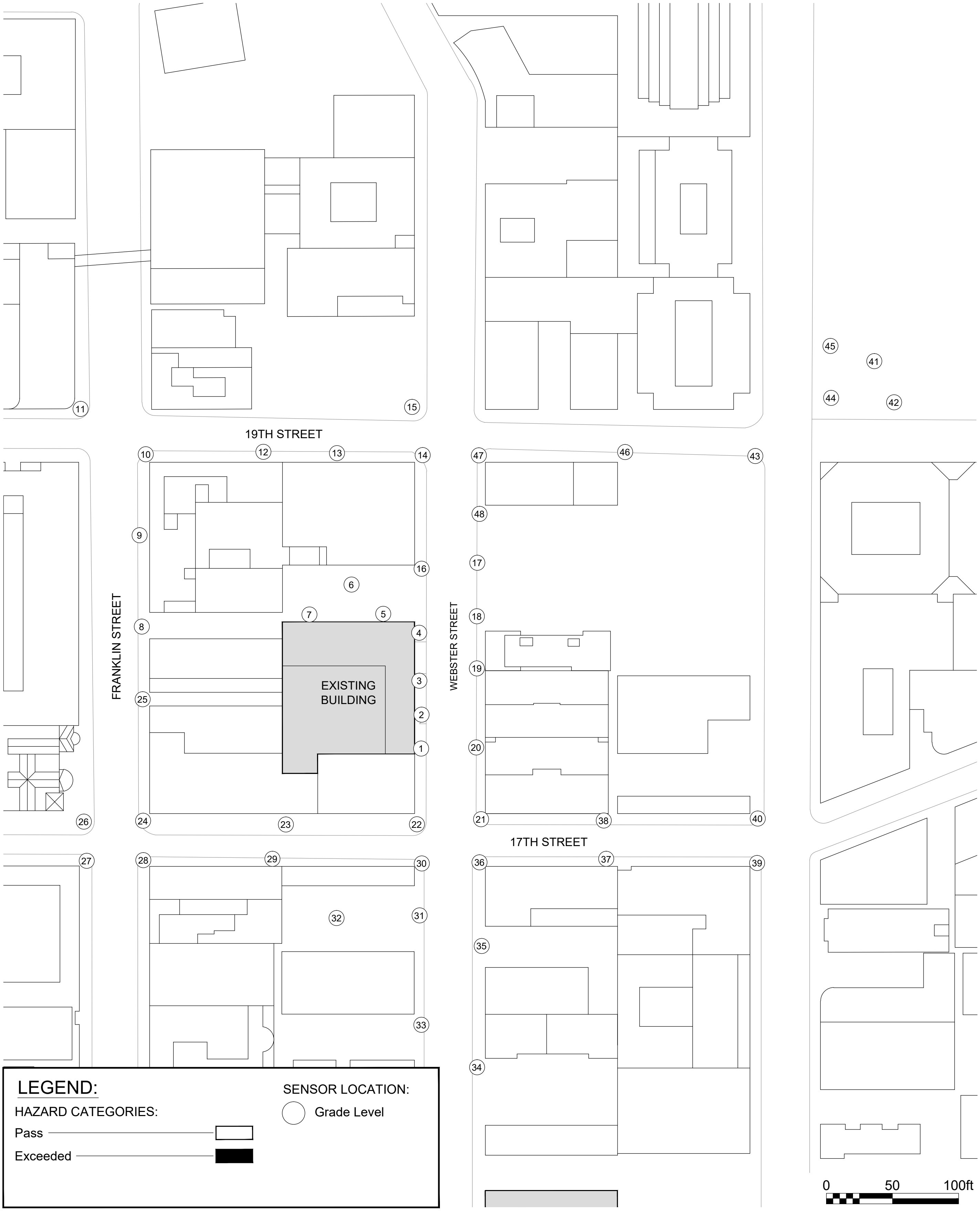
Pedestrian Wind Comfort Conditions - Cumulative + Landscaping
Annual (January to December)

1721 Webster Street - Oakland, CA

True North

Project #1700458

Drawn by: ck	Figure: 3d
Approx. Scale:	1"=150'
Date Revised:	Nov. 22, 2016



Pedestrian Wind Hazard Conditions - Existing

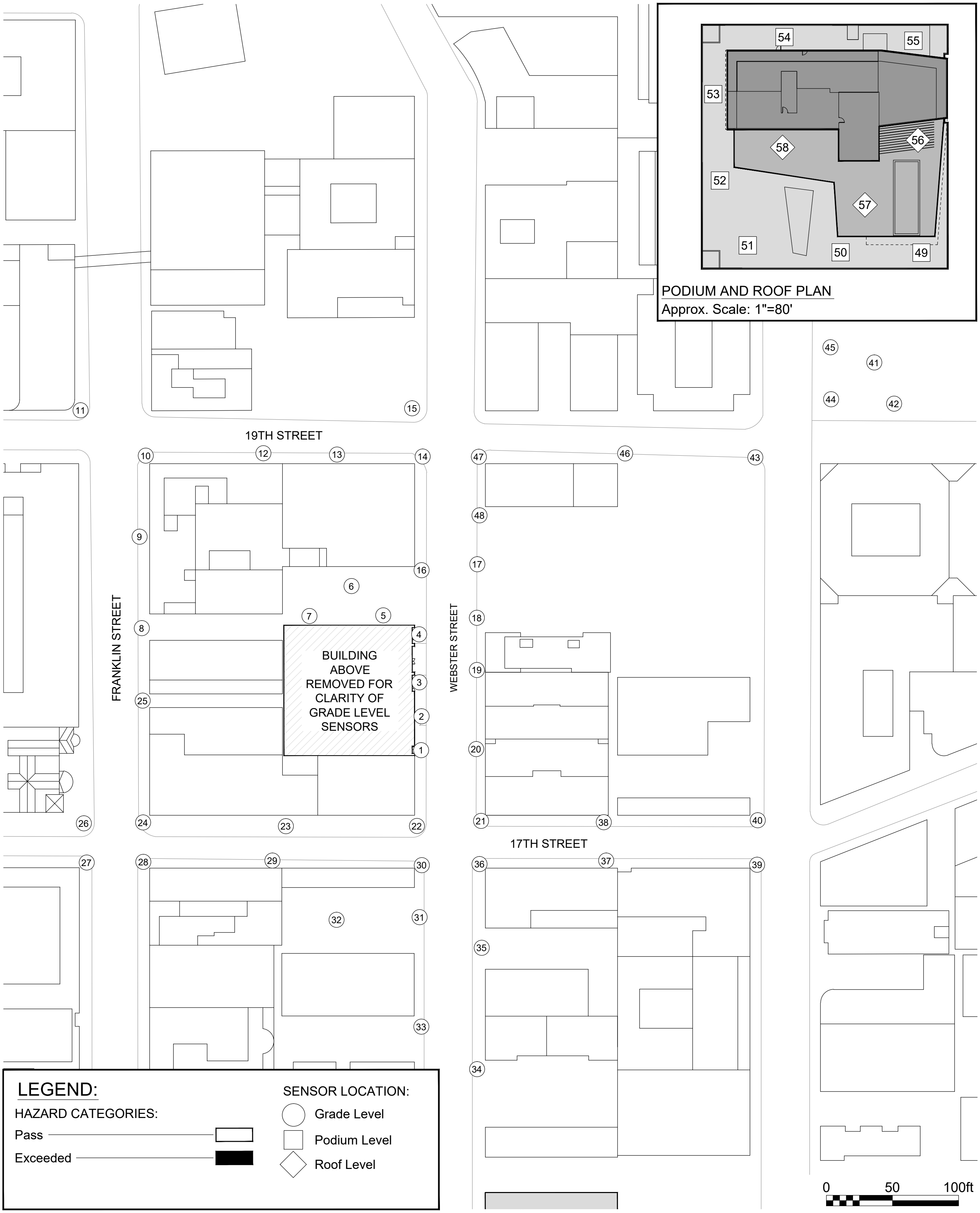
Annual (January to December)

1721 Webster Street - Oakland, CA

Project #1700458

Drawn by: ck	Figure: 4a
Approx. Scale: 1"=150'	
Date Revised: Nov. 22, 2016	

RWDI



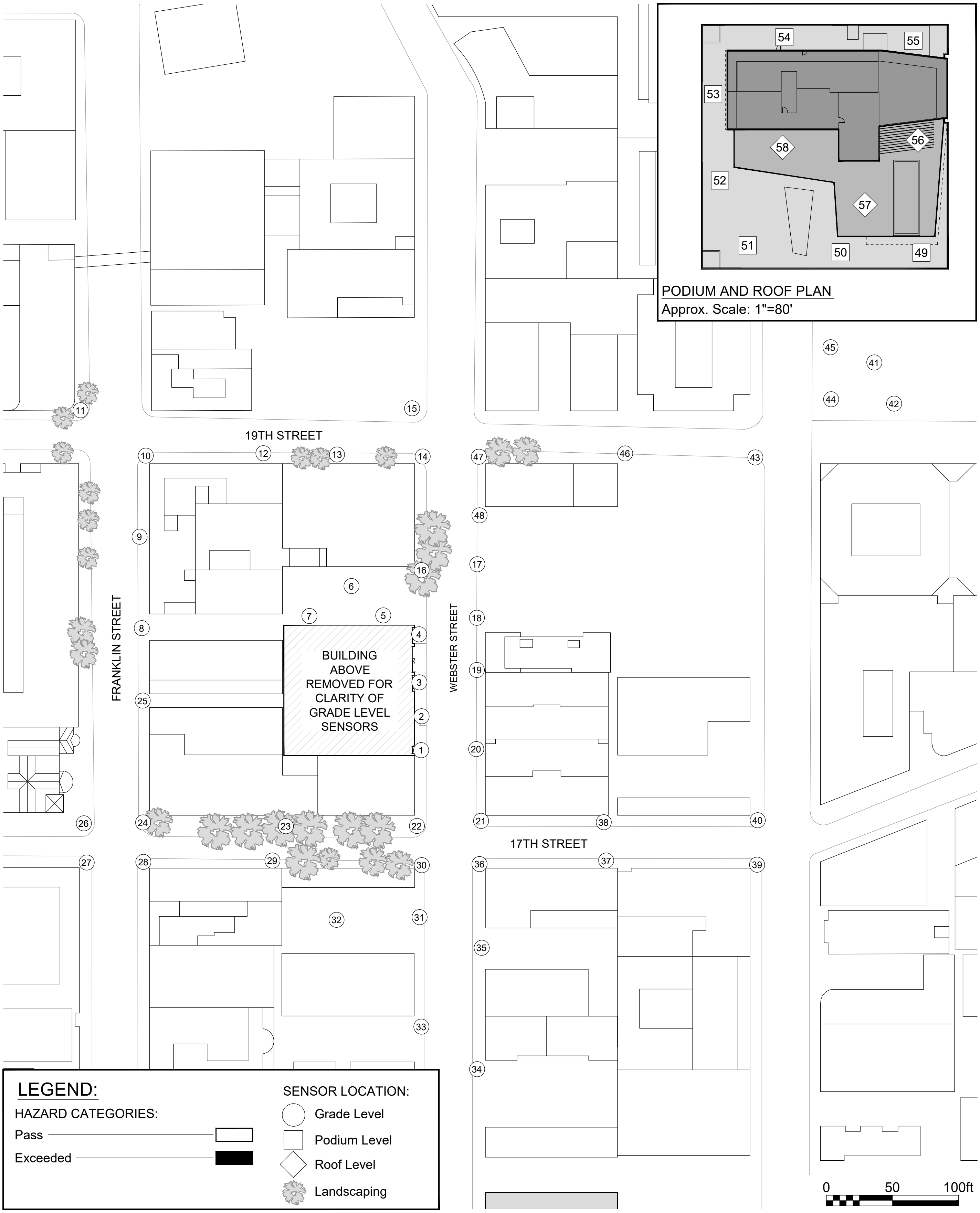
Pedestrian Wind Hazard Conditions - Project
Annual (January to December)

1721 Webster Street - Oakland, CA

Project #1700458

True North

Drawn by: ck	Figure: 4b	RWDI
Approx. Scale: 1"=150'		
Date Revised: Nov. 22, 2016		



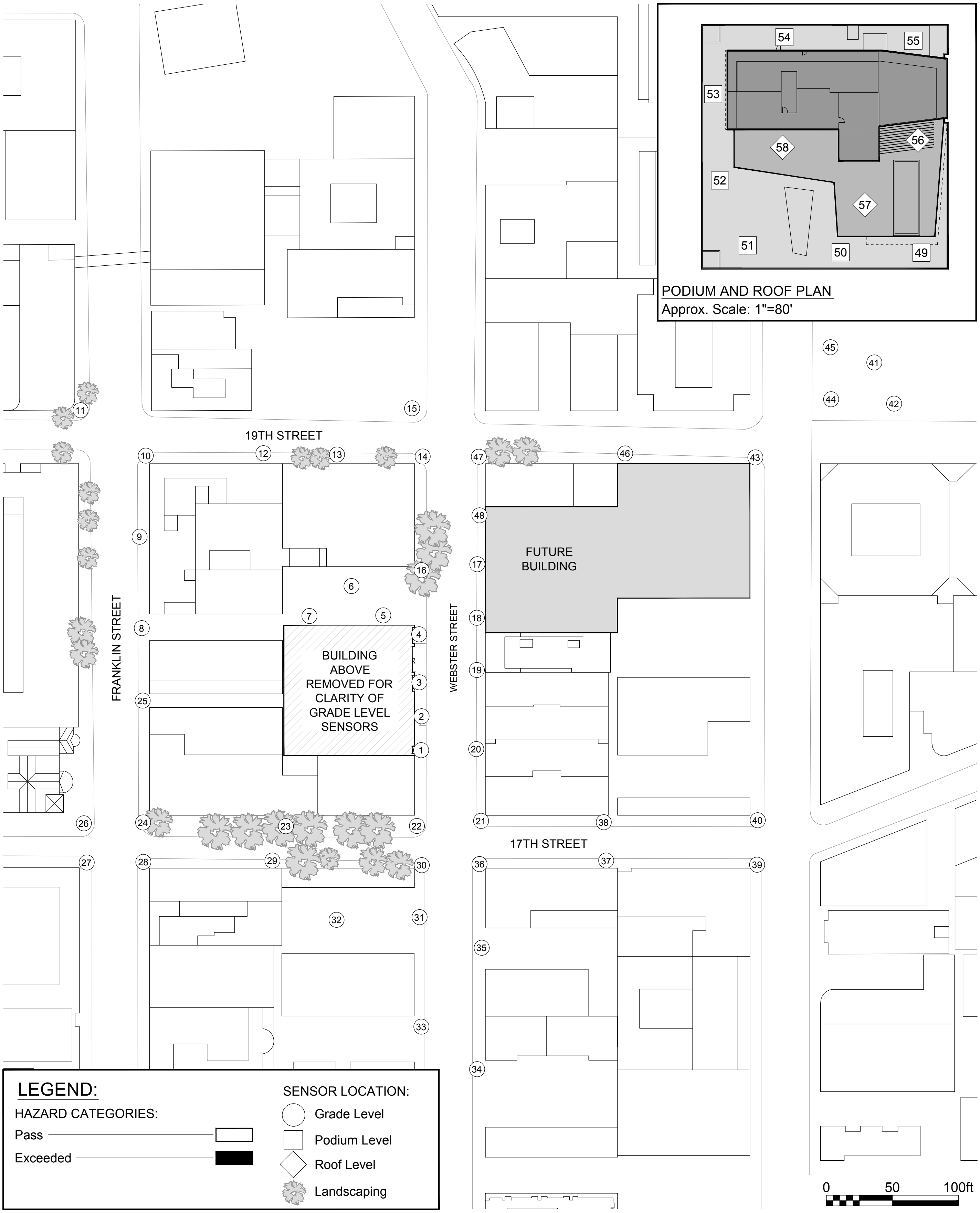
Pedestrian Wind Hazard Conditions - Project + Landscaping
Annual (January to December)

True North

1721 Webster Street - Oakland, CA

Project #1700458

Drawn by: ck	Figure: 4c
Approx. Scale:	1"=150'
Date Revised:	Nov. 22, 2016



Pedestrian Wind Hazard Conditions - Cumulative + Landscaping
Annual (January to December)

True North

1721 Webster Street - Oakland, CA

Project #1700458

Drawn by: ck	Figure: 4d
Approx. Scale:	1"=150'
Date Revised:	Nov. 22, 2016

RWDI

Table 1: Wind Comfort Results
Comfort Criterion Speed = 11 mph

Grade Level Locations

References	A Existing			B Project				C Project + Landscaping				D Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds
1	10	5		9	5	-1		9	4	-1		9	5	-1	
2	9	6		9	5	0		9	5	0		9	4	0	
3	9	4		9	5	0		9	5	0		9	5	0	
4	9	4		10	6	1		10	6	1		11	10	2	
5	8	1		8	2	0		8	2	0		8	2	0	
6	8	2		9	4	1		9	4	1		8	2	0	
7	9	4		11	10	2		11	10	2		9	4	0	
8	13	19	e	12	16	-1	e	13	16	0	e	10	6	-3	
9	14	27	e	14	24	0	e	14	24	0	e	11	10	-3	
10	12	14	e	12	15	0	e	12	16	0	e	12	15	0	e
11	9	4		9	4	0		9	4	0		7	1	-2	
12	13	21	e	13	19	0	e	13	18	0	e	12	13	-1	e
13	10	7		10	6	0		9	3	-1		10	4	0	
14	10	7		10	6	0		8	2	-2		9	3	-1	
15	8	3		8	3	0		8	3	0		8	1	0	
16	10	4		9	4	-1		9	4	-1		9	4	-1	
17	9	3		10	7	1		11	10	2		9	5	0	
18	13	19	e	11	10	-2		10	8	-3		9	4	-4	
19	10	8		11	10	1		11	10	1		11	10	1	
20	9	6		11	10	2		10	8	1		10	7	1	
21	14	20	e	10	8	-4		10	7	-4		10	6	-4	
22	12	12	e	8	2	-4		8	2	-4		8	2	-4	

Table 1: Wind Comfort Results
Comfort Criterion Speed = 11 mph

References	A Existing			B Project				C Project + Landscaping				D Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds
23	10	8		11	10	1		7	1	-3		7	1	-3	
24	15	28	e	14	27	-1	e	13	20	-2	e	10	7	-5	
25	14	24	e	13	21	-1	e	13	19	-1	e	12	16	-2	e
26	16	30	e	16	28	0	e	15	27	-1	e	10	6	-6	
27	15	29	e	15	28	0	e	15	28	0	e	12	12	-3	e
28	13	21	e	13	21	0	e	13	18	0	e	11	10	-2	
29	10	6		10	7	0		9	3	-1		7	1	-3	
30	11	10		10	8	-1		8	2	-3		7	1	-4	
31	10	7		9	4	-1		9	3	-1		8	2	-2	
32	8	2		7	2	-1		7	2	-1		7	1	-1	
33	9	4		9	4	0		8	2	-1		8	2	-1	
34	9	4		9	4	0		8	3	-1		9	3	0	
35	9	4		9	4	0		9	4	0		9	3	0	
36	13	17	e	10	5	-3		9	4	-4		8	2	-5	
37	12	16	e	10	6	-2		10	7	-2		10	5	-2	
38	12	15	e	10	6	-2		10	7	-2		10	5	-2	
39	12	13	e	11	10	-1		11	10	-1		11	10	-1	
40	10	6		10	5	0		10	5	0		9	4	-1	
41	14	27	e	14	24	0	e	14	23	0	e	11	10	-3	
42	15	33	e	14	28	-1	e	15	29	0	e	12	14	-3	e
43	13	20	e	12	17	-1	e	13	18	0	e	11	10	-2	
44	16	35	e	15	31	-1	e	15	31	-1	e	14	25	-2	e
45	13	19	e	12	16	-1	e	13	16	0	e	10	6	-3	

Table 1: Wind Comfort Results
Comfort Criterion Speed = 11 mph

References	A Existing			B Project				C Project + Landscaping				D Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds
46	8	2		9	3	1		8	2	0		9	3	1	
47	9	4		9	5	0		10	7	1		9	3	0	
48	10	7		11	10	1		9	5	-1		8	3	-2	
46	8	2		9	3	1		8	2	0		9	3	1	
47	9	4		9	5	0		10	7	1		9	3	0	
48	10	7		11	10	1		9	5	-1		8	3	-2	
Average speed, Average % exceedance, Total exceedances	**11.1 mph**	**12.3 %**	**21 of 48**	**10.7 mph**	**10.7 %**	**-0.4 mph**	**14 of 48**	**10.4 mph**	**9.7 %**	**-0.7 mph**	**14 of 48**	**9.5 mph**	**6.0 %**	**-1.6 mph**	**6 of 48**

