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1314 FRANKLIN STREET MIXED-USE PROJECT

CEQA Analysis

Pursuant to California Resources Code Sections 21083.3, 21094.5.5, and 21166 and CEQA Guidelines Sections 15162, 15164, 15183, 15183.3, 15168, and 15180.

Date:	March 16, 2017
Project Address:	1314 Franklin Street
Case Number:	PLN16-295
Zoning:	D-LM-2 Lake Merritt Station Area District Pedestrian Commercial; D-LM-3 Lake Merritt Station Area District General Commercial; and D-LM-4 Lake Merritt Station Area District Mixed Commercial
Height District:	Lake Merritt Station Area District Height Area LM-175 feet allowed; 275 feet with Conditional Use Permit
APNs:	002-0055-001-00
Lot Size:	1.37 acres
Applicant:	CP VI Franklin, LLC c/o Carmel Partners 1000 Sansome Street, 1st Floor San Francisco, CA 94111
Staff Contact:	Peterson Vollmann, Planner IV Bureau of Planning, pvollmann@oaklandnet.com (510) 238-6167

I. Executive Summary

The proposed 1314 Franklin Street Mixed-Use Project ("proposed project") would construct two residential buildings on top of a 30-foot-tall, three- story podium with ground floor retail and a total of five levels of parking, two of which would be below ground, on a privately-owned site. A 40-story tower would be situated on the western side of the project site, facing Franklin Street. An eight-story building would be situated on the remainder of the project site, separated from the tower by a 25-foot-wide breezeway. The proposed project would include a total of up to 635 residential units, up to 18,000 square feet of ground-floor commercial space, and up to 631 on-site parking spaces. A loading area serving both the residential and commercial uses would be located on the first floor of the building. The project construction period would last approximately 27 months. The project site consists of one parcel, Assessor's Parcel Number 002-0055-001-00, occupying the full block bound by 13th, 14th, Franklin, and Webster Streets. The project site is currently occupied by a three-level, 180,000 square-foot parking structure used for public parking. The parking structure is privately operated and has a capacity of approximately 546 vehicles.

Pursuant to City of Oakland Municipal Code (OMC) Chapter 17.107 and the State Density Bonus Law (Government Code §§ 65915 et seq.), the project applicant is applying for a density bonus and a related concession/incentive. The proposed project would qualify for a density bonus by the inclusion of on-site affordable housing units equal to either ten percent of the base allowable density restricted for lower income households, or five percent of the base allowable density restricted for very low income households.[1]

Consistent with City of