CONSULTING ENGINEERS & SCIENTISTS

Table 1: Wind Comfort Results
Comfort Criterion Speed = 11 mph

Above Grade Locations

References	A Existing			B Project				C Project + Landscaping				D Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds
49	Data Not Available			10	5	N/A		9	4	N/A		9	4	N/A	
50	Data Not Available			16	27	N/A	e	17	27	N/A	e	16	27	N/A	e
51	Data Not Available			15	29	N/A	e	15	29	N/A	e	15	29	N/A	e
52	Data Not Available			15	27	N/A	e	15	25	N/A	e	14	27	N/A	e
53	Data Not Available			11	10	N/A		11	10	N/A		9	4	N/A	
54	Data Not Available			10	8	N/A		11	10	N/A		11	10	N/A	
55	Data Not Available			9	4	N/A		9	4	N/A		10	6	N/A	
56	Data Not Available			9	4	N/A		9	4	N/A		9	4	N/A	
57	Data Not Available			10	6	N/A		10	6	N/A		10	5	N/A	
58	Data Not Available			10	7	N/A		10	7	N/A		10	6	N/A	
Average speed, Average % exceedance, Total exceedances	**Data Not Available**			**11.5 mph**	**12.7 %**	**N/A**	**3 of 10**	**11.6 mph**	**12.6 %**	**N/A**	**3 of 10**	**11.3 mph**	**12.2 %**	**N/A**	**3 of 10**

CONSULTING ENGINEERS & SCIENTISTS

Table 2: Wind Hazard Results
Hazard Criterion Speed = 36 mph

Grade Level Locations

References	A Existing			B Project				C Project + Landscaping				D Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds
1	28	0		27	0	0		26	0	0		25	0	0	
2	31	0		28	0	0		27	0	0		25	0	0	
3	26	0		26	0	0		26	0	0		24	0	0	
4	21	0		33	0	0		33	0	0		30	0	0	
5	18	0		23	0	0		23	0	0		21	0	0	
6	26	0		22	0	0		22	0	0		20	0	0	
7	22	0		24	0	0		23	0	0		21	0	0	
8	31	0		31	0	0		30	0	0		28	0	0	
9	32	0		32	0	0		32	0	0		26	0	0	
10	26	0		30	0	0		30	0	0		26	0	0	
11	25	0		26	0	0		24	0	0		24	0	0	
12	28	0		27	0	0		27	0	0		24	0	0	
13	22	0		23	0	0		20	0	0		19	0	0	
14	26	0		25	0	0		19	0	0		20	0	0	
15	24	0		26	0	0		25	0	0		17	0	0	
16	25	0		26	0	0		24	0	0		22	0	0	
17	21	0		27	0	0		27	0	0		25	0	0	
18	30	0		31	0	0		30	0	0		22	0	0	
19	29	0		28	0	0		27	0	0		24	0	0	
20	35	0		30	0	0		29	0	0		27	0	0	
21	31	0		27	0	0		27	0	0		26	0	0	

Table 2: Wind Hazard Results
Hazard Criterion Speed = 36 mph

References	A Existing			B Project				C Project + Landscaping				D Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds
22	27	0		21	0	0		23	0	0		21	0	0	
23	25	0		24	0	0		19	0	0		18	0	0	
24	29	0		29	0	0		27	0	0		24	0	0	
25	29	0		27	0	0		26	0	0		26	0	0	
26	35	0		35	0	0		35	0	0		30	0	0	
27	32	0		32	0	0		32	0	0		34	0	0	
28	29	0		29	0	0		28	0	0		30	0	0	
29	22	0		23	0	0		19	0	0		22	0	0	
30	24	0		24	0	0		21	0	0		18	0	0	
31	26	0		22	0	0		22	0	0		19	0	0	
32	22	0		21	0	0		21	0	0		20	0	0	
33	25	0		24	0	0		21	0	0		20	0	0	
34	25	0		24	0	0		21	0	0		22	0	0	
35	21	0		20	0	0		20	0	0		19	0	0	
36	29	0		24	0	0		24	0	0		22	0	0	
37	31	0		31	0	0		30	0	0		29	0	0	
38	30	0		29	0	0		29	0	0		28	0	0	
39	29	0		28	0	0		28	0	0		26	0	0	
40	24	0		23	0	0		23	0	0		22	0	0	
41	31	0		30	0	0		30	0	0		25	0	0	
42	33	0		31	0	0		32	0	0		27	0	0	
43	35	0		35	0	0		34	0	0		30	0	0	
44	34	0		33	0	0		34	0	0		31	0	0	

Table 2: Wind Hazard Results
Hazard Criterion Speed = 36 mph

References	A Existing			B Project				C Project + Landscaping				D Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds
45	31	0		31	0	0		30	0	0		28	0	0	
46	20	0		20	0	0		19	0	0		19	0	0	
47	27	0		25	0	0		25	0	0		20	0	0	
48	25	0		26	0	0		26	0	0		21	0	0	
Average speed, Total hours, Total exceedances	**27.2 mph**	**0 hrs**	**0 of 48**	**26.9 mph**	**0 hrs**	**0 hrs**	**0 of 48**	**26.0 mph**	**0 hrs**	**0 hrs**	**0 of 48**	**23.9 mph**	**0 hrs**	**0 hrs**	**0 of 48**

CONSULTING ENGINEERS & SCIENTISTS

Table 2: Wind Hazard Results
Hazard Criterion Speed = 36 mph

Above Grade Locations

References	A Existing			B Project				C Project + Landscaping				D Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds
49	Data Not Available			24	0	0		25	0	0		25	0	0	
50	Data Not Available			35	0	0		35	0	0		35	0	0	
51	Data Not Available			34	0	0		34	0	0		33	0	0	
52	Data Not Available			35	0	0		35	0	0		30	0	0	
53	Data Not Available			27	0	0		27	0	0		26	0	0	
54	Data Not Available			24	0	0		24	0	0		25	0	0	
55	Data Not Available			27	0	0		27	0	0		26	0	0	
56	Data Not Available			21	0	0		21	0	0		22	0	0	
57	Data Not Available			25	0	0		25	0	0		24	0	0	
58	Data Not Available			24	0	0		24	0	0		28	0	0	
Average speed, Total hours, Total exceedances	**Data Not Available**			**27.8 mph**	**0 hrs**	**N/A**	**0 of 10**	**27.8 mph**	**0 hrs**	**N/A**	**0 of 10**	**27.4 mph**	**0 hrs**	**N/A**	**0 of 10**

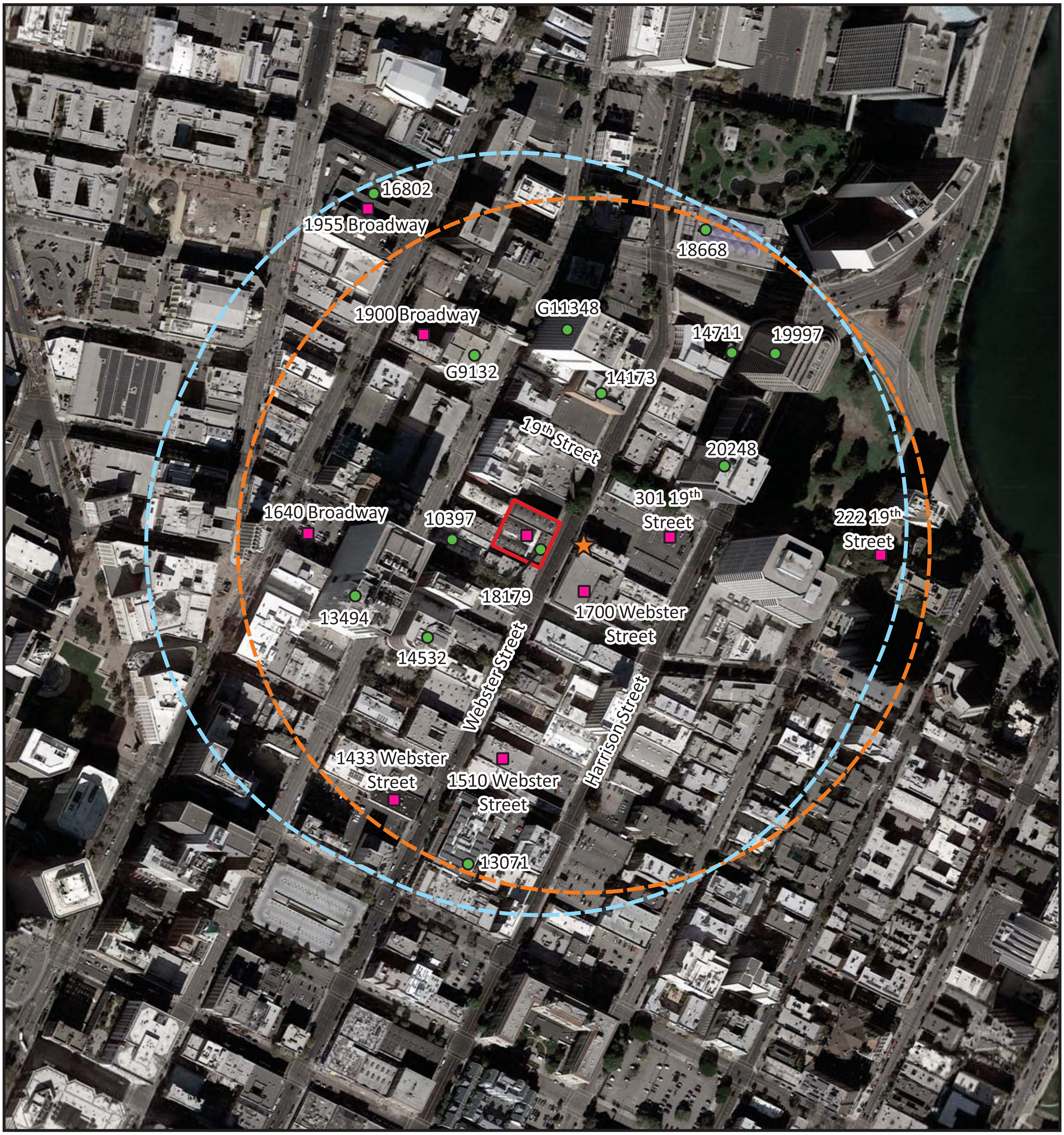
APPENDIX A: DRAWING LIST FOR MODEL CONSTRUCTION

The drawings and information listed below were received from Urban Planning Partners and were used to construct the scale model of the proposed 1721 Weber Street. Should there be any design changes that deviate from this list of drawings, the results may change. Therefore, if changes in the design area made, it is recommended that RWDI be contacted and requested to review their potential effects on the pedestrian wind conditions presented in this report.

Description	File Name	File Type	Date Received (dd/mm/yyyy)
AutoCad Floor Plans	1721 Webster_Plans Section 2016_1020.dwg	AutoCAD drawing	20/10/2016
Sketch Up 3D Model	1721 Webster with Context 2016_1020.skp	SketchUp	20/10/2016

Attachment F: Air Quality and Greenhouse Gas Emissions Estimates and Health Risk Analysis for the 1721 Webster Street Project prepared by BASELINE Environmental Consulting

TAC Sources and Sensitive Receptors



Base: Google Earth Pro, 2017.
Notes: BAAQMD = Bay Area Air Quality Management District

Project Site
1,000-Foot Buffer around Project Site
1,000-Foot Buffer around Maximally Exposed Individual Resident
Existing Stationary Source (with BAAQMD Plant ID)
Future Emergency Generator
Maximally Exposed Individual Resident

1721 Webster Street Project
Oakland

0 325 Feet N

1721 Webster St, Oakland

Construction Equipment List

Construction Phase	Total Work Days	Equipment Type	Quantity	Horsepower	Total Hours
Demolition	32	Excavator	1	225	256
		Excavator	1	303	256
		Steer Loader	1	74.3	192
		Crusher	1	475	80
Excavation, Shoring, and Ground Improvements	27	Drill Rig	1	540	216
		Steer Loader	2	74.3	60
		Forklift	1	89	120
		Excavator	1	303	120
		Grader	2	174	120
		Dozer	1	255	60
		Steer Loader	1	92	96
		Forklift	1	92	48
		Air Compresso	1	89	96
		Generator	1	78	96
Joint Trench and Wet Utilities	44	Backhoe	1	97	352
		Air Compresso	1	78	352
		Paver	1	125	88
		Roller	1	80	88
Building Construction	266	Forklift	2	84	1,044
		Air Compresso	1	78	1,044
		Backhoe	1	97	560
		Line Pump	1	84	532
		Welder	2	46	348
		Generator	1	84	2,620
		Generator	1	84	2,620
		Forklift	1	92	784
General Construction	175	Forklift	1	92	872
Offsite Construction	22	Backhoe	1	97	168
		Air Compresso	1	78	168
		Paver	1	125	32
		Roller	1	80	32

Notes:
Construction is expected to begin in December 2017 and last for approximtely 26 months.

1721 Webster Street - Maximum Development Scenario

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	10.00	1000sqft	0.00	10,000.00	30
Enclosed Parking with Elevator	275.00	Space	0.00	100,000.00	0
High Turnover (Sit Down Restaurant)	2.50	1000sqft	0.00	2,500.00	7
Apartments High Rise	250.00	Dwelling Unit	0.52	260,000.00	525

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	63
Climate Zone	5			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	427	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E's default 2008 CO2 intensity factor updated to the most recent (2013) emission factor verified by a 3rd party in PG&E’s (2015) Greenhouse Gas Emission Factors: Guidance for PG&E Customers.

Land Use - Based on maximum development scenario. Population estimates based on 2.1 persons/residential unit, 3 persons/KSF office, 2.5 persons/KSF retail.

Construction Phase - Based on project-specific information from the sponsor.

Off-road Equipment -

Off-road Equipment - Based on project-specific information from the sponsor.

Off-road Equipment - Based on project-specific information from the sponsor.

Off-road Equipment - Based on project-specific information from the sponsor.

Off-road Equipment - Based on project-specific information from the sponsor.

Off-road Equipment - Based on project-specific information from the sponsor.

Off-road Equipment - Based on project-specific information from the sponsor.

Trips and VMT -

Demolition - Project sponsor anticipates up to 2,500 tons of debris will be hauled offsite from demolition.

Grading - Project sponsor anticipates up to 14,500 cubic yards of soil will be hauled offsite from excavation.

Architectural Coating -

Vehicle Trips - Weekday trip rates adjusted based on Fehr & Peers (2016) traffic analysis.

Vehicle Emission Factors - x

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No fireplaces or woodstoves.

Energy Use - PG&E's default 2008 CO2 intensity factor updated to the most recent (2013) emission factor verified by a 3rd party in PG&E’s (2015) Greenhouse Gas Emission Factors: Guidance for PG&E Customers.

Water And Wastewater - EBMUD would service the proposed project and applies 100 percent aerobic process and 100 percent cogeneration.

Construction Off-road Equipment Mitigation - SCA-AIR-1 (#19) Enhanced Controls require use of Tier 4 engines. These emission reductions are considered part of the project's unmitigated emissions.

Water Mitigation - CALGreen Code mandatory requirement. These emission reductions are considered part of the project's unmitigated emissions.

Stationary Sources - Emergency Generators and Fire Pumps - Conservatively assuming 1000 HP for emergency diesel generator.

Stationary Sources - Emergency Generators and Fire Pumps EF -

1721 Webster Street - Maximum Development Scenario - Alameda County, Annual

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	175.00
tblConstructionPhase	NumDays	100.00	266.00
tblConstructionPhase	NumDays	10.00	32.00
tblConstructionPhase	NumDays	2.00	27.00
tblConstructionPhase	NumDays	5.00	22.00
tblFireplaces	NumberGas	37.50	0.00
tblFireplaces	NumberNoFireplace	10.00	0.00
tblFireplaces	NumberWood	42.50	0.00
tblGrading	MaterialExported	0.00	14,500.00
tblLandUse	BuildingSpaceSquareFeet	110,000.00	100,000.00
tblLandUse	BuildingSpaceSquareFeet	250,000.00	260,000.00
tblLandUse	LandUseSquareFeet	110,000.00	100,000.00
tblLandUse	LandUseSquareFeet	250,000.00	260,000.00
tblLandUse	LotAcreage	0.23	0.00
tblLandUse	LotAcreage	2.47	0.00
tblLandUse	LotAcreage	0.06	0.00
tblLandUse	LotAcreage	4.03	0.52
tblLandUse	Population	0.00	30.00
tblLandUse	Population	0.00	7.00
tblLandUse	Population	715.00	525.00
tblOffRoadEquipment	HorsePower	89.00	84.00
tblOffRoadEquipment	HorsePower	89.00	92.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	78.00	89.00

tblOffRoadEquipment	HorsePower	221.00	540.00
tblOffRoadEquipment	HorsePower	85.00	475.00
tblOffRoadEquipment	HorsePower	158.00	225.00
tblOffRoadEquipment	HorsePower	158.00	303.00
tblOffRoadEquipment	HorsePower	158.00	303.00
tblOffRoadEquipment	HorsePower	89.00	92.00
tblOffRoadEquipment	HorsePower	89.00	92.00
tblOffRoadEquipment	HorsePower	84.00	78.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	65.00	74.00
tblOffRoadEquipment	HorsePower	65.00	74.00
tblOffRoadEquipment	HorsePower	65.00	92.00
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Excavation, Shoring, Ground Improvement
tblOffRoadEquipment	PhaseName		Joint Trench and Wet Utilities
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Offsite Construction
tblOffRoadEquipment	PhaseName		Excavation, Shoring, Ground Improvement
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Excavation, Shoring, Ground Improvement
tblOffRoadEquipment	PhaseName		Excavation, Shoring, Ground Improvement
tblOffRoadEquipment	PhaseName		Excavation, Shoring, Ground Improvement
tblOffRoadEquipment	PhaseName		General Const
tblOffRoadEquipment	PhaseName		Excavation, Shoring, Ground Improvement
tblOffRoadEquipment	PhaseName		Excavation, Shoring, Ground Improvement

tblOffRoadEquipment	PhaseName		Joint Trench and Wet Utilities
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Joint Trench and Wet Utilities
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Excavation, Shoring, Ground Improvement
tblOffRoadEquipment	PhaseName		Excavation, Shoring, Ground Improvement
tblOffRoadEquipment	PhaseName		Joint Trench and Wet Utilities
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	UsageHours	6.00	3.90
tblOffRoadEquipment	UsageHours	6.00	2.90
tblOffRoadEquipment	UsageHours	7.00	1.50
tblOffRoadEquipment	UsageHours	7.00	1.50
tblOffRoadEquipment	UsageHours	1.00	2.20
tblOffRoadEquipment	UsageHours	8.00	2.10
tblOffRoadEquipment	UsageHours	7.00	7.60
tblProjectCharacteristics	CO2IntensityFactor	641.35	427
tblProjectCharacteristics	OperationalYear	2018	2020
tblVehicleTrips	ST_TR	4.98	2.84
tblVehicleTrips	ST_TR	2.46	1.40
tblVehicleTrips	ST_TR	158.37	90.27
tblVehicleTrips	SU_TR	3.65	2.08
tblVehicleTrips	SU_TR	1.05	0.60
tblVehicleTrips	SU_TR	131.84	75.15
tblVehicleTrips	WD_TR	4.20	3.78
tblVehicleTrips	WD_TR	11.03	6.27
tblVehicleTrips	WD_TR	127.15	72.96

tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	5.00	0.00
tblWoodstoves	NumberNoncatalytic	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0175	0.2033	0.0906	3.8000e-004	0.0203	6.1100e-003	0.0264	3.3900e-003	5.7800e-003	9.1600e-003	0.0000	36.7330	36.7330	6.6100e-003	0.0000	36.8982
2018	0.3579	2.9374	2.5582	6.7000e-003	0.2491	0.1325	0.3816	0.0710	0.1288	0.1998	0.0000	607.7107	607.7107	0.0587	0.0000	609.1771
2019	2.0523	0.9966	1.1325	2.7500e-003	0.1215	0.0483	0.1699	0.0326	0.0471	0.0797	0.0000	246.7399	246.7399	0.0172	0.0000	247.1708
2020	0.0180	0.0561	0.0628	1.0000e-004	1.0500e-003	3.5200e-003	4.5700e-003	2.8000e-004	3.3600e-003	3.6400e-003	0.0000	8.6780	8.6780	1.6500e-003	0.0000	8.7193
Maximum	**2.0523**	**2.9374**	**2.5582**	**6.7000e-003**	**0.2491**	**0.1325**	**0.3816**	**0.0710**	**0.1288**	**0.1998**	**0.0000**	**607.7107**	**607.7107**	**0.0587**	**0.0000**	**609.1771**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	5.3600e-003	0.0547	0.1517	3.8000e-004	0.0203	6.6000e-004	0.0210	3.3900e-003	6.5000e-004	4.0400e-003	0.0000	36.7329	36.7329	6.6100e-003	0.0000	36.8981
2018	0.1507	1.1053	2.7290	6.7000e-003	0.2491	0.0107	0.2598	0.0710	0.0104	0.0813	0.0000	607.7104	607.7104	0.0587	0.0000	609.1768
2019	1.9779	0.3524	1.1631	2.7500e-003	0.1215	3.9000e-003	0.1254	0.0326	3.7700e-003	0.0364	0.0000	246.7398	246.7398	0.0172	0.0000	247.1707
2020	0.0124	4.6600e-003	0.0650	1.0000e-004	1.0500e-003	1.4000e-004	1.1900e-003	2.8000e-004	1.4000e-004	4.2000e-004	0.0000	8.6780	8.6780	1.6500e-003	0.0000	8.7193
Maximum	**1.9779**	**1.1053**	**2.7290**	**6.7000e-003**	**0.2491**	**0.0107**	**0.2598**	**0.0710**	**0.0104**	**0.0813**	**0.0000**	**607.7104**	**607.7104**	**0.0587**	**0.0000**	**609.1768**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**12.24**	**63.82**	**-6.89**	**0.00**	**0.00**	**91.93**	**30.06**	**0.00**	**91.94**	**58.20**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**12-1-2017**	**2-28-2018**	0.3289	0.0930
2	**3-1-2018**	**5-31-2018**	0.3379	0.1247
3	**6-1-2018**	**8-31-2018**	0.8401	0.3100
4	**9-1-2018**	**11-30-2018**	0.8374	0.3130
5	**12-1-2018**	**2-28-2019**	0.7876	0.3014
6	**3-1-2019**	**5-31-2019**	0.5239	0.2007
		Highest	0.8401	0.3130

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3193	0.0216	1.8651	1.0000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	3.0373	3.0373	2.9700e-003	0.0000	3.1116
Energy	0.0187	0.1619	0.0814	1.0200e-003		0.0129	0.0129		0.0129	0.0129	0.0000	573.7767	573.7767	0.0299	8.8600e-003	577.1641
Mobile	0.3329	2.1118	3.5420	0.0118	0.8597	0.0142	0.8739	0.2311	0.0134	0.2445	0.0000	1,082.3936	1,082.3936	0.0512	0.0000	1,083.6724
Stationary	0.0410	0.1835	0.1046	2.0000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	19.0399	19.0399	2.6700e-003	0.0000	19.1066
Waste						0.0000	0.0000		0.0000	0.0000	31.2708	0.0000	31.2708	1.8481	0.0000	77.4720
Water						0.0000	0.0000		0.0000	0.0000	6.6602	25.6236	32.2838	0.0247	0.0148	37.3238
Total	**1.7119**	**2.4787**	**5.5931**	**0.0131**	**0.8597**	**0.0435**	**0.9031**	**0.2311**	**0.0427**	**0.2738**	**37.9310**	**1,703.8710**	**1,741.8020**	**1.9594**	**0.0237**	**1,797.8505**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3193	0.0216	1.8651	1.0000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	3.0373	3.0373	2.9700e-003	0.0000	3.1116
Energy	0.0187	0.1619	0.0814	1.0200e-003		0.0129	0.0129		0.0129	0.0129	0.0000	573.7767	573.7767	0.0299	8.8600e-003	577.1641
Mobile	0.3329	2.1118	3.5420	0.0118	0.8597	0.0142	0.8739	0.2311	0.0134	0.2445	0.0000	1,082.3936	1,082.3936	0.0512	0.0000	1,083.6724
Stationary	0.0410	0.1835	0.1046	2.0000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	19.0399	19.0399	2.6700e-003	0.0000	19.1066
Waste						0.0000	0.0000		0.0000	0.0000	31.2708	0.0000	31.2708	1.8481	0.0000	77.4720
Water						0.0000	0.0000		0.0000	0.0000	5.3282	22.0454	27.3735	0.0198	0.0119	31.4147
Total	**1.7119**	**2.4787**	**5.5931**	**0.0131**	**0.8597**	**0.0435**	**0.9031**	**0.2311**	**0.0427**	**0.2738**	**36.5989**	**1,700.2928**	**1,736.8917**	**1.9546**	**0.0208**	**1,791.9413**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.51**	**0.21**	**0.28**	**0.25**	**12.41**	**0.33**

3.0 Construction Detail

Construction Phase

1721 Webster Street - Maximum Development Scenario - Alameda County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/1/2017	1/15/2018	5	32	
2	Excavation, Shoring, Ground Improvement	Grading	1/16/2018	2/21/2018	5	27	
3	Joint Trench and Wet Utilities	Trenching	2/22/2018	4/24/2018	5	44	
4	Building Construction	Building Construction	4/25/2018	5/1/2019	5	266	
5	General Const	Architectural Coating	5/2/2019	1/1/2020	5	175	
6	Offsite Construction	Paving	1/2/2020	1/31/2020	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 526,500; Residential Outdoor: 175,500; Non-Residential Indoor: 18,750; Non-Residential Outdoor: 6,250; Striped Parking Area: 6,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Crushing/Proc. Equipment	1	2.50	475	0.78
Demolition	Excavators	1	8.00	225	0.38
Demolition	Excavators	1	8.00	303	0.38
Demolition	Skid Steer Loaders	1	6.00	74	0.37
Excavation, Shoring, Ground Improvement	Air Compressors	1	3.60	89	0.48
Excavation, Shoring, Ground Improvement	Bore/Drill Rigs	1	8.00	540	0.50
Excavation, Shoring, Ground Improvement	Excavators	1	4.40	303	0.38
Excavation, Shoring, Ground Improvement	Forklifts	1	4.40	89	0.20
Excavation, Shoring, Ground Improvement	Forklifts	1	1.80	92	0.20

Excavation, Shoring, Ground Improvement	Generator Sets	1	3.60	78	0.74
Excavation, Shoring, Ground Improvement	Graders	2	4.40	174	0.41
Excavation, Shoring, Ground Improvement	Rubber Tired Dozers	1	2.20	255	0.40
Excavation, Shoring, Ground Improvement	Skid Steer Loaders	2	2.20	74	0.37
Excavation, Shoring, Ground Improvement	Skid Steer Loaders	1	3.60	92	0.37
Joint Trench and Wet Utilities	Air Compressors	1	8.00	78	0.48
Joint Trench and Wet Utilities	Pavers	1	2.00	125	0.42
Joint Trench and Wet Utilities	Rollers	1	2.00	80	0.38
Joint Trench and Wet Utilities	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Air Compressors	1	3.90	78	0.48
Building Construction	Forklifts	2	3.90	84	0.20
Building Construction	Forklifts	1	2.90	92	0.20
Building Construction	Pumps	1	2.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	2.10	97	0.37
Building Construction	Welders	2	1.30	46	0.45
General Const	Forklifts	1	5.00	92	0.20
Offsite Construction	Air Compressors	1	7.60	78	0.48
Offsite Construction	Pavers	1	1.50	125	0.42
Offsite Construction	Rollers	1	1.50	80	0.38
Offsite Construction	Tractors/Loaders/Backhoes	1	7.60	97	0.37
Building Construction	Generator Sets	2	9.80	84	0.74

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	247.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavation, Shoring, Ground Improvement	12	30.00	0.00	1,813.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Joint Trench and Wet Utilities	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	226.00	45.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
General Const	1	45.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Offsite Construction	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0176	0.0000	0.0176	2.6600e-003	0.0000	2.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0161	0.1743	0.0819	3.1000e-004		5.9500e-003	5.9500e-003		5.6300e-003	5.6300e-003	0.0000	29.5429	29.5429	6.2300e-003	0.0000	29.6986
Total	**0.0161**	**0.1743**	**0.0819**	**3.1000e-004**	**0.0176**	**5.9500e-003**	**0.0235**	**2.6600e-003**	**5.6300e-003**	**8.2900e-003**	**0.0000**	**29.5429**	**29.5429**	**6.2300e-003**	**0.0000**	**29.6986**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.9000e-004	0.0286	4.7300e-003	7.0000e-005	1.9100e-003	1.5000e-004	2.0600e-003	5.1000e-004	1.4000e-004	6.5000e-004	0.0000	6.3839	6.3839	3.5000e-004	0.0000	6.3927
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	4.0000e-004	3.9400e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.4000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.8062	0.8062	3.0000e-005	0.0000	0.8069
Total	**1.3900e-003**	**0.0290**	**8.6700e-003**	**8.0000e-005**	**2.7400e-003**	**1.6000e-004**	**2.9000e-003**	**7.3000e-004**	**1.5000e-004**	**8.8000e-004**	**0.0000**	**7.1901**	**7.1901**	**3.8000e-004**	**0.0000**	**7.1996**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0176	0.0000	0.0176	2.6600e-003	0.0000	2.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9700e-003	0.0257	0.1430	3.1000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	29.5428	29.5428	6.2300e-003	0.0000	29.6986
Total	**3.9700e-003**	**0.0257**	**0.1430**	**3.1000e-004**	**0.0176**	**5.0000e-004**	**0.0181**	**2.6600e-003**	**5.0000e-004**	**3.1600e-003**	**0.0000**	**29.5428**	**29.5428**	**6.2300e-003**	**0.0000**	**29.6986**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.9000e-004	0.0286	4.7300e-003	7.0000e-005	1.9100e-003	1.5000e-004	2.0600e-003	5.1000e-004	1.4000e-004	6.5000e-004	0.0000	6.3839	6.3839	3.5000e-004	0.0000	6.3927
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-004	4.0000e-004	3.9400e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.4000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.8062	0.8062	3.0000e-005	0.0000	0.8069
Total	**1.3900e-003**	**0.0290**	**8.6700e-003**	**8.0000e-005**	**2.7400e-003**	**1.6000e-004**	**2.9000e-003**	**7.3000e-004**	**1.5000e-004**	**8.8000e-004**	**0.0000**	**7.1901**	**7.1901**	**3.8000e-004**	**0.0000**	**7.1996**

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.1900e-003	0.0000	9.1900e-003	1.3900e-003	0.0000	1.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5300e-003	0.0761	0.0412	1.6000e-004		2.5600e-003	2.5600e-003		2.4300e-003	2.4300e-003	0.0000	15.3203	15.3203	3.2400e-003	0.0000	15.4014
Total	**7.5300e-003**	**0.0761**	**0.0412**	**1.6000e-004**	**9.1900e-003**	**2.5600e-003**	**0.0118**	**1.3900e-003**	**2.4300e-003**	**3.8200e-003**	**0.0000**	**15.3203**	**15.3203**	**3.2400e-003**	**0.0000**	**15.4014**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-004	0.0139	2.3000e-003	3.0000e-005	1.7400e-003	5.0000e-005	1.8000e-003	4.5000e-004	5.0000e-005	5.0000e-004	0.0000	3.3179	3.3179	1.7000e-004	0.0000	3.3223
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.8000e-004	1.8100e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4109	0.4109	1.0000e-005	0.0000	0.4113
Total	**6.3000e-004**	**0.0141**	**4.1100e-003**	**3.0000e-005**	**2.1700e-003**	**5.0000e-005**	**2.2400e-003**	**5.7000e-004**	**5.0000e-005**	**6.2000e-004**	**0.0000**	**3.7288**	**3.7288**	**1.8000e-004**	**0.0000**	**3.7335**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.1900e-003	0.0000	9.1900e-003	1.3900e-003	0.0000	1.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0800e-003	0.0134	0.0749	1.6000e-004		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	15.3203	15.3203	3.2400e-003	0.0000	15.4014
Total	**2.0800e-003**	**0.0134**	**0.0749**	**1.6000e-004**	**9.1900e-003**	**2.6000e-004**	**9.4500e-003**	**1.3900e-003**	**2.6000e-004**	**1.6500e-003**	**0.0000**	**15.3203**	**15.3203**	**3.2400e-003**	**0.0000**	**15.4014**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-004	0.0139	2.3000e-003	3.0000e-005	1.7400e-003	5.0000e-005	1.8000e-003	4.5000e-004	5.0000e-005	5.0000e-004	0.0000	3.3179	3.3179	1.7000e-004	0.0000	3.3223
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.8000e-004	1.8100e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4109	0.4109	1.0000e-005	0.0000	0.4113
Total	**6.3000e-004**	**0.0141**	**4.1100e-003**	**3.0000e-005**	**2.1700e-003**	**5.0000e-005**	**2.2400e-003**	**5.7000e-004**	**5.0000e-005**	**6.2000e-004**	**0.0000**	**3.7288**	**3.7288**	**1.8000e-004**	**0.0000**	**3.7335**

3.3 Excavation, Shoring, Ground Improvement - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0311	0.0000	0.0311	0.0133	0.0000	0.0133	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0361	0.3847	0.2592	6.3000e-004		0.0187	0.0187		0.0174	0.0174	0.0000	56.9383	56.9383	0.0165	0.0000	57.3496
Total	**0.0361**	**0.3847**	**0.2592**	**6.3000e-004**	**0.0311**	**0.0187**	**0.0497**	**0.0133**	**0.0174**	**0.0307**	**0.0000**	**56.9383**	**56.9383**	**0.0165**	**0.0000**	**57.3496**

3.3 Excavation, Shoring, Ground Improvement - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.6300e-003	0.2963	0.0491	7.4000e-004	0.0154	1.1200e-003	0.0165	4.2200e-003	1.0700e-003	5.2900e-003	0.0000	70.8473	70.8473	3.7300e-003	0.0000	70.9407
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-003	1.3300e-003	0.0133	3.0000e-005	3.2000e-003	2.0000e-005	3.2300e-003	8.5000e-004	2.0000e-005	8.7000e-004	0.0000	3.0259	3.0259	9.0000e-005	0.0000	3.0283
Total	**0.0103**	**0.2976**	**0.0624**	**7.7000e-004**	**0.0186**	**1.1400e-003**	**0.0197**	**5.0700e-003**	**1.0900e-003**	**6.1600e-003**	**0.0000**	**73.8732**	**73.8732**	**3.8200e-003**	**0.0000**	**73.9689**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0311	0.0000	0.0311	0.0133	0.0000	0.0133	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7800e-003	0.0417	0.3373	6.3000e-004		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	56.9382	56.9382	0.0165	0.0000	57.3495
Total	**7.7800e-003**	**0.0417**	**0.3373**	**6.3000e-004**	**0.0311**	**1.0100e-003**	**0.0321**	**0.0133**	**1.0100e-003**	**0.0143**	**0.0000**	**56.9382**	**56.9382**	**0.0165**	**0.0000**	**57.3495**

3.3 Excavation, Shoring, Ground Improvement - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.6300e-003	0.2963	0.0491	7.4000e-004	0.0154	1.1200e-003	0.0165	4.2200e-003	1.0700e-003	5.2900e-003	0.0000	70.8473	70.8473	3.7300e-003	0.0000	70.9407
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-003	1.3300e-003	0.0133	3.0000e-005	3.2000e-003	2.0000e-005	3.2300e-003	8.5000e-004	2.0000e-005	8.7000e-004	0.0000	3.0259	3.0259	9.0000e-005	0.0000	3.0283
Total	**0.0103**	**0.2976**	**0.0624**	**7.7000e-004**	**0.0186**	**1.1400e-003**	**0.0197**	**5.0700e-003**	**1.0900e-003**	**6.1600e-003**	**0.0000**	**73.8732**	**73.8732**	**3.8200e-003**	**0.0000**	**73.9689**

3.4 Joint Trench and Wet Utilities - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0178	0.1495	0.1319	1.9000e-004		0.0104	0.0104		9.9100e-003	9.9100e-003	0.0000	17.3186	17.3186	3.7700e-003	0.0000	17.4129
Total	**0.0178**	**0.1495**	**0.1319**	**1.9000e-004**		**0.0104**	**0.0104**		**9.9100e-003**	**9.9100e-003**	**0.0000**	**17.3186**	**17.3186**	**3.7700e-003**	**0.0000**	**17.4129**

3.4 Joint Trench and Wet Utilities - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.2000e-004	7.2000e-004	7.2200e-003	2.0000e-005	1.7400e-003	1.0000e-005	1.7500e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.6437	1.6437	5.0000e-005	0.0000	1.6450
Total	**9.2000e-004**	**7.2000e-004**	**7.2200e-003**	**2.0000e-005**	**1.7400e-003**	**1.0000e-005**	**1.7500e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.6437**	**1.6437**	**5.0000e-005**	**0.0000**	**1.6450**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1900e-003	9.4900e-003	0.1350	1.9000e-004		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	17.3186	17.3186	3.7700e-003	0.0000	17.4129
Total	**2.1900e-003**	**9.4900e-003**	**0.1350**	**1.9000e-004**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**17.3186**	**17.3186**	**3.7700e-003**	**0.0000**	**17.4129**

3.4 Joint Trench and Wet Utilities - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.2000e-004	7.2000e-004	7.2200e-003	2.0000e-005	1.7400e-003	1.0000e-005	1.7500e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.6437	1.6437	5.0000e-005	0.0000	1.6450
Total	**9.2000e-004**	**7.2000e-004**	**7.2200e-003**	**2.0000e-005**	**1.7400e-003**	**1.0000e-005**	**1.7500e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.6437**	**1.6437**	**5.0000e-005**	**0.0000**	**1.6450**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1798	1.4052	1.2640	2.0900e-003		0.0946	0.0946		0.0931	0.0931	0.0000	179.7464	179.7464	0.0195	0.0000	180.2331
Total	**0.1798**	**1.4052**	**1.2640**	**2.0900e-003**		**0.0946**	**0.0946**		**0.0931**	**0.0931**	**0.0000**	**179.7464**	**179.7464**	**0.0195**	**0.0000**	**180.2331**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0200	0.5429	0.1240	1.1300e-003	0.0265	3.8700e-003	0.0303	7.6500e-003	3.7100e-003	0.0114	0.0000	108.0177	108.0177	6.9100e-003	0.0000	108.1905
Worker	0.0848	0.0666	0.6641	1.6700e-003	0.1599	1.1700e-003	0.1611	0.0425	1.0800e-003	0.0436	0.0000	151.1237	151.1237	4.7400e-003	0.0000	151.2422
Total	**0.1048**	**0.6094**	**0.7881**	**2.8000e-003**	**0.1864**	**5.0400e-003**	**0.1914**	**0.0502**	**4.7900e-003**	**0.0550**	**0.0000**	**259.1413**	**259.1413**	**0.0117**	**0.0000**	**259.4326**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0220	0.1189	1.3200	2.0900e-003		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003	0.0000	179.7462	179.7462	0.0195	0.0000	180.2329
Total	**0.0220**	**0.1189**	**1.3200**	**2.0900e-003**		**2.8400e-003**	**2.8400e-003**		**2.8400e-003**	**2.8400e-003**	**0.0000**	**179.7462**	**179.7462**	**0.0195**	**0.0000**	**180.2329**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0200	0.5429	0.1240	1.1300e-003	0.0265	3.8700e-003	0.0303	7.6500e-003	3.7100e-003	0.0114	0.0000	108.0177	108.0177	6.9100e-003	0.0000	108.1905
Worker	0.0848	0.0666	0.6641	1.6700e-003	0.1599	1.1700e-003	0.1611	0.0425	1.0800e-003	0.0436	0.0000	151.1237	151.1237	4.7400e-003	0.0000	151.2422
Total	**0.1048**	**0.6094**	**0.7881**	**2.8000e-003**	**0.1864**	**5.0400e-003**	**0.1914**	**0.0502**	**4.7900e-003**	**0.0550**	**0.0000**	**259.1413**	**259.1413**	**0.0117**	**0.0000**	**259.4326**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0771	0.6263	0.6091	1.0100e-003		0.0397	0.0397		0.0391	0.0391	0.0000	87.1825	87.1825	8.7400e-003	0.0000	87.4009
Total	**0.0771**	**0.6263**	**0.6091**	**1.0100e-003**		**0.0397**	**0.0397**		**0.0391**	**0.0391**	**0.0000**	**87.1825**	**87.1825**	**8.7400e-003**	**0.0000**	**87.4009**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.8200e-003	0.2503	0.0554	5.5000e-004	0.0129	1.6000e-003	0.0145	3.7200e-003	1.5300e-003	5.2500e-003	0.0000	52.1429	52.1429	3.2100e-003	0.0000	52.2232
Worker	0.0372	0.0284	0.2867	7.9000e-004	0.0777	5.5000e-004	0.0783	0.0207	5.1000e-004	0.0212	0.0000	71.3035	71.3035	2.0300e-003	0.0000	71.3543
Total	**0.0460**	**0.2787**	**0.3421**	**1.3400e-003**	**0.0906**	**2.1500e-003**	**0.0927**	**0.0244**	**2.0400e-003**	**0.0264**	**0.0000**	**123.4463**	**123.4463**	**5.2400e-003**	**0.0000**	**123.5775**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0107	0.0578	0.6416	1.0100e-003		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003	0.0000	87.1824	87.1824	8.7400e-003	0.0000	87.4007
Total	**0.0107**	**0.0578**	**0.6416**	**1.0100e-003**		**1.3800e-003**	**1.3800e-003**		**1.3800e-003**	**1.3800e-003**	**0.0000**	**87.1824**	**87.1824**	**8.7400e-003**	**0.0000**	**87.4007**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.8200e-003	0.2503	0.0554	5.5000e-004	0.0129	1.6000e-003	0.0145	3.7200e-003	1.5300e-003	5.2500e-003	0.0000	52.1429	52.1429	3.2100e-003	0.0000	52.2232
Worker	0.0372	0.0284	0.2867	7.9000e-004	0.0777	5.5000e-004	0.0783	0.0207	5.1000e-004	0.0212	0.0000	71.3035	71.3035	2.0300e-003	0.0000	71.3543
Total	**0.0460**	**0.2787**	**0.3421**	**1.3400e-003**	**0.0906**	**2.1500e-003**	**0.0927**	**0.0244**	**2.0400e-003**	**0.0264**	**0.0000**	**123.4463**	**123.4463**	**5.2400e-003**	**0.0000**	**123.5775**

3.6 General Const - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.9053					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.9900e-003	0.0803	0.0671	9.0000e-005		6.2200e-003	6.2200e-003		5.7200e-003	5.7200e-003	0.0000	7.7160	7.7160	2.4400e-003	0.0000	7.7770
Total	**1.9143**	**0.0803**	**0.0671**	**9.0000e-005**		**6.2200e-003**	**6.2200e-003**		**5.7200e-003**	**5.7200e-003**	**0.0000**	**7.7160**	**7.7160**	**2.4400e-003**	**0.0000**	**7.7770**

3.6 General Const - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0148	0.0113	0.1142	3.1000e-004	0.0310	2.2000e-004	0.0312	8.2300e-003	2.0000e-004	8.4400e-003	0.0000	28.3952	28.3952	8.1000e-004	0.0000	28.4154
Total	**0.0148**	**0.0113**	**0.1142**	**3.1000e-004**	**0.0310**	**2.2000e-004**	**0.0312**	**8.2300e-003**	**2.0000e-004**	**8.4400e-003**	**0.0000**	**28.3952**	**28.3952**	**8.1000e-004**	**0.0000**	**28.4154**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.9053					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0600e-003	4.5900e-003	0.0653	9.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	7.7160	7.7160	2.4400e-003	0.0000	7.7770
Total	**1.9064**	**4.5900e-003**	**0.0653**	**9.0000e-005**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**7.7160**	**7.7160**	**2.4400e-003**	**0.0000**	**7.7770**

3.6 General Const - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0148	0.0113	0.1142	3.1000e-004	0.0310	2.2000e-004	0.0312	8.2300e-003	2.0000e-004	8.4400e-003	0.0000	28.3952	28.3952	8.1000e-004	0.0000	28.4154
Total	**0.0148**	**0.0113**	**0.1142**	**3.1000e-004**	**0.0310**	**2.2000e-004**	**0.0312**	**8.2300e-003**	**2.0000e-004**	**8.4400e-003**	**0.0000**	**28.3952**	**28.3952**	**8.1000e-004**	**0.0000**	**28.4154**

3.6 General Const - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0110					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0000e-005	4.2000e-004	3.8000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0434	0.0434	1.0000e-005	0.0000	0.0437
Total	**0.0110**	**4.2000e-004**	**3.8000e-004**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0434**	**0.0434**	**1.0000e-005**	**0.0000**	**0.0437**

3.6 General Const - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1581	0.1581	0.0000	0.0000	0.1582
Total	**8.0000e-005**	**6.0000e-005**	**5.9000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1581**	**0.1581**	**0.0000**	**0.0000**	**0.1582**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0110					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0000e-005	3.0000e-005	3.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0434	0.0434	1.0000e-005	0.0000	0.0437
Total	**0.0110**	**3.0000e-005**	**3.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0434**	**0.0434**	**1.0000e-005**	**0.0000**	**0.0437**

3.6 General Const - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1581	0.1581	0.0000	0.0000	0.1582
Total	**8.0000e-005**	**6.0000e-005**	**5.9000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1581**	**0.1581**	**0.0000**	**0.0000**	**0.1582**

3.7 Offsite Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.5100e-003	0.0553	0.0590	9.0000e-005		3.4800e-003	3.4800e-003		3.3300e-003	3.3300e-003	0.0000	7.7033	7.7033	1.6200e-003	0.0000	7.7437
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.5100e-003**	**0.0553**	**0.0590**	**9.0000e-005**		**3.4800e-003**	**3.4800e-003**		**3.3300e-003**	**3.3300e-003**	**0.0000**	**7.7033**	**7.7033**	**1.6200e-003**	**0.0000**	**7.7437**

3.7 Offsite Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.8000e-004	2.8800e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7731	0.7731	2.0000e-005	0.0000	0.7736
Total	**3.8000e-004**	**2.8000e-004**	**2.8800e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.8000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**	**0.0000**	**0.7731**	**0.7731**	**2.0000e-005**	**0.0000**	**0.7736**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.9000e-004	4.3000e-003	0.0612	9.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	7.7033	7.7033	1.6200e-003	0.0000	7.7437
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.9000e-004**	**4.3000e-003**	**0.0612**	**9.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**7.7033**	**7.7033**	**1.6200e-003**	**0.0000**	**7.7437**

3.7 Offsite Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.8000e-004	2.8800e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7731	0.7731	2.0000e-005	0.0000	0.7736
Total	**3.8000e-004**	**2.8000e-004**	**2.8800e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.8000e-004**	**2.3000e-004**	**1.0000e-005**	**2.4000e-004**	**0.0000**	**0.7731**	**0.7731**	**2.0000e-005**	**0.0000**	**0.7736**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3329	2.1118	3.5420	0.0118	0.8597	0.0142	0.8739	0.2311	0.0134	0.2445	0.0000	1,082.3936	1,082.3936	0.0512	0.0000	1,083.6724
Unmitigated	0.3329	2.1118	3.5420	0.0118	0.8597	0.0142	0.8739	0.2311	0.0134	0.2445	0.0000	1,082.3936	1,082.3936	0.0512	0.0000	1,083.6724

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	945.00	710.00	520.00	1,964,816	1,964,816
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	62.70	14.00	6.00	113,855	113,855
High Turnover (Sit Down Restaurant)	182.40	225.68	187.88	219,713	219,713
Total	1,190.10	949.68	713.88	2,298,383	2,298,383

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.558186	0.040947	0.190770	0.110456	0.017401	0.005228	0.022658	0.042795	0.002118	0.002805	0.005569	0.000308	0.000759
Enclosed Parking with Elevator	0.558186	0.040947	0.190770	0.110456	0.017401	0.005228	0.022658	0.042795	0.002118	0.002805	0.005569	0.000308	0.000759
High Turnover (Sit Down Restaurant)	0.558186	0.040947	0.190770	0.110456	0.017401	0.005228	0.022658	0.042795	0.002118	0.002805	0.005569	0.000308	0.000759
Apartments High Rise	0.558186	0.040947	0.190770	0.110456	0.017401	0.005228	0.022658	0.042795	0.002118	0.002805	0.005569	0.000308	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	388.3697	388.3697	0.0264	5.4600e-003	390.6554
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	388.3697	388.3697	0.0264	5.4600e-003	390.6554
NaturalGas Mitigated	0.0187	0.1619	0.0814	1.0200e-003		0.0129	0.0129		0.0129	0.0129	0.0000	185.4070	185.4070	3.5500e-003	3.4000e-003	186.5087
NaturalGas Unmitigated	0.0187	0.1619	0.0814	1.0200e-003		0.0129	0.0129		0.0129	0.0129	0.0000	185.4070	185.4070	3.5500e-003	3.4000e-003	186.5087

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	2.8599e+006	0.0154	0.1318	0.0561	8.4000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	152.6149	152.6149	2.9300e-003	2.8000e-003	153.5218
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	194200	1.0500e-003	9.5200e-003	8.0000e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3633	10.3633	2.0000e-004	1.9000e-004	10.4248
High Turnover (Sit Down Restaurant)	420300	2.2700e-003	0.0206	0.0173	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003	0.0000	22.4288	22.4288	4.3000e-004	4.1000e-004	22.5621
Total		**0.0187**	**0.1619**	**0.0814**	**1.0200e-003**		**0.0129**	**0.0129**		**0.0129**	**0.0129**	**0.0000**	**185.4070**	**185.4070**	**3.5600e-003**	**3.4000e-003**	**186.5087**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	2.8599e+006	0.0154	0.1318	0.0561	8.4000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	152.6149	152.6149	2.9300e-003	2.8000e-003	153.5218
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	194200	1.0500e-003	9.5200e-003	8.0000e-003	6.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	10.3633	10.3633	2.0000e-004	1.9000e-004	10.4248
High Turnover (Sit Down Restaurant)	420300	2.2700e-003	0.0206	0.0173	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003	0.0000	22.4288	22.4288	4.3000e-004	4.1000e-004	22.5621
Total		**0.0187**	**0.1619**	**0.0814**	**1.0200e-003**		**0.0129**	**0.0129**		**0.0129**	**0.0129**	**0.0000**	**185.4070**	**185.4070**	**3.5600e-003**	**3.4000e-003**	**186.5087**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.13035e+006	218.9302	0.0149	3.0800e-003	220.2186
Enclosed Parking with Elevator	674000	130.5430	8.8700e-003	1.8300e-003	131.3113
General Office Building	127700	24.7334	1.6800e-003	3.5000e-004	24.8790
High Turnover (Sit Down Restaurant)	73125	14.1631	9.6000e-004	2.0000e-004	14.2465
Total		**388.3697**	**0.0264**	**5.4600e-003**	**390.6554**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.13035e+006	218.9302	0.0149	3.0800e-003	220.2186
Enclosed Parking with Elevator	674000	130.5430	8.8700e-003	1.8300e-003	131.3113
General Office Building	127700	24.7334	1.6800e-003	3.5000e-004	24.8790
High Turnover (Sit Down Restaurant)	73125	14.1631	9.6000e-004	2.0000e-004	14.2465
Total		**388.3697**	**0.0264**	**5.4600e-003**	**390.6554**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3193	0.0216	1.8651	1.0000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	3.0373	3.0373	2.9700e-003	0.0000	3.1116
Unmitigated	1.3193	0.0216	1.8651	1.0000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	3.0373	3.0373	2.9700e-003	0.0000	3.1116

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1916					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0707					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0570	0.0216	1.8651	1.0000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	3.0373	3.0373	2.9700e-003	0.0000	3.1116
Total	**1.3193**	**0.0216**	**1.8651**	**1.0000e-004**		**0.0103**	**0.0103**		**0.0103**	**0.0103**	**0.0000**	**3.0373**	**3.0373**	**2.9700e-003**	**0.0000**	**3.1116**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1916					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0707					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0570	0.0216	1.8651	1.0000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	3.0373	3.0373	2.9700e-003	0.0000	3.1116
Total	**1.3193**	**0.0216**	**1.8651**	**1.0000e-004**		**0.0103**	**0.0103**		**0.0103**	**0.0103**	**0.0000**	**3.0373**	**3.0373**	**2.9700e-003**	**0.0000**	**3.1116**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	27.3735	0.0198	0.0119	31.4147
Unmitigated	32.2838	0.0247	0.0148	37.3238

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	16.2885 / 10.2688	28.2048	0.0214	0.0129	32.5674
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	1.77734 / 1.08934	3.0565	2.3300e-003	1.4000e-003	3.5324
High Turnover (Sit Down Restaurant)	0.758834 / 0.0484362	1.0225	9.8000e-004	5.9000e-004	1.2240
Total		**32.2838**	**0.0247**	**0.0148**	**37.3238**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	13.0308 / 10.2688	23.9561	0.0172	0.0103	27.4544
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	1.42187 / 1.08934	2.5929	1.8700e-003	1.1200e-003	2.9745
High Turnover (Sit Down Restaurant)	0.607067 / 0.0484362	0.8246	7.8000e-004	4.8000e-004	0.9858
Total		**27.3735**	**0.0198**	**0.0119**	**31.4147**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	31.2708	1.8481	0.0000	77.4720
Unmitigated	31.2708	1.8481	0.0000	77.4720

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	115	23.3440	1.3796	0.0000	57.8337
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	9.3	1.8878	0.1116	0.0000	4.6770
High Turnover (Sit Down Restaurant)	29.75	6.0390	0.3569	0.0000	14.9613
Total		**31.2708**	**1.8481**	**0.0000**	**77.4720**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	115	23.3440	1.3796	0.0000	57.8337
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	9.3	1.8878	0.1116	0.0000	4.6770
High Turnover (Sit Down Restaurant)	29.75	6.0390	0.3569	0.0000	14.9613
Total		**31.2708**	**1.8481**	**0.0000**	**77.4720**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	1	50	1000	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.0410	0.1835	0.1046	2.0000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	19.0399	19.0399	2.6700e-003	0.0000	19.1066
Total	**0.0410**	**0.1835**	**0.1046**	**2.0000e-004**		**6.0400e-003**	**6.0400e-003**		**6.0400e-003**	**6.0400e-003**	**0.0000**	**19.0399**	**19.0399**	**2.6700e-003**	**0.0000**	**19.1066**

11.0 Vegetation

Project-Specific Construction Equipment List and Schedule

Construction Phase	Total Work Days	Equipment Type	Quantity	Horsepower	Total Hours
Demolition	32	Excavator	1	225	256
		Excavator	1	303	256
		Steer Loader	1	74.3	192
		Crusher	1	475	80
Excavation, Shoring, and Ground Improvements	27	Drill Rig	1	540	216
		Steer Loader	2	74.3	60
		Forklift	1	89	120
		Excavator	1	303	120
		Grader	2	174	120
		Dozer	1	255	60
		Steer Loader	1	92	96
		Forklift	1	92	48
		Air Compressor	1	89	96
		Generator	1	78	96
Joint Trench and Wet Utilities	44	Backhoe	1	97	352
		Air Compressor	1	78	352
		Paver	1	125	88
		Roller	1	80	88
Building Construction	266	Forklift	2	84	1,044
		Air Compressor	1	78	1,044
		Backhoe	1	97	560
		Line Pump	1	84	532
		Welder	2	46	348
		Generator	1	84	2,620
		Generator	1	84	2,620
		Forklift	1	92	784
General Construction	175	Forklift	1	92	872
Offsite Construction	22	Backhoe	1	97	168
		Air Compressor	1	78	168
		Paver	1	125	32
		Roller	1	80	32

Notes:

Construction is expected to begin in December 2017 and last for approximtely 26 months.

Summary of ISCST3 Model Parameters, Assumptions, and Results for DPM and $PM_{2.5}$ Emissions during Construction

ISCST3 Model Parameters and Assumptions			
Source Type	**Units**	**Value**	**Notes**
Volume Source: Off-Road Equipment Exhaust (without SCA-AIR-1)			
Hours/Work Day	hours/day	8	Information from project sponsor
DPM Emission Rate	gram/second	0.01012	Exhaust PM_{10} from off-road equipment
Number of Sources	count	13	SMAQMD, 2015
Emission Rate/Source	gram/second	0.00078	
Release Height	meters	5.0	SMAQMD, 2015
Length of Side	meters	10.0	SMAQMD, 2015
Initial Lateral Dimension	meters	2.3	ISCST3 Calculator
Initial Vertical Dimension	meters	1.0	SMAQMD, 2015
Volume Source: Off-Road Equipment Exhaust (with SCA-AIR-1)			
Hours/Work Day	hours/day	8	Information from project sponsor
DPM Emission Rate	gram/second	0.00037	Exhaust PM_{10} from off-road equipment
Number of Sources	count	13	SMAQMD, 2015
Emission Rate/Source	gram/second	0.000028	
Release Height	meters	5.0	SMAQMD, 2015
Length of Side	meters	10.0	SMAQMD, 2015
Initial Lateral Dimension	meters	2.3	ISCST3 Calculator
Initial Vertical Dimension	meters	1.0	SMAQMD, 2015
Line-Area Source: On-Road Vehicle Exhaust			
Hours/Work Day	hours/day	8	
DPM Emission Rate	gram/second	0.000027	Exhaust PM_{10} from on-road vehicles
Number of Sources	count	2	Based on maximum 1 width:10 length ratio
Length of Side	meters	9.0	ISCST3 Calculator
Release Height	meters	3.0	BAAQMD, 2012
Initial Vertical Dimension	meters	2.8	ISCST3 Calculator
ISCST3 Model Results			
Emissions Source	**Pollutant**	**Annual Average Concentration**	**Notes**
Construction (without SCA-AIR-1)	DPM ($\mu g/m^3$)	0.520	MEIR (Second-story residential receptor)
	$PM_{2.5}$ ($\mu g/m^3$)	0.505	MEIR (Second-story residential receptor)
Construction (with SCA-AIR-1)	DPM ($\mu g/m^3$)	0.020	MEIR (Second-story residential receptor)
	$PM_{2.5}$ ($\mu g/m^3$)	0.020	MEIR (Second-story residential receptor)

Notes:
DPM = diesel particulate matter
PM_{10} = particulate matter with aerodynamic resistance diameters equal to or less than 10 microns
$PM_{2.5}$ = particulate matter with aerodynamic resistance diameters equal to or less than 2.5 microns
$\mu g/m^3$ = micrograms per cubic meter
Sacramento Metropolitan Air Quality Management District (SMAQMD), 2015. *Guide to Air Quality Assessment in Sacramento County*. June.

Summary DPM Emissions from On-Road Vehicles Accessing the Project Site

Phase Name	Worker Vehicles Total Trips	Worker Vehicles Emissions (grams)	Vendor Trucks Total Trips	Vendor Trucks Emissions (grams)	Haul Trucks Total Trips	Haul Trucks Emissions (grams)	Total Emissions (grams)	Emission Rate (grams/day)
Demolition	320	0.9	0	0	247	5.7	6.6	0.012
Site Preparation	810	2.3	0	0	1,813	41.7	44.0	0.078
Grading, Excavation, Shoring, and Trenching	440	1.2	0	0	0	0.0	1.2	0.002
Building Construction	60,116	170.2	11,970	188.3	0	0.0	358.6	0.634
Paving	7,875	22.3	0	0	0	0.0	22.3	0.039
Architectural Coatings and General Construction	220	0.6	0	0	0	0.0	0.6	0.001
						Grand Total	**433.3**	**0.8**

Notes:

Emission estimates include vehicles traveling, idling, and stop/starting along a 0.1-mile segment of Webster Street adjacent to the project site.

Vehicle trip rates and emission factors used to calculate emissions for each construction phase are based on default parameters from CalEEMod.

Emission rates are based on total emissions averaged over 566 work days.

Summary of Health Risk Assessment for DPM Emissions during Construction

Health Risk Assessment Parameters and Results				
DPM Emissions without SCA-AIR-1				
Inhalation Cancer Risk Assessment for DPM	**Units**	**Age Group**		**Notes**
		3rd Trimester	**0-2 Years**	
DPM Concentration (C)	μg/m^3	0.520	0.520	ISCST3 Annual Average
Daily Breathing Rate (DBR)	L/kg-day	361	1090	95th percentile under age of 2 (OEHHA, 2015)
Inhalation absorption factor (A)	unitless	1.0	1.0	OEHHA, 2015
Exposure Frequency (EF)	unitless	0.96	0.96	350 days/365 days in a year (OEHHA, 2015)
Dose Conversion Factor (CF_D)	mg-m^3/μg-L	0.000001	0.000001	Conversion of μg to mg and L to m^3
Dose	mg/kg/day	0.000180	0.000544	C*DBR*A*EF*CF_D (OEHHA, 2015)
Cancer Potency Factor (CPF)	(mg/kg/day)$^{-1}$	1.1	1.1	OEHHA, 2015
Age Sensitivity Factor (ASF)	unitless	10	10	OEHHA, 2015
Annual Exposure Duration (ED)	years	0.17	2.00	Based on total construction period of 26 months
Averaging Time (AT)	years	70	70	70 years for residents (OEHHA, 2015)
Fraction of time at home (FAH)	unitless	0.85	0.85	OEHHA, 2015
Cancer Risk Conversion Factor (CF)	m^3/L	1000000	1000000	Chances per million (OEHHA, 2015)
Cancer Risk	per million	4.01	145.19	D*CPF*ASF*ED/AT*FAH*CF (OEHHA, 2015)
Total Cancer Risk	per million	149.2		At MEIR location
Hazard Index for DPM	**Units**	**Value**	**Notes**	
Chronic REL	μg/m^3	5.0	OEHHA, 2015	
Chronic Hazard Index for DPM	unitless	0.10	At MEIR location	
DPM Emissions with SCA-AIR-1				
Inhalation Cancer Risk Assessment for DPM	**Units**	**Age Group**		**Notes**
		3rd Trimester	**0-2 Years**	
DPM Concentration (C)	μg/m^3	0.020	0.020	ISCST3 Annual Average
Daily Breathing Rate (DBR)	L/kg-day	361	1090	95th percentile under age of 2 (OEHHA, 2015)
Inhalation absorption factor (A)	unitless	1.0	1.0	OEHHA, 2015
Exposure Frequency (EF)	unitless	0.96	0.96	350 days/365 days in a year (OEHHA, 2015)
Dose Conversion Factor (CF_D)	mg-m^3/μg-L	0.000001	0.000001	Conversion of μg to mg and L to m^3
Dose	mg/kg/day	0.000007	0.000021	C*DBR*A*EF*CF_D (OEHHA, 2015)
Cancer Potency Factor (CPF)	(mg/kg/day)$^{-1}$	1.1	1.1	OEHHA, 2015
Age Sensitivity Factor (ASF)	unitless	10	10	OEHHA, 2015
Annual Exposure Duration (ED)	years	0.17	2.00	Based on total construction period of 26 months
Averaging Time (AT)	years	70	70	70 years for residents (OEHHA, 2015)
Fraction of time at home (FAH)	unitless	0.85	0.85	OEHHA, 2015
Cancer Risk Conversion Factor (CF)	m^3/L	1000000	1000000	Chances per million (OEHHA, 2015)
Cancer Risk	per million	0.16	5.62	D*CPF*ASF*ED/AT*FAH*CF (OEHHA, 2015)
Total Cancer Risk	per million	5.8		At MEIR location
Hazard Index for DPM	**Units**	**Value**	**Notes**	
Chronic REL	μg/m^3	5.0	OEHHA, 2015	
Chronic Hazard Index for DPM	unitless	0.0040	At MEIR location	

Notes:

DPM = diesel particulate matter

REL = reference exposure level

μg/m^3 = micrograms per cubic meter

L/kg-day = liters per kilogram-day

m^3/L = cubic meters per liter

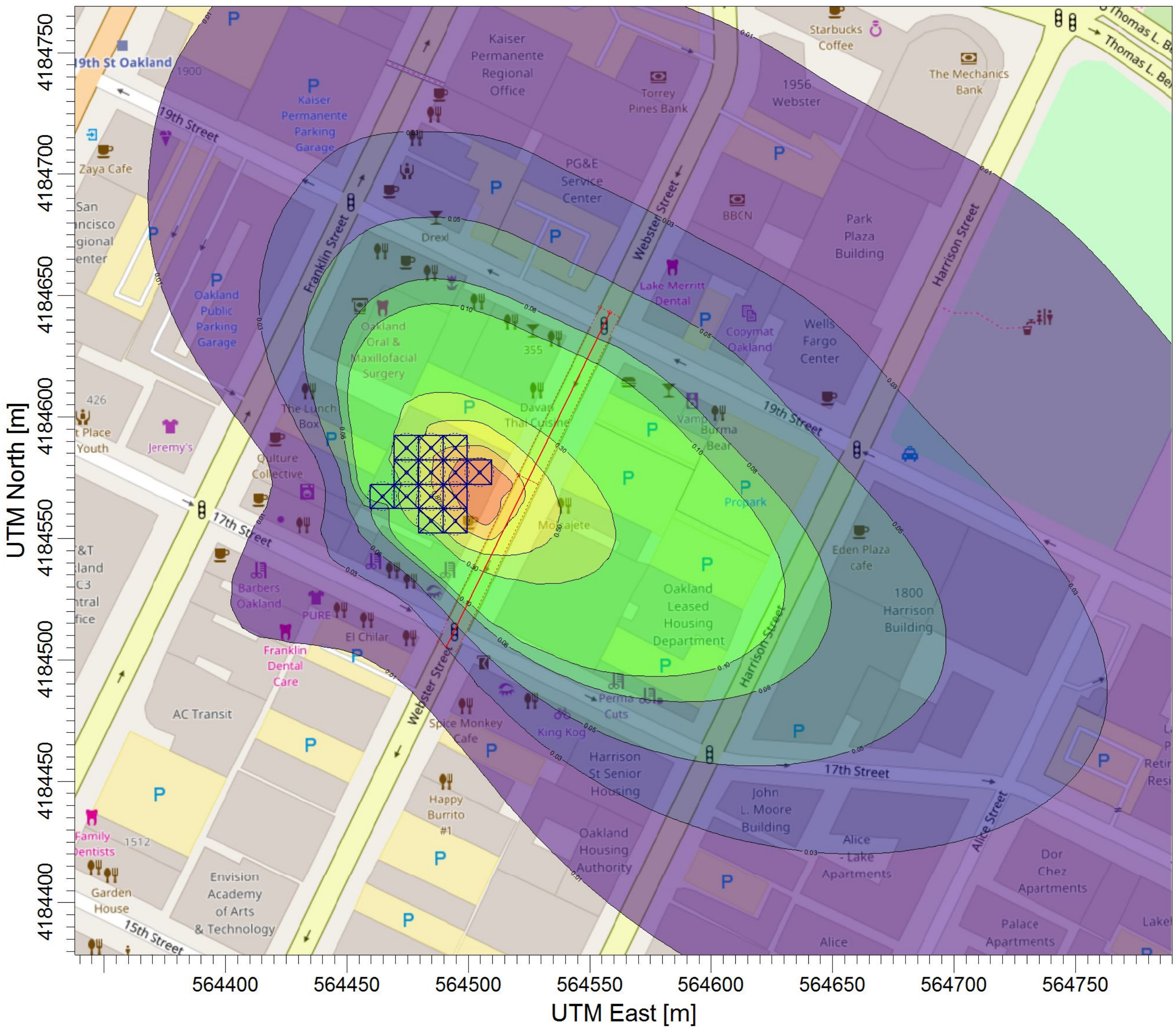
(mg/kg/day)$^{-1}$ = 1/milligrams per kilograms per day

MEIR = maximum exposed individual resident

Office of Environmental Health Hazard Assessment (OEHHA), 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February.*

PROJECT TITLE:

C:\tao_work_local\16232 1721 Webster\AERMOD\UPP_1721_Webster\UPP_172



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

Max: 1.22 [ug/m^3] at (564506.69, 4184562.75)

0.01 | 0.03 | 0.05 | 0.08 | 0.10 | 0.30 | 0.50 | 0.80 | 1.00 | 1.22

COMMENTS:	SOURCES: **14**	COMPANY NAME: **BASELINE Environmental Consulting**
	RECEPTORS: **2622**	
	OUTPUT TYPE: **Concentration**	SCALE: 1:2,841 0 ——— 0.1 km
	MAX: **1.22 ug/m^3**	DATE: **1/19/2017** PROJECT NO.:

Attachment G: Historical Resource Evaluation Report for the 1721 Webster Street Project prepared by Architecture and History, LLC

historical resource evaluation report
1711-1739 webster street
oakland, ca

completed for:
the holland partner group

march 15, 2017

submitted by:

architecture + history, llc
san francisco, ca
415 760 4318
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www.architecture-history.com

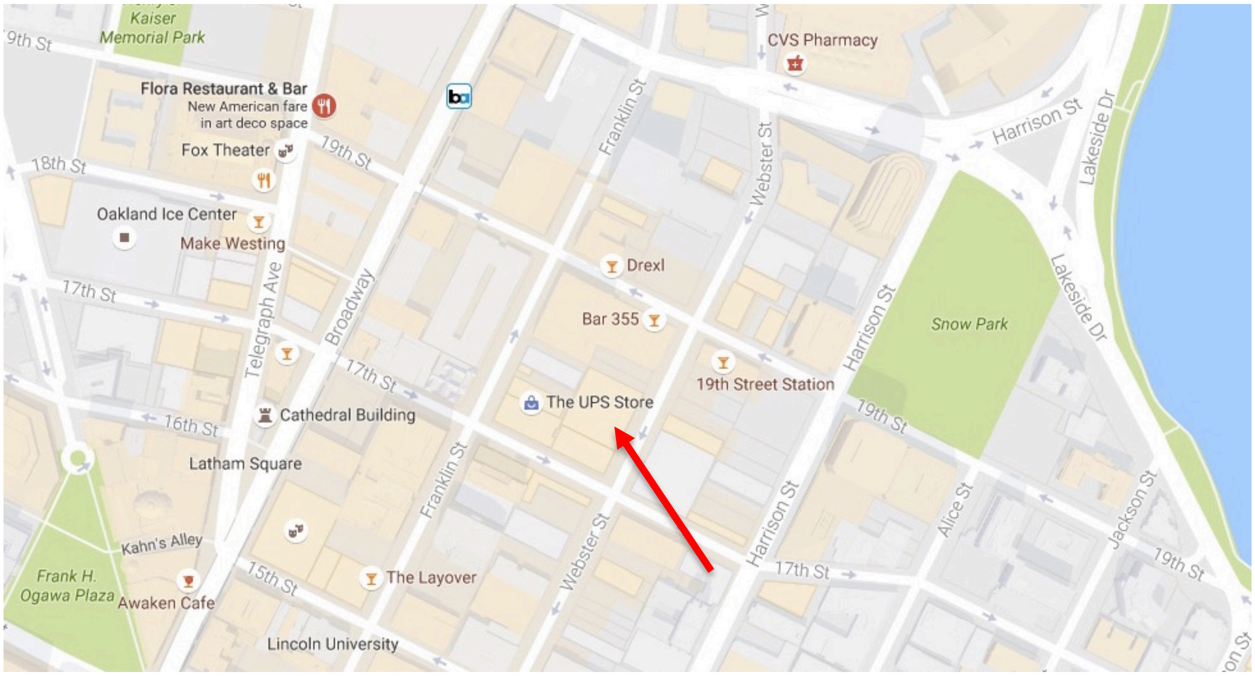
I. Introduction

This Historic Resource Evaluation was prepared by architecture + history, llc (**a + h**) for Holland Partner Group for the property at 1711-1739 Webster Street in Oakland, California (APN 008-624-006-00). Bridget Maley, Principal at **a + h**, meets *the Secretary of the Interior's Professional Qualification Standards in History and Architectural History*. The parcel sits on the west side of Webster between 17th and 19th Streets in downtown Oakland. The purpose of this analysis is to assess if the structure presently on the site meets the definition of an historic resource under the California Environmental Quality Act (CEQA).

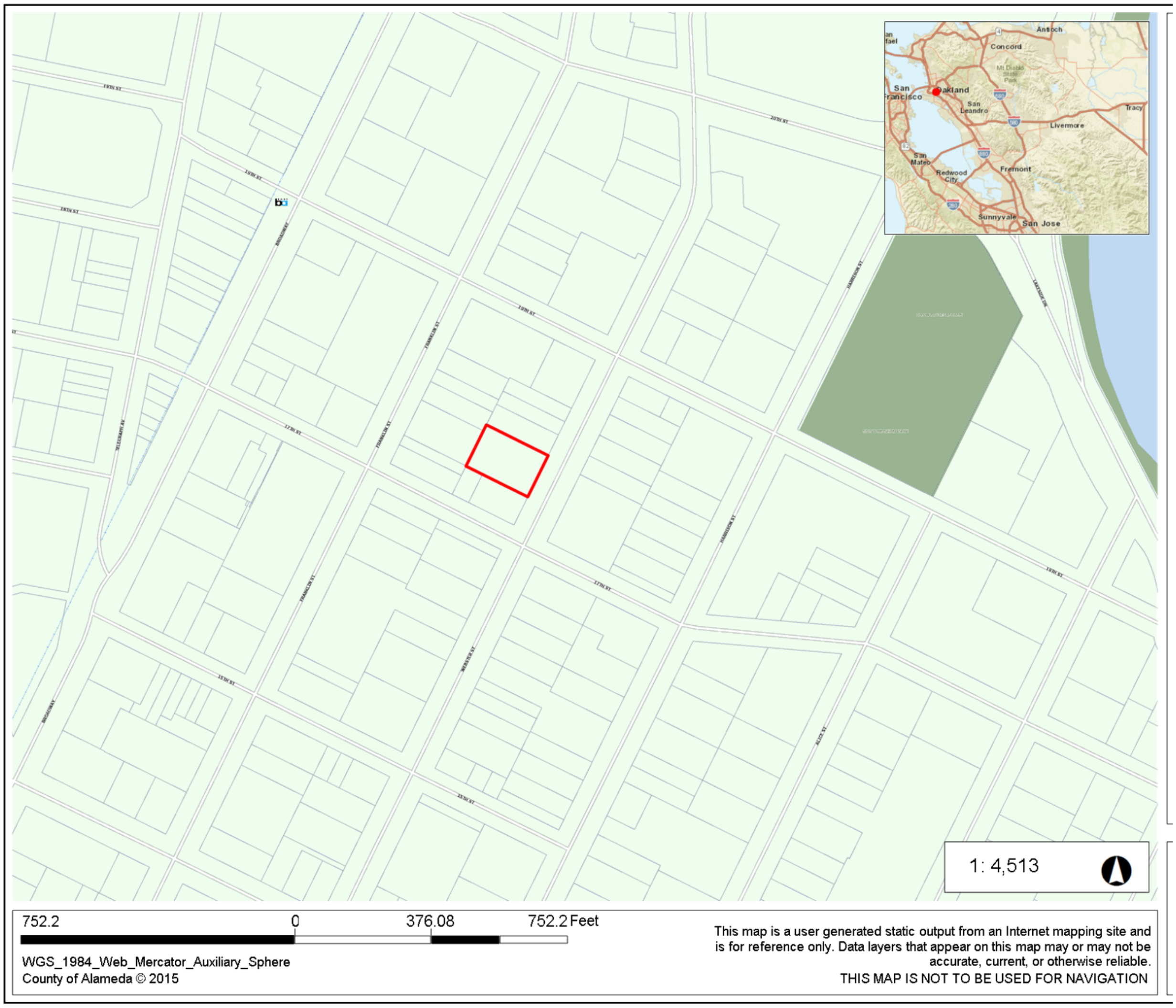
The City of Oakland's *Thresholds of Significance Guidelines* state that an historical resource under CEQA is a resource that meets any of the following criteria:

> 1) A resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources;
> 2) A resource included in Oakland's Local Register of historical resources, unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
> 3) A resource identified as significant (e.g., rated 1-5) in a historical resource survey recorded on Department of Parks and Recreation Form 523, unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
> 4) Meets the criteria for listing on the California Register of Historical Resources; or
> 5) A resource that is determined by the Oakland City Council to be historically or culturally significant even though it does not meet the other four criteria listed above.

The subject site is occupied by a two-story building originally constructed in 1924. This report will provide an evaluation of this building as a potential historic resource. Additionally, there are several older and historic buildings in the immediate vicinity that are identified in the Oakland Cultural Heritage Survey (OCHS), including the City of Oakland designated landmark Leamington Hotel. Background information on these resources is also provided, including the buildings within the 17th Street Commercial Historic District.



The project site is located near the intersection of Webster and 17th Streets in Downtown Oakland, California. The red arrow points to the site.



The subject parcel is outlined in red on the above map of downtown Oakland.

II. CEQA and Historic Resources

When a proposed project may cause a "substantial adverse change" in the significance of an historical resource, the California Environmental Quality Act (CEQA) requires the permitting agency to carefully consider the possible impacts before proceeding (Public Resources Code Section 21084.1). CEQA equates substantial adverse change in the significance of a historical resource with a significant effect on the environment (Section 21084.1). CEQA explicitly prohibits the use of a categorical exemption for projects that may cause such a change in an historical resource (Section 21084).[1] "Substantial adverse change" in the significance of a historical resource is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." Further, that the significance of an historical resource is "materially impaired" when a project:

- demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the California Register of Historical Resources; or

- demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources...or its identification in an historical resources survey...unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

- demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA. (Guidelines Section 15064.5(b)).

III. Methodology

a + h conducted a site visit to the building at 1711-1739 Webster Street in September 2016. Only the exterior of the building was inspected and photographed. The neighboring buildings were photographed and common architectural features and elements were identified. A thorough review of the documentation on the surrounding historic resources was undertaken to understand the history and context of the immediate urban environment.

Historic Sanborn Fire Insurance Maps for the area were located to gain a sense of how the area has developed historically. OCHS survey forms were reviewed for the individual historic resources and the 17^{th} Street Commercial Historic District that surrounds the site. Additional research on the development of downtown Oakland was conducted at the Oakland Public Library (History Room), the San Francisco Public Library, the Mechanic's Institute Library, and online at the City of Oakland's website and with other repositories of information. Also reviewed were relevant City of Oakland Planning Department plans, policies and documents. A list of sources is provided in the Bibliography at the conclusion of this report.

IV. Summary of Oakland's Downtown Development

The project site is within lands that once were part of the Rancho San Antonio granted to Luis Maria Peralta for his service to the Spanish government.[2] The over 40,000-acre rancho included the present-day cities of Oakland, Berkeley, Alameda, and parts of San Leandro and Piedmont. Peralta's grant was confirmed after Mexico gained independence from Spain in 1822, and the United States honored the land title when California entered the Union in 1848. Soon after, squatters had begun to use portions of Peralta's undeveloped lands. The Gold Rush and subsequent statehood brought miners, businessmen, lumbermen and other speculators to Northern California. Early settlers to the area that became Oakland include Edson Adams, Andrew Moon, and Horace Carpentier, who set up camp on what had been Peralta lands. These trailblazers soon realized the area's potential and engaged Jules Kellsersberger, a Swiss immigrant and former military engineer, to lay out a city, which was officially incorporated as Oakland in 1852.

Originally, Oakland encompassed the area roughly bordered by the estuary, Market Street, 14th Street and the Lake Merritt Channel. Broadway served as the "Main Street," for the growing town. Early residents, numbering under one hundred, lived near the foot of Broadway close to the estuary. Development began moving toward the Oakland hills and ultimately eastward to what would become East Oakland.

A detail from the 1888 Woodward & Gamble Map of Oakland showing the area of downtown Oakland. (Source: David Rumsey Maps)

Oakland's size and population began to expand in 1869, when the city became the terminus of the Central Pacific Railroad. With an accessible harbor, Oakland was strategically located and easily accessible to inland agricultural products. A period of rapid population expansion and physical growth followed, including the establishment of civic and commercial buildings and improved infrastructure. By the turn of the twentieth century, Oakland was beginning to attract businesses and residents away from the more populous San Francisco. Then, the 1906 earthquake and devastating San Francisco fire resulted in refugees from the burned out city across the bay pouring into East Bay towns. By 1910, Oakland had population of 150,000, more than double the 67,000 individuals counted in 1900.

Residential and commercial development in Oakland increased during the 1910s to further accommodate displaced San Francisco residents. A number of moderately priced hotels were constructed in downtown Oakland from 1910 and 1915 to house travelers coming to the Panama Pacific International Exposition (PPIE) hosted by San Francisco. This includes the Hotel Harrison, directly across the street from the project site, and a number of other hotels in the vicinity. Also during this period, older neighborhoods became more densely populated as new apartment buildings were constructed, shopping districts expanded, hotels for visitors to the increasingly popular city were developed, and new commercial centers began to take shape along busier thoroughfares. The post-earthquake development boom defined much of downtown Oakland, with a number of landmark skyscrapers and commercial buildings constructed during this era, including the Hotel Oakland, just across the street from the project site.

World War I also increased the number of industrial establishments in both downtown and along the waterfront, which in turn contributed to increased residential construction in areas made more easily accessible by the increased popularity and use of the automobile. Downtown Oakland saw a great number of buildings constructed during the 1920s including many structures in the blocks that surround the project site, such as the Advertiser and the Pelton-Faustina Buildings, both situated along 13th Street adjacent to the project site.

The Great Depression of the 1930s followed the post-World War I prosperity of the 1920s. Like most of the country, Oakland fell into a period of financial instability in the 1930s, with little to no building occurring, especially downtown. Then with the preparations for and outset of World War II, Oakland entered an era of intense industrial, commercial and economic development. From 1940 to 1945, Oakland's population increased by one third and by 1950, the population was nearly 385,000. The Port of Oakland became a major staging area for war operations in the Pacific and a center of wartime production of goods and materials. The economic impact of World War II on Oakland, and indeed the entire Bay Area, was significant, with effects felt in almost every sector and by the increasingly diverse communities represented in Oakland. Post War commercial building in downtown Oakland was fairly steady from the late 1940s into the early 1960s.

Between 1950 and 1980, Oakland's population steadily decreased, though it again rose in the 1980s. Shifts in the economy and changes in manufacturing methods left many empty warehouses and office buildings along Oakland's waterfront and in the downtown area. In the late 1980s and 1990s, many of these buildings were reclaimed for office and residential uses.

V. Chronology & Description of Subject Property

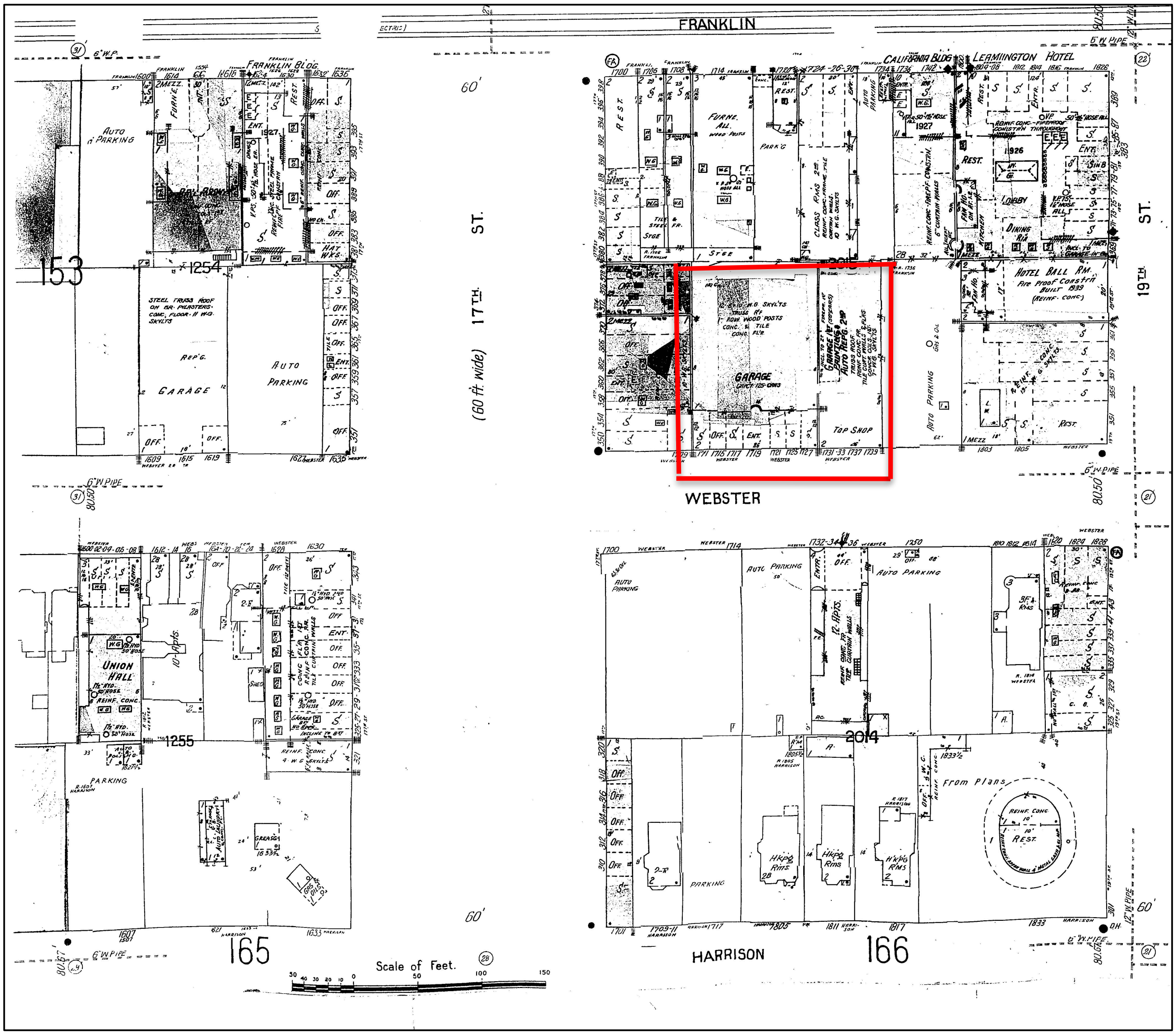
The subject parcel is located near the intersection of Webster and 17th Street in downtown Oakland. The 1700 block of Webster and surrounding blocks were fully developed with mostly large, single-family residences in the late 1800s and early 1900s. Until the early 1920s, 15th and 17th Streets did not cut through Harrison, Webster, and Franklin Streets, so Webster Street from 14th to 19th Streets was an unusually long, continuous block of residences. In the first decade of the 20th century, the most prominent buildings in the blocks surrounding 1700 Webster Street were the First Church of Christ Scientist at 17th and Franklin, the United States Federal Post Office under construction at the corner of 17th and Broadway, and the Maple Hall at the corner of Webster and 14th.[3] By 1911, the area remained mostly single-family homes, with some larger apartments buildings having been constructed.[4]

The 1923 Oakland Sanborn Map indicates that 15th and 17th Streets were cut through Harrison, Webster, and Franklin Streets, creating space for commercial corridors in what had previously been a residential area. These changes were in response a report written by Werner Hegemann in 1915 that recommended new city plans and development for both Oakland and Berkeley.[5] After the streets were cut through, the character of the area changed rapidly. Single-family homes were replaced by higher-density uses, such as larger, mixed-use buildings with storefronts at ground level and apartments or offices above. New commercial uses included automotive-related buildings and large parking lots, as well as a number of hotels.

By 1950-51, almost all of the single-family homes in the blocks around 17th and Webster had been removed and replaced by new uses, more commercial in focus.[6] The west side of the 1700 block of Webster included fairly low-scale structures for commercial, retail, office and automobile use

The subject building was constructed in 1924. City of Oakland building permit #90883 identified the builder as Marshall & Burks. No architect was listed on the permit. An advertisement in the *Oakland Tribune* on March 22, 1924 announced: "Garage opportunity 17th and Webster. Will build and lease. 100 x 150 possession in 90 days. Marshall & Burks 17th Street."[7]

Additional *Oakland Tribune* articles in August and September 1923 detailed similar projects by Marshall & Burks. Copies of these articles are included in the appendix of this report. These articles outlined the company's approach to building low cost, quickly-constructed, auto-related structures in the East Bay. The company embraced the use of Dicky Mastertiles, or hollow clay tiles, and Livermore pressed brick set within a concrete frame. This construction method was detailed in these articles and images of similar projects are shown. The buildings are similar in character to the building at 1711-1739 Webster, but this building does not appear in these articles.[8]



A view of the 1951 Oakland Sanborn Fire Insurance Map. The subject property, outlined in red and was labeled "garage." (Source: Sanborn Map Company)

Over the years the occupants and users of the building at 1711-1739 Webster Street range from automotive business and parking enterprises, to insurance and real estate brokers, to a printing press to a trophy shop.[9]

1711-1739 Webster Street – Building Description

1711-1739 Webster Street is a 1924 decorative brick garage and store building. It is two stories in height, rectangular in plan and situated on an interior lot. The ground floor contains a series of storefronts and a vehicle entrance to an interior parking garage. There is a straight parapet above exterior walls of mottled brick. Above the storefronts there are a series of divided light transom windows, some of which appear to be operable. These windows are painted over at the third storefront from the northern end. At the second floor on the front façade there are eleven metal sash windows with a central, operable hopper window. The north wall, which faces a surface parking lot, is brick with a wood overlaid false parapet. There are several windows toward the rear (west) end of this side elevation.

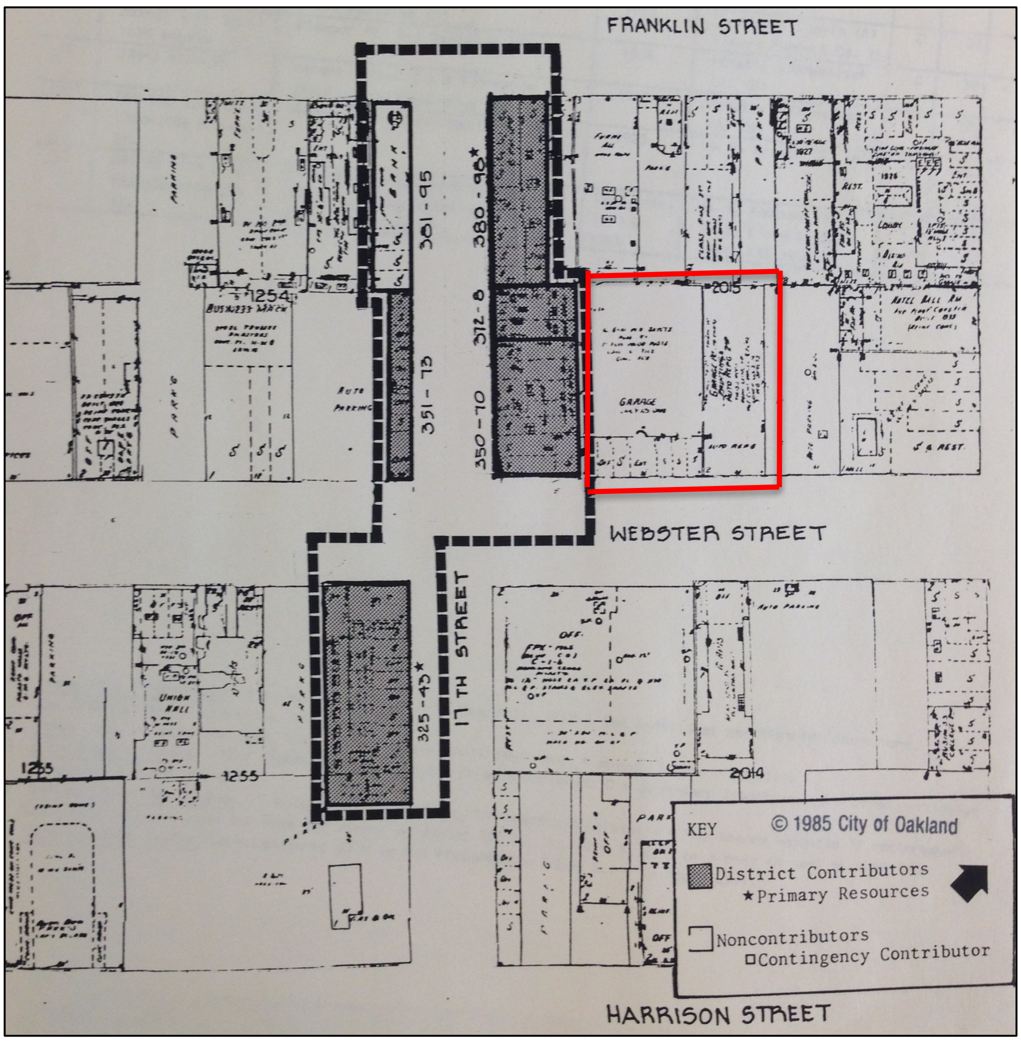
While the interior of the building was not viewed, historic Sanborn Maps indicate the building has two sections. At the south side, historically the storefront ranging from 1711-1729 Webster Street had twelve 6 x 10 wire glass skylights, a truss roof, one row of wood posts, hollow clay tile walls and a concrete floor. The more northern section of the storefront, 1731-39 Webster, had seven wire glass skylights, a truss roof, a reinforced concrete frame infilled with hollow clay tile.

An architect was not listed on the building permit. As discussed above, the builder was Marshall & Burks. The OCHS Local Historic Property Category is Local Register. The OCHS Rating is D3. D = Minor Importance. 3 = Not in an Historic District.

The Webster Street elevation of the building showing the storefront divisions and the primarily blank wall of the north elevation is also visible.

VI. Description of Immediate Surroundings & Previously Identified Historic Resources

The project site is located near the intersection of 17th and Webster Streets in downtown Oakland, adjacent to the 17th Street Commercial Historic District. The 17th Street Commercial District encompasses a portion of 17th Street between Harrison and Franklin Streets. It is characterized by long, narrow commercial buildings constructed of brick or reinforced concrete with long bands of storefront windows at the ground level. The buildings within the historic district were constructed between 1923 and 1927. In 1984, the district was determined eligible for listing in the National Register as an "extremely cohesive group of low-rise commercial structures" that represents a "monument to the 1920s speculative building boom."[10] The project site is not within, but is adjacent to, the 17th Street Commercial Historic District.



The 17th Street Commercial Historic District map. The adjacent building at 1711-1739 Webster Street (the subject property) is outlined in red (Source: Oakland Cultural Heritage Survey files).

The project site is located on a block bounded by Webster Street, 17th Street, Franklin Street and 19th Street, as well as the blocks across the street, are developed with a mix of buildings ranging from small-scale commercial buildings to a large City of Oakland Landmark-designated historic hotel. The block face across the street, on the east side of Webster Street, is developed with a similar mix of structure. The buildings immediately adjacent to the project site or within view of the project site are described below.

1700-1710 Webster Street

Constructed in 1964, by Harry A. Bruno, architect, for the Title Insurance and Trust Company, the building has most recently been occupied by the American Cancer Society. The building at 1700-10 Webster is rectangular in plan and measures 163 x 150 feet. It is a two-story structure composed of steel beams and the exterior walls of concrete block masonry with a smooth plaster finish. The roof is flat. The main façades face both Webster Street to the west and 17th Street to the south. Vertical panels of textured stucco stretching across the wall planes dominate the exterior facades.

A historic resources evaluation of this building in 2015 determined it did not meet the California Register of Historical Resources criteria of evaluation and thus would not be considered an historic resource under CEQA. The building is currently proposed for demolition and project is under review for this site.

1700-1710 Webster Street sits across the street from the subject building.

1732-36 Webster Street

Constructed in 1926-27, the building at 1732-36 Webster is Renaissance Revival apartment building known as the Mentone Arms. It is four stories in height and I-shaped in plan. It is constructed of a reinforced concrete frame with tile curtain walls. The architect was Charles W. McCall, and the builder was C.H. Lawrence. The OCHS Local Historic Property Category is Local Register. The OCHS Rating is B+3. B = Major Importance, an especially fine architectural example, or major historical example. 3 = Not in an Historic District.

There is a large adjacent surface parking lot that extends between this building and the building situated at the corner of Webster and 19th Street. An infill project is currently under review by the City of Oakland for the surface parking lot.

1732-1734 Webster Street – Mentone Arms Apartments.

1830 Webster / 337-343 19th Street

The corner building at 1830 Webster Street / 337-343 19th Street is a 1928 store and office building. It is two stories in height and rectangular in plan. Exterior walls are reinforced concrete. The ground floor contains a series of storefronts facing both Webster and 19th Streets. The architect and builder are unknown. The OCHS Local Historic Property Category is Potential Designated Historic Property. The OCHS Rating is Dc3. D = Minor importance; representative example. c = if restored and 3 = not in an historic district.

1830 Webster Street / 337-343 19th Street

1701-1709 Webster Street / 350-370 17th Street

The corner Elvin Building at 1701 – 1709 Webster Street and 350-370 17th Street is a 1926 store and office building. It is three stories in height and rectangular in plan. Exterior walls are reinforced concrete with terra cotta decoration. The architect was T. Marcel Chovin, and the engineer was Pierre Zucco & Co. The OCHS Local Historic Property Category is Potential Designated Historic Property. The OCHS Rating is Cb-1+. This rating indicates the building is of secondary importance and is within an Area of Primary Importance (17th Street Commercial District). This building sits immediately adjacent to the subject property.

1701-1709 Webster Street / 350-370 17th Street

1803 Webster Street / 351-61 19th Street

This corner building has both Webster Street and 19th Street addresses. It is a 1946 Art Deco-inspired commercial store building. It is one story in height and rectangular in plan. Exterior walls are concrete. There is a surface parking lot between this structure and the subject property. The architect is unknown, and the builder was Lewis Construction Company. The OCHS Local Historic Property Category is Local Register. The OCHS Rating is F3. This rating reflects that that building was not yet 45-years old when it was first surveyed. It is now 71 years old and would likely be assigned a higher rating today. It is not within a historic district.

Above: The 19th Street elevation of 1803 Webster Street / 351-367 19th Street
Below: The Webster Street elevation of 1803 Webster Street / 351-367 19th Street

325-43 1th Street /1628-30 Webster Street

The Robert A. Howden building at is situated at the southeast corner of Webster and 17th Street with decorative facades facing both streets. It is a 1925, three-story commercial building with a rectangular plan. Exterior walls are reinforced concrete with hollow tile curtains sheathed in glazed ceramic tiles. The designer and builder was McWethy & Greenleaf. The building is an advertisement for Howden Tiles, employing decorative tiles at both the exterior and the interior.

The OCHS Local Historic Property Category is Local Register. The OCHS Rating is A1+. A = Highest Importance, Outstanding example or extreme historical importance. 1 = Within an Area of Primary Importance (17th Street Commercial District). + = is a contributor. The building is also a designated City of Oakland Landmark.

329-337 17th Street / 1628-1630 Webster Street

351-73 17th Street / 1635 Webster Street

The W.G. Gilmour Building at 351-73 17th Street/1635 Webster is a 1924 Mediterranean Revival store and office building. It is two stories in height and rectangular in plan. Exterior walls are stucco and hollow clay tile. The architect and builder is McWethy & Greenleaf. The OCHS Local Historic Property Category is Potential Designated Historic Property. The OCHS Rating is C1+. C = Secondary Importance, Superior or visually important example. 1 = Within an Area of Primary Importance (17th Street Commercial District). + = is a district contributor.

351-373 17th Street / 1635 Webster Street

372-378 17th Street

This small, two-story building that sits between the two corner buildings on 17th Street between Webster and Franklin. It is difficult to photograph because of the mature street trees along 17th Street. The building is located with an Area of Primary Importance – the 17th Street Commercial Historic District.

1700-1706 Franklin / 380-398 17th Street – Holmes Building

This corner, two-story commercial building was constructed in 1923. It has facades facing both Franklin Street and 17th Street. The OCHS Rating is B+1+. B = Major Importance, Especially fine architectural examples or major historical importance. + = is a district contributor. 1 = Within an Area of Primary Importance (17th Street Commercial Historic District).

Above: The Franklin Street façade of the Holmes Building.
Below: A corner view of the building showing the street trees along 19th Street.

1708-1710 Franklin Street

This two-story, loft style building was constructed in 1924. The OCHS Rating is Ed3. E = Of no particular interest. d = if restored and 3 = not in an historic district.

The small, two-story structure at 1708-1710 Franklin.

1714-18 Franklin Street

This three-story building, constructed in 1924, has been extensively altered at the front facade. The OCHS Rating is Ec3. E = of no particular interest. c = if restored. 3 = not in an historic district.

The building at 1714 - 1718 Franklin Street.

1720 Franklin Street

This is a small, one-story building housing a restaurant. The building does not appear to have a survey rating.

The building at 1720 Franklin Street.

1724-1730 Franklin Street

This is a three story building constructed in 1970. The OCHS Rating is *3. This rating reflects the that the building was not 45 years old when surveyed and that it is not in an historic district.

The building at 1724 – 1730 Franklin Street.

1734 Franklin Street

This is a small surface parking area adjacent to the Leamington Hotel annex. There is a red awning leading up to the entry to the California Ballroom along the side of the annex building, otherwise there are no structures on this small, mid-block lot.

The awning and vacant lot at 1734 Franklin Street.

1736-1742 Franklin Street – Leamington Hotel Annex

This annex to its neighbor was constructed in 1926-27 to house a ballroom and additional guest rooms for the Leamington Hotel. The OCHS Rating is Cb+1+. The building is within a Local Historic District Area of Primary Importance, the Leamington Hotel Group.

The Leamington Hotel Annex structure is located at 1736-42 Franklin Street.

An historic postcard of the Leamington Hotel with its annex constructed shortly after the main building was completed.

1800-1826 Franklin / 365-385 19th Street – Leamington Hotel
This building was designed and constructed in 1925-26 by well-known California architect William Weeks. It was a major addition to downtown Oakland when it opened in 1926. The OCHS Rating is A1+. A = Highest Importance, Outstanding example or extreme historical importance. 1 = Within an Area of Primary Importance (Leamington Hotel Group).

On April 7, 1987 the Leamington Hotel Building & Annex, located at 1800-26 Franklin Street/365-89 19th Street, was designated as a City of Oakland Landmark.

The Leamington Hotel is located at 1800 - 1826 Franklin Street with additional storefronts at 365-385 19th Street.

VII. Evaluation of Significance

Under that California Environmental Quality Act (CEQA) resources that meet the criteria of the California Register of Historical Resources are considered historical resources for the purposes of CEQA. Determinations of historical significance require that several factors are considered including: the property's history (both construction and use); the history and context of the surrounding community; an association with important persons or uses; the number of resources associated with the property; the potential for the resources to be the work of a master architect, builder, craftsman, landscape gardener, or artist; the historical, architectural or landscape influences that have shaped the property's design and its pattern of use; and alterations that have taken place, and lastly how these changes may have affected the property's historical integrity.

These issues must be explored thoroughly before a final determination of significance can be established. To be eligible for the California Register historic resources must possess both historic significance and retain historic integrity. The following are the four significance criteria of the California Register. Upon review of the criteria, if historic significance is identified, then an integrity analysis is conducted. To be eligible for the California Register, an historical resource must be significant at the local, state, or national level under at least one of the following criteria.

Each criteria is discussed below in relationship to the building at 1711 – 1739 Webster Street.

Criterion 1: Event or Patterns of Events
It is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

> Historical research has determined that the building at 1711-1739 Webster Street in downtown Oakland does not qualify individually under Register Criterion 1: Event/Patterns of Events. While the building possesses an association with the development of downtown Oakland and with the automobile related buildings and structures located in this vicinity, it does not appear to be individually significant within this context. It does not possess an association with an important event that rises to a level of significance that would justify individual eligibility for the California Register.

Criterion 2: Important Person(s)
It is associated with the lives of persons important to local, California, or national history.

> Historical research has determined that the building at 1711-1739 Webster Street in downtown Oakland is not associated with any individuals who have had an important role in local, California or national history. While the developer / builders Marshall and Burks appear to have been somewhat prolific in their Oakland building campaigns and within the development of auto related structures in the East Bay, they do not possess individual

significance within this context. As a result, this building does not qualify under California Register Criterion 2: Important Person(s).

Criterion 3: Design/Construction
It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.

The building at 1711-37 Webster Street in Downtown Oakland is associated with Marshall and Burks. This partnership built a number of projects similar in style and scale in Oakland related to the city's automobile industry. However, the building constructed at 1711-1739 Webster Street does not rise to a level of master work, nor does it necessarily reflect high artistic values. The partnership advocated and employed hollow clay tile as a quick, efficient and cost effective material. This alone does not elevate their work to a level of significance to justify individual eligibility within this historic context. The building does not have the qualities or design elements that would elevate it to individual eligibility under Criterion 3.

Criterion 4: Information Potential
It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Evaluation of potential archeological resources was outside the scope of this report.

Oakland Cultural Heritage Survey Previous Evaluation and Current Assessment

The building at 1711-1739 was first surveyed and evaluated by the Oakland Cultural Heritage Survey in March 1982 by Chris Buckley. It was reevaluated by Betty Marvin in February 1994 with the following conclusion on the survey sheet:

"1711-39 Webster St, the Vargas (J.C.) garage, is a fair example of a 1920s decorative brick garage and store building. Although its architectural integrity has been maintained, the building does not meet the criteria for individual listing on the National Register of Historic Places since it appears to lack significant historical associations and architectural interest. It is not located within a district.

It was built in 1924-25, architect unknown and builder Marshall & Burks. It is dated by building permit 90883+; it was originally valued at $30,000. Historically, the building reflects motor transportation and the auto industry, and downtown Oakland business and commercial development."[11] The current OCHS Rating is D3. D = Minor Importance. 3 = Not in an Historic District.

VIII. Conclusion

The CEQA Public Resources Code §21084.1 provides that any project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. Public Resources Code §5020.1(q) defines "substantial adverse change" as demolition, destruction, relocation, or alteration such that the significance of the historical resource would be impaired. According to Public Resources Code §5024.1, an historical resource is a resource that is listed in, or determined to be eligible for listing in the California Register of Historical Resources; included in a local register of historical resources; or is identified as significant in a historic resource survey if that survey meets specified criteria.

Based on research conducted for this current historic evaluation, there is no reason to believe that a higher rating is warranted or that the building at 1711-1739 Webster Street would now be eligible as a local landmark under Oakland's Landmark criteria. It is, therefore, not considered an historic resource under CEQA.

According to CEQA Guidelines §15064.5(a)(3), a lead agency can find a resource has been determined to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the determination is supported by substantial evidence in light of the whole record. The building at 1711-1739 Webster Street does not qualify as an historical resource under the criteria of the California Register of Historical Resources and is therefore not considered an historical resource under CEQA.

The proposed project for 1721 Webster Street in Downtown Oakland would not result in "substantial adverse change" in the significance of any known historic resources. Further, the proposed project would not materially impair any of the adjacent historic resources, either within the same block or in adjacent blocks. While the proposed new building would be taller than the existing building stock surrounding the site, the proposed height of the building is allowed in the current zoning of the site. Although the building would likely cast shadows on nearby historic resources, the extent of the shadows would not render those historic resources ineligible for inclusion in any federal, state or local registers.

The construction of the proposed new building near designated historic resources would not impair either individually significant or historic district contributors such that the significance of these resources would be materially impaired. While the proposed project would include new construction located adjacent to individually significant historic resources and near, but not within the boundaries of historic districts, it would not result in the removal of any character-defining features of the nearby historic districts or result in any direct or indirect impacts to historic resources.

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Starr, Kevin. *Inventing the Dream: California Through the Progressive Era.* New York: Oxford University Press, 1985.

Weber, David. *Oakland Hub of the West*. Tulsa, Oklahoma: Continental Heritage Press, 1981.

Woodbridge, Sally. *Main Post Office and Federal Building National Register Nomination*. July 27, 1979. Listed on National Register October 23, 1980.

X. Endnotes

[1] CEQA statutory exemptions and streamlining provisions such as an Addendum may also be precluded where demolition, as that term is defined by the Secretary of Interior Standards and implemented by the City of Oakland, of a historic resource occurs.

[2] Summary of Downtown Oakland Development summarized from Beth Bagwell, *Oakland: The Story of a City*, 1982; David Weber, *Oakland Hub of the West*, 1981; Lois Rather, *Oakland's Image: A History of Oakland, California*, 1972. Marilynn S. Johnson, *The Second Gold Rush: Oakland and the East Bay in World War II*, 1993.

[3] Sanborn Fire Insurance Company Map, 1903.

[4] Sanborn Fire Insurance Company Map, 1911.

[5] Oakland Cultural Heritage Survey, "17th Street Commercial District," May 31, 1984.

[6] Sanborn Fire Insurance Company Map, 1950.

[7] *Oakland Tribune*. March 24, 1924.

[8] *Oakland Tribune*. August 26, 1923; September 2, 1923; and September 9, 1923.

[9] Oakland City Directories. Various years.

[10] Oakland Cultural Heritage Survey, "17th Street Commercial District," May 31, 1984.

[11] Oakland Cultural Heritage Survey, Survey Form 1711-1739 Webster Street.

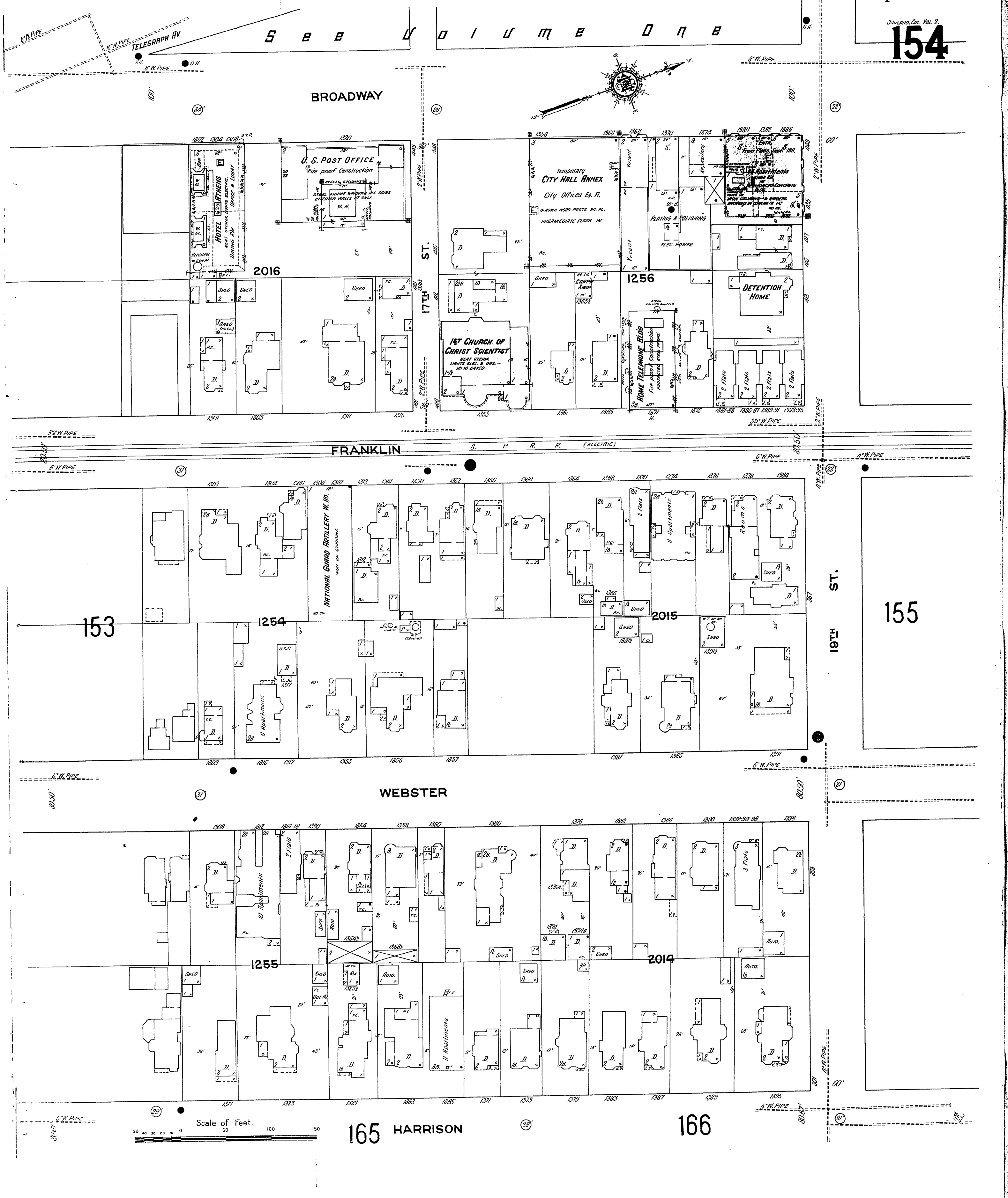
APPENDIX ONE

Sanborn Fire Insurance Company Maps – Oakland

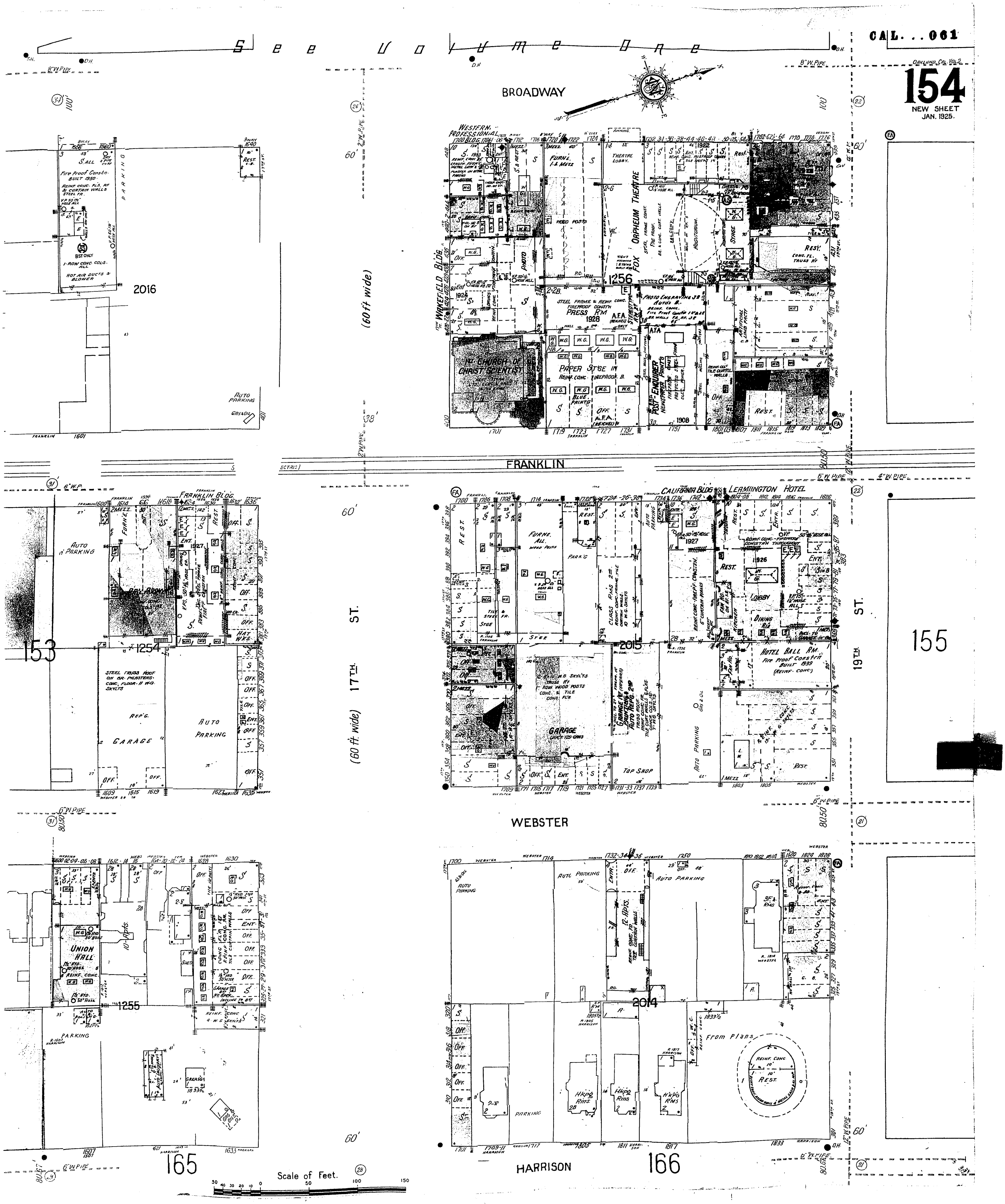
1911 – Sheet 154

1951 – Sheet 154

1911 Oakland Sanborn Map



1951 Oakland Sanborn Map



APPENDIX TWO

Oakland Cultural Heritage Survey Forms for 1711 – 1739 Webster Street

Oakland Cultural Heritage Survey
Oakland City Planning Department

FIELD FORM

F F

OCHS file address: 1711-39 WEBSTER ST
Assessor's parcel: 008 0624 006 00 Bldg:
Common name: None

Photo: 676-7A 08/24/94
District: - None

Seqno. 856 URM: Z Prelim. D3
Estdate: 1924 (1924-25)

Coded description:

X: Exterior:
Story: 2S two stories
Plan: RF rectangular plan
Lot: IL on an interior lot
Roof: PG straight parapet
Ex5: SE storefront SI
Ex6: TP vehicle door

M: Materials:
Wall1: OK mottled brick
Wall2: HO hollow clay tile
Found: CO concrete
Roof: AR composition
Other: MS metal sash
Other: TS transom

R: Remodeling:
SW-some windows changed
PA-paint
- FS
-
-
-

Condition: Integrity:

Stru1: 1W brick bearing wall Stru2: 2F concrete frame

A: Archstyle: 2B 1920s decorative brick
B: Bldg type: GA & ST garage and store building

U: Present use: 84 parking garage
N: Supportive:
S: Surround: DC

Computer prose (derived from codes above). Make suggestions for text editing below. (14 lines max on 1 page)

1711-39 WEBSTER ST is a 1920s decorative brick garage and store building. It is two stories, rectangular plan, on an interior lot. It has a straight parapet, series of storefronts and vehicle door. Exterior walls are mottled brick, concrete and hollow clay tile. Roof is composition. Foundation is concrete. Structure is brick bearing wall and concrete frame. Sanborn maps describe it as brick with reinforced concrete frame. & wood posts The building has conc pilasters, metal sash windows and transom. Present use is parking garage. Surroundings are densely built up, commercial.

Visible alterations include some windows changed, paint, ~~transoms~~ & The building is in excellent condition; its integrity is excellent.

JM

resource attributes: 04--garage

Sanborn map information: PS map # 154 Green# map 154
Sancolor: R E brick reinforced concrete frame
Uses (1951 etc.): garage and auto repair 2nd
Two buildings on Sanborn. 1711-27 has 12 6'X10' W.G. skylights, truss roof, 1 row wood posts, conc. and tile, conc. floor. 1731-39 has truss roof, reinf. conc. frame., tile curtain walls and floors, conc. columns 1st, 7 W.G.skylights.

additional information:
building permit: 90883+ 04/17/24 2s tile stores & garage W Webster 100' N/17th St 30000 Plans: N
notes: garage 1st, Auto Rep 2nd, reinf conc fame - tile curtain walls & floors. B15434 ALT. 2 stores, 2 off, rest--SSinfo: 2.0 stories; 29130 sf; Red/CONCRETE FRAME; 1739 Webster///Inside garage has 1st & 2md. brick surrounding walls with wood framing./--SSaddrs: 1711-39 WEBSTER ST/1711, 1717,1721-1/2/1739WEBSTER ST

AL HERITAGE SURVEY - Evaluation Tally Sheet - Record 1501 of 1833 on C:NCRUBLDG.DBF

Address: 1711-39 WEBSTER ST

A.P. no: 8- 624- 6- 0
UTM: 10/ /
Sanborn 154 Prelim. D3
Serial No. 856

Common name: None
Historic name: Vargas (J.C.) garage

A. 1. Exterior:
Story: 2S-two stories
Plan: RF-rectangular plan
Lot: IL-on an interior lot
Roof: PG-straight parapet
Ex5: SE-storefront
Ex6: TP-vehicle door
Sanborn:

3. Construction:
Wall1: OK-mottled brick
Wall2: HO-hollow clay tile
Found: CO-concrete
Roof: AR-composition
Other: MS-metal sash
Other: TS-transom

Stru1: 2F-concrete frame
Stru2: -

4. Architect: unknown
Builder: Marshall & Burks

5. Arch style: 2B 1920s decorative brick

Bldg type: GA & ST garage
and store building
Present use: 84-parking garage
6. Supportive: -

B. 7. Name1:
Name2, 3, etc: (see Signif. text or ES sheet))
8. Events? (see ES sheet)

9. Patterns (historic contexts):
Eval.Ctx. CO commercial activity and development in Oakland 1850-1948
AU-automobile/truck transport N.R.contingency:
DT-downtown commercial
-

10. Constr. date: 1924-25

Source: BP building permit Value: $30,000 Permit #: 90883+
Plans: N

C. 11. District Role: None -:
District Name:

Surroundings: D C Threat: N none known
densely built up commercial
12. Familiarity (see ES form)

D. 13. Condition: (field)
14-16. Alterations:
SW-some windows changed -
PA-paint -
- -

17. Site: on original site

E. 18. n/a
19. n/a

	Rating	Score
A. VISUAL QUALITY/DESIGN (Photo #: 104-7)		
1. Exterior	F	0.0
2. Interior	-	0.0
3. Construction	G	3.0
4. Designer/Builder	F	0.0
5. Type/Style	V	5.0
6. Supportive Elements	F	0.0
B. HISTORY/ASSOCIATION		
7. Person/Organization	F	0.0
8. Event	F	0.0
9. Patterns	G	3.0
10. Age	G	2.0
C. CONTEXT		
11. Continuity	F	0.0
12. Familiarity	F	0.0
D. INTEGRITY DEDUCTIONS		minus:
13. Condition (field:)	E	0% A,B,C
14. Exterior Alterations (field:)	E	0% A&C 0% B
15. Interior Alterations	-	0% 2
16. Structural Removals	E	0% A&C 0% B
17. Site	E	0% B
E. REVERSIBILITY		
18. Exterior Alterations	G	
19. Interior Alterations	-	

Evaluated by Chris Buckley on 03/02/82 Re-evaluated by Betty Marvin on 02/15/94
Tallied (or re-tallied) by computer; printed on 02/26/94
OCHSET3.FRM rev.2/8/94 Adapted from the San Francisco Downtown Inventory & Harold Kalman's 'The Evaluation of Historic Buildings'

Address: 1711-39 WEBSTER ST

A.P. no: 8- 624- 6- 0
UTM: 10/ /
Sanborn 154 Prelim. D3
Serial No. 856

Common name: None
Historic name: Vargas (J.C.) garage

Evaluated by Chris Buckley on 03/02/82 Re-evaluated by Betty Marvin on 02/15/94
Tallied (or re-tallied) by computer; printed on 02/26/94

Description

1711-39 WEBSTER ST is a 1920s decorative brick garage and store building. It is two stories, rectangular plan, on an interior lot. It has a straight parapet, storefront, and vehicle door. Exterior walls are mottled brick and hollow clay tile. Roof is composition. Foundation is concrete. Structure is concrete frame. The building has metal sash and transom. Present use is parking garage. Surroundings are densely built up, commercial.

Visible alterations include some windows changed, paint. The building is in excellent condition; its integrity is excellent.

Significance

1711-39 WEBSTER ST, the Vargas (J.C.) garage, is a fair example of a 1920s decorative brick garage and store building. Although its architectural integrity has been maintained, this building does not meet the criteria for individual listing on the National Register of Historic Places since it appears to lack significant historical associations and architectural interest. It is not located within a district.

It was built in 1924-25, architect unknown and builder Marshall & Burks. It is dated by building permit 90883+; it was originally valued at $30,000. Historically the building reflects motor transportation and the auto industry, and downtown Oakland business and commercial development.

Notes:
garage 1st, Auto Rep 2nd, reinf conc fame - tile curtain walls & floors. B15434 ALT. 2 stores, 2 off, rest--SSinfo: 2.0 stories; 29130 sf; Red/CONCRETE FRAME; 1739 Webster///Inside garage has 1st & 2md. brick surrounding walls with wood framing./--SSaddrs: 1711-39 WEBSTER ST/1711, 1717,1721-1/2/1739WEBSTER ST

APPENDIX THREE

Oakland Tribune August 26, 1923

Oakland Tribune September 2, 1923

Oakland Tribune September 9, 1923

HOLLOW TILE MADE POPULAR BY BUILDERS

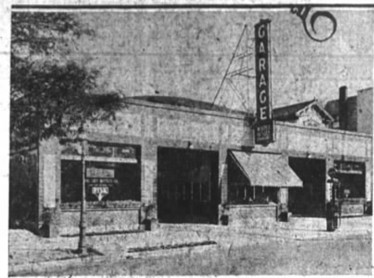
Marshall & Burks have combined utility and beauty and permanent construction without excessive costs in the erection of these three garages in the East-of-the-Lake district, and in this work they have used exclusively Dickey Mastertile. Marshall & Burks were the first to adopt Dickey Mastertile for general construction in Alameda county and they continue to specialize in the use of the various materials produced by the California Brick company and the Livermore Fire Brick Works, allied plants.

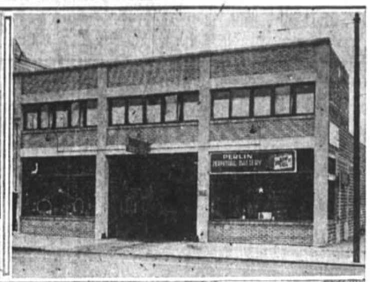
The buildings are fireproof throughout, having cement floors, steel window and skylight sash and fireproof roofs in conjunction with the Mastertile walls. This type has been developed by Marshall an Burks as the best kind of construction for the medium sized garage, both for cheapness of contaruction and lowness of overhead operating expense. Buildings of this type of 5000 or more qusare feet of floor space can be erected at an average cost of $1.50 per square goot, according to Marshall & Burks' estimate.

Marshall & Burks follow a policy of building, leasing and financing the construction of garages of this type. Through the ues of Dickey Mastertile and by doing all work possible with their own men and machinery, they have been enabled to construct many buildings at a cost that would be impossible under other conditions. Work that cannot be done by their own men is let out to other contractors, the same men being secured for each piece of construction. Contractors are selected for excellence in their particular line and when satisfactory are used on all construction work.

Marshall & Burks Develop Hollow Tile Construction in Oakland

These three buildings illustrate the utility effects of hollow tile construction as done by Marshall & Burks in the Eastbay district. Marshall & Burks use Dickey Mastertile in all their construction as the best and cheapest material for permanent results. The picture at the upper left is a new garage on Harrison street, Oakland; on the right is a garage on East Fourteenth street in the Melrose district, and below is the Thirty-fourth Avenue Garage on East Twelfth street and East Fourteenth street, one of the newest and biggest garages in the East-of-the-Lake district. (Photographs by Ford E. Samuel)





EAST OAKLAND GARAGES.

The Thirty-fourth Avenut garage, one of the above garages built by Marshall and Burks, was built with the Dickey Mastertile walls and Livermore pressed brick front and has plate glass in the large front display windows. The garage was built for the present owners, Frank Lorentz, Calvin E. Wright and Marino Marini. These three partners were formerly mechanics in the City Hall Garage but resigned to establish their own business in this building, recently completed.

At the time of opening Thirty-fourth avenue had not been completed and the men were risking a financial loss if they misjudged the growth of the community after the street was completed. With the completion of the avenue, however, business immediately increased and has increased rapidly with the development of the section. The garage is equipped throughout with the best and most up-to-date machinery and with the fireproof construction is the last word in modern automobile service shops.

The Lone Star garage on East Fourteenth street was another garage built by Marshall & Burks a year ago. The building is of the same type as the Fourteenth Avenue garage and the owner, A. S. Watson, is already in need of more room for his increasing custom. Fenstra steel window sashes and Mastertile construction is also featured in the Lone Star building.

BUSINESS GROWS.

The third example of Marshall & Burks' garage construction work is the McAfee & Nickel garage, 1600 Harrison street. This building was promoted by Marshall & Burks, the space being leased to the partners before construction started, the building being owned by the Alliance Land Company of San Jose.

Marshall & Burks started McAfee & Nickel in business in a small way four years ago at San Pablo and Thirtieth street. Two years later they sold their lease and business to buy the lease and etsablish themselves in the new Marshall & Burks building on Harrison street. Since oopening there they have built up a prosperous business and recently opened a branch garage in San Jose, erecting a new 175 by 200 foot building. The growth of McAfee & Nickel's business is typical of the three garages and indicates the general success of the Marshall & Burks type of building.

"We are glad to see the men in the garages we have built so successful," Mrs. W. C. Marshall said in commenting on the growth of their businesses in the last year, "and we believe it is directly due to the prosperous condition in Oakland and the individual ability of the men. As to the type of buildings, we are strongly back of this type of construction with Mastertile walls and Livermore pressed brick front, and feel that it is one of the most practical and efficient types of construction for this kind of work."

FIRST TO USE TILE.

W. C. Marshall was the first builder in the Oakland section to advocate the use of hollow tile in bungalow and general construction. Coming four years ago from Kansas City, where the hollow tile has been used for some time, he was familiar with its advantages and use and immediately started a fight to make the use of this building material legitimate under Oakland's building ordinances. After several months' work he secured the passage of an ordinance permitting the use of hollow tile in building work and since that time has used Dickey Mastertile exclusively in all buildings erected by Marshall & Burks.

R. J. Burks, building supervisor for the firm, was formerly in charge of the City of Oakland building department and resigned to help form the company of Marshall & Burks. Burks is recognized as one of the foremost construction engineers in Oakland. He has had extensive experience and had charge of the building of the new wharf at Honolulu. Burks is in active charge of all building done by the company and supervises all construction, most of which is done by employees of the firm without subletting contracts. When work is necessary that cannot be done by the facilities of the firm, or would necessitate a larger outlay of money than warranted by the amount of work to be done, private contractors are given a contract for the piece of work. The policy, however, is to use the same contractor on all buildings of his particular kind of work.

The California Brick company has enjoyed the exclusive patronage of Marshall & Burks in supplying tile and brick, Dickey Mastertile and Livermore pressed brick, both products of the Dickey companies, being used exclusively by this firm. The California Brick company operates two factories, both in Alameda county. The Dickey Mastertile is made at the factory at Niles and the pressed brick and fire brick at the Livermore Fire Brick factory.

HIGH CLASS SUPPLIES.

Dickey Mastertile was first used by Marshall & Burks in extensive building of bungalows, being the first attempt at hollow tile bungalow building in the Oakland section. Since that time all kinds of buildings have been built, among them several garages similar to those featured in the photographs. One of the features of the California Brick company's service is the immediate delivery upon receipt of order. Both plants being located close to Oakland it is possible to give exceptionally swift service to all builders in the entire section.

The E. L. Blackman company furnished all lumber used in the three garages and also all lumber for the other Marshall & Burks structures. The Blackman company specializes in keeping all kinds of lumber in stock an can supply any order in the minimum time, a feature beneficial to the contractor when time gets to be a premium in finishing a building for the owner. This service has played a big part in landing all orders from Marshall & Burks for the Blackman company.

Powell Bros., Inc., are the regular dealers in cement and plaster material for Marshall & Burks, a position maintained by the high quality of their products and efficiency of service maintained. Powell Brothers specialize in sand, lime, cement, plaster an rock, and from their warehouse at Harrison avenue and Pearl street, Alameda, can supply any part of the city in a short time.

Carter & Foley install all glass work on the Marshall & Burks buildings. Where large plate glass windows, such as are used in the display fronts of the above garages, are handled, careful workmanship and skillful handling is necessary, both to the contractor and the owner. Carter & Foley have installed all glass for Marshall & Burks during their activities in building Mastertile bungalows an garages. The glass used is furnished by the W. P. Fuller company.

Duner-Matheny Sash company, East Fourteenth street and Forty-second avenue, manufacture all doors and sash material for the Marshall & Burks buildings. They turn out all materials and in some cases assemble the sash ready for installation in the building.

The Western Roofing company, 2908 Telegraph avenue, has charge of all roofing work, different types being used to fit the construction of the building.

Attention was given the hardware in the buildings, care being taken that all equipment should be of the best quality. The Smith Hardware compang, 929 Broadway, furnished all hardware and fixtures for the three buildings and have furnished the hardware for all Marshall & Burks homes and buildings.

The Slater Electric company has charge of all electrical work in the buildings, installing both lighting and power wires.

F. A. Morrell, plumbing contractor at 348 Adeline street, did the plumbing work for the buildings, installing the drains for wash racks and the water system.

In building these garages, as in the construction of the bungalows and other buildings in the East of the Bay section, Marshall & Burks have used practically all Oakland products.

Eight Cities Restrict Use of Realty Signs

PASADENA, Alhambra and Torrance have joined the ranks of Berkeley, San Jose, Oakland and Santa Monica boards as cities who either prohibit or restrict the number of "For Sale" signs which can be used on a lot, either by realty board regulations or city ordinance.

Carroll Page Fisk of the Frank Meline company, chairman of the anti-sign committee, was largely responsible for the elimination of the signs in Pasadena.

The Alhambra Realtors met at 9 a. m., June 30, at the office of Mills & Burke and from there proceeded to collect all their signs. Later a parade of the realtors down the principal streets of the city was held.

Torrance was a "no sign" board from birth, having written the anti-sign rule into its constitution and bylaws. The members of this, the baby board of the state, have donated all their "For Sale" signs for "To Torrance" signs, which will be posted along the highways leading to their city.

Santa Monica has handled the sign problem by passing a city ordinance requiring that real estate signs must be at least fifteen feet apart, thus restricting three to a fifty-foot lot. In addition the board rules require realtors to post signs only when they have an exclusive listing for the property so posted.—California Real Estate.

WIDE USE OF HOLLOW TILE DEMONSTRATED

Marshall & Burks have shown the versatility of Dicky Mastertile and Livermore pressed brick and some of their many uses in this group of East-of-the-Lake store buildings, all constructed of Mastertile and Livermore brick by these pioneers in the use of hollow tile for general building purposes in Eastbay building circles. One of the structures is a combination store and apartment building and the others are modern business blocks.

All three buildings are in rapidly growing sections of the district and were designed and built by Mrashall & Burks. They are representative of the type of buildings in this class being erected by Marshall & Burks and the demand for such quarters by the branch stores and business houses is shown by the rapidity with which floor space was leased.

FAIRFAX.

The Eggleston building, located on the southwest corner of Foothill boulevard and Fairfax avenue, is a combination of the Marshall & Burks promotion and construction policy and the deep seated faith of one man in the future of his adopted section. Charles P. Eggleston has been a realtor in the Fairfax neighborhood for 14 years. Coming before the locality was thickly settled, he believed there was a future ahead of the Fairfax community and has maintained that belief through years of little progress. When the section started it's growth a few years ago Eggleston had another vision, that of a business block at the corner of Foothill boulevard and Fairfax avenue, and he worked toward that end until it was recently completed.

The building is of Dickey Mastertile and Livermore brick with an outside finish of combination plaster and brick relief work that follows the Marshall & Burks plan of making their buildings a little "different." It is now occupied by the Fairfax branch of the Oakland Bank, one of the Pon Honor chain grocery stores, R. S. Contelli, vegetable and fruit dealer; Ross Meader, hardware dealer, and Eggleston, who maintains a real estate office in one of the sections.

BANK BUILDING.

The Fairfax branch of the Oakland bank was established on Foothill boulevard some months ago and the rapid increase of depositors under Manager Leo J. Saxton and Assistant Manager R. D. Watkins soon made larger quarters imperative. The corner location in the Eggleston building was secured and the branch transferred August 18. The new quarters afford a spacious lobby for the convenience of depositors and a well appointed waiting room for shoppers.

All business men in the Fairfax district report good and increasing business and uphold Eggleston when he says "I believe this is the logical point in the East-of-the-Lake section for a thriving suburban trading center. We are on the only artery of travel from Oakland to the coast and inland valleys that traverses a residential district, the other route being through an industrial section.

STORY OF GROWTH.

"We have nothing in the way to retard our progress for five miles northward. Development can go on till we reach the hills and then the hills can be utilized for country homes."

Eggleston's optimism is given material support by the sales figures for Fairfax real estate the last few years. A few years ago the corner lots in the section were selling for $40 a front foot. Now the inside lots are selling for $150 a front foot and the corner lots are valued at $300.

The two story building shown is of a different style of architecture, being a combination store and apartment building, but the type of construction is the same. Dicky Mastertile is used for partitions and walls are of Livermore brick with Livermore pressed brick front. The building was promoted and constructed by Marshall & Burks for Robert T. Davies of Napa, and leased by Mrs. W. C. Marshall. It is situated at 4014 East 14th st.

Half of the lower floor is occupied by Sims & Hard, Mitchell automobile agents and general accessory, tire and auto part dealers, and the remainder by Joseph Dietrich, manufacturer of the Million line of specialty confectionery, a combination of candied fruits and cake. The top floor is divided into four apartments and is leased to B. W. Harmon of the Melrose Sheet Metal works.

VALUES INCREASE.

The rapid increase of real estate values in the vicinity of the Davies store building is told by Mrs. Marshall, who has charge of the management of the building. "When the Davies building was built," she said, "the average price per front foot was about $100. Now it is well over the $250 mark. Property values are more than double and the future outlook is certainly bright."

The third building is owned by E. F. Lane, San Francisco business man, and is another of the Marshall & Burks store buildings built of Dicky Mastertile and Livermore pressed brick. This store is in a particularly advantageous position, having frontage on Foothill boulevard, Seminary avenue, Walnut avenue and Fortune way.

Lane purchased the property for a permanent investment after being convinced of the district's future. Lane employed Marshall & Burks to prepare plans for a building to house five stores.

Before work could be started on the building Lane was offered $6750 for the lot, $3750 more than he paid for it a short time before by Andrew Williams, head of the Piggly Wiggly company in California.

The Lane building has but recently been completed and one of the stores has been leased to A. E. Orton, an Oakland home builder, that has made a study of the district and believes in its future.

FOOTHILL BOULEVARD.

"Lane showed remarkable foresight in refusing this flattering offer," W. C. Marshall of Marshall & Burks said in regard to the rapid growth of the Seminary avenue section, "and many other business men are coming to this section to locate.

"I believe the corner of Foothill boulevard and Seminary avenue is on the main artery of traffic north and south from East Fourteenth street and with the recent opening of Walnut avenue should be the logical outlet for Maxwell Park.

"Since the completion of the Lane building a permit has been granted for the erection of a motion picture theater in this vicinity and the theater leased to a Marin theater operator."

Marshall & Burks built the first permanent business block in this section a half block from the Lane building, now owned by W. C. Kerley. Another proposed building is a lodge room and hall, to contain 10,000 square feet of floor space, and Marshall predicts that within a short time one of the banks establish a branch here to care for the rapidly growing district.

Following their custom of doing all the work possible with their own men and machinery, hiring the same contractors on each construction job and securing the best grade of materials from the same dealers for each building, Marshall & Burks are enabled to build with a uniform quality and lower cost than would be possible with lesser organization.

DICKEY MASTERTILE.

As has been their custom in all building operations, Marshall & Burks used Dickey Mastertile and Livermore pressed brick, both being products of the California Brick Company, in all three buildings. Marshall was the pioneer in the use of Dickey Mastertile in Oakland, having engineered the passage of the ordinance authorizing its use several years ago, and since that time has used it in all type sof buildings.

The Livermore pressed brick is made by the Livermore Fire Brick Company, a subsidiary company of the California Brick Company, and is used by Marshall & Burks for front construction in the Davies and Lane buildings.

The glass in all three buildings was furnished and installed by Carter & Foley, glass specialists at Tenth and Webster streets. The installation of the glass, especially the large plate-glass fronts, is important to both builder and owner and Carter & Foley have had a long experience in this work, having sub-contracted all glass work for the Marshall & Burks buildings.

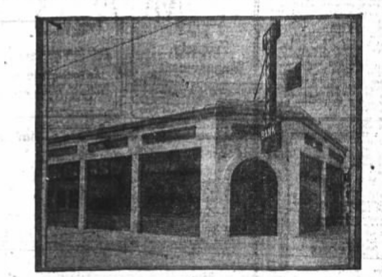
The E. L. Blackman Company furnishes all lumber for the Marshall & Burks buildings, the personal attention and prompt delivery of orders, coupled with the quality of lumber and mill work handled, being responsible for them continually landing the lumber orders for these builders.

Rock and gravel for the concrete and plaster work on all Marshall & Burks construction work is furnished by Powell Bros., Inc., specialists in building materials. This company maintains a service for builders that enables them to deliver needed materials in the shortest possible time, a factor of vital importance when a contractor is working against time for the completion of a building. The roof work on all these buildings was done by the Western Roofing Company, Inc., 2908 Telegraph avenue. The Western Roofing Company specializes in felt and gravel roofing and has done all work for Marshall & Burks.

The smaller items in construction are watched as carefully as the major operations to secure quality workmanship and lowest possible cost. The Duner-Matheny Sash and Door Company does all sash work for Marshall & Burks, the Slater Electric Company the wiring, both light and power; F. A. Morrell does all plumbing and the Smith Hardware Company furnishes all hradware, tools and paint. Through this system of securing quality goods from reputable men the Marshall & Burks Company has been enabled to construct buildings of the best quality at a price much lower than ordinary.

Marshall & Burks Show Use of Hollow Tile for Commercial Construction

These buildings, erected for "Store" purposes, are a demonstration of the use of Alameda county made clay products for commercial construction. Marshall & Burks built these blocks of stores in the rapidly growing East-of-the-Lake District, using Dickey Mastertile Products. The building at the upper left of the picture is on the Foothill boulevard and Seminary avenue; that at the right is the new Fairfax branch of the Oakland bank, on the corner of Foothill boulevard and Fairfax avenue; and the lower building is at 4014 East Fourteenth street. —Photographs by Ford E. Samuels.



PROMINENT FIRM HAS SPECIALTY CONSTRUCTION

Marshall & Burks have been boosters of East Twelfth street, between Fifth and Sixth avenues, for three years and, have had an important part in the development of this section through their construction of the three buildings shown above, built in their popular style for one story garage or store buildings, having Dickey Mastertile walls, Livermore brick front and the bowstring truss originated by W. C. Marshall, senior member of the firm.

The growth of the section since Marshall & Burks bought their property from W. C. Kerley in April has justified their belief in the community, the lot bought at that time for $8,000 now being worth $12,000, and property values going up all the time. Since that time Marshall & Burks have erected three buildings within a block of each other and more construction is planned for the near future.

GARAGE BUILDINGS.

The Clinton Park garage at 541 East Twelfth street, was one of the first buildings of this type to be erected in the section, having been built more [illegible] a year ago by Marshall & Burks [illegible] Mortenson and Hicks. The building is of the same construction type as all Marshall & Burks buildings with the Mastertile walls and Livermore brick front.

Concrete floors, steel windows, sash and fireproof roofing makes the building the last word in fire protection for both the garage owner and motorists using the building for storage of their cars. This type of building has been recommended by Marshall & Burks as the best for the one story garage or store building and its continued adoption throughout the East-of-the-Lake section bears out their choice.

Harry Mortensen, of the original firm of Mortensen and Hicks, bought the interest of T. W. Hicks some time ago and is now running the garage. He says the business in the section is constantly increasing and he is in need of much more room for his trade.

Mortensen is considering enlarging his building, making an entrance to Sixth avenue, and would then have one of the best garages in the section, as he is already equipped with an up-to-the-minute machine shop and has a corps of competent mechanics.

TWO NEW BUILDINGS.

Two buildings have been at the corner of Fifth avenue and Twelfth street, one having been occupied for a year and the other to be completed within a few days and used for a first class market.

The Barton building, constructed a year ago by Marshall & Burks for A. J. Burton, Oakland business man, was entirely leased before it was built and has proved a profitable investment to the owner.

The corner location is occupied by the Oakland branch of the White Motor Company, taking up the entire side of the building. Through this office the sales and service of the Pacific coast is handled and direct communication established between the west and the eastern office.

THE ROSS MARKET.

H. W. Ross, wholesale and retail produce dealer, occupies more than half of the building, having the space next to the White company, extending the full length of the building. Ross has built up a good business in the produce handling in this section, having both a retail market and handling wholesale trade. Ross now operates the Eleventh street market but saw the possibilities of the district and opened Ross Market No. 2.

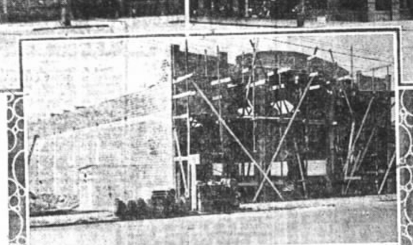
The Barton building is of the same general construction type, having the bow string truss roof, Dickey Mastertile walls and Livermore brick outer finish walls, but a finishing touch was added with the use of Cordova tile trimming around the edge of the roof. The tile is used in conjunction with a concealed gutter and gives the building a neat and attractive appearance.

Being one of the first substantial blocks in the section the Barton building is looked upon as a pioneer in the business life of the

(Continued on Next Page)

Hollow Tile Used by Marshall & Burks in Three East Twelfth Buildings

Marshall & Burks have had a big part in the development of store and garage buildings at East Twelfth street and Fifth avenue, the above three buildings all having been constructed by them in the last year. The left hand building, the Clinton Park Garage, is built with Dickey Mastertile walls and Livermore pressed brick front, the standard Marshall & Burks construction for one story garage buildings. The A. J. Burton building, center, has Livermore pressed brick outside walls and Mastertile partitions. This building is used as a combination store and garage, the Oakland branch of the White Motor Truck Company occupying the corner location. The building on the right is owned by Marshall & Burks and is now under construction.



Attachment H: Traffic Noise Outputs for the 1721 Webster Street Project prepared by BASELINE Environmental Consulting

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

Webster Street between 17th and 19th Streets (am peak) existing

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	401.0
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	13.0
Average medium truck speed (mph):	30.0
Heavy truck volume (v/h):	9.0
Average heavy truck speed (mph):	30.0
Bus volume (v/h):	4.0
Average bus speed (mph):	30.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

person

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	61.0

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

Webster Street between 17th and 19th Streets (am peak) existing+project

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	462.0
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	15.0
Average medium truck speed (mph):	30.0
Heavy truck volume (v/h):	10.0
Average heavy truck speed (mph):	30.0
Bus volume (v/h):	5.0
Average bus speed (mph):	30.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

person

Distance from center of 12-ft wide, single lane roadway (ft): 50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 61.6

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

Webster Street between 17th and 19th Streets (pm peak) existing

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	528.0
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	17.0
Average medium truck speed (mph):	30.0
Heavy truck volume (v/h):	11.0
Average heavy truck speed (mph):	30.0
Bus volume (v/h):	6.0
Average bus speed (mph):	30.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

person

Distance from center of 12-ft wide, single lane roadway (ft):	50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	62.2

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

Webster Street between 17th and 19th Streets (pm peak) cumulative+project

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	735.0
Average automobile speed (mph):	30.0
Medium truck volume (v/h):	23.0
Average medium truck speed (mph):	30.0
Heavy truck volume (v/h):	16.0
Average heavy truck speed (mph):	30.0
Bus volume (v/h):	8.0
Average bus speed (mph):	30.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

person

Distance from center of 12-ft wide, single lane roadway (ft): 50.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 63.6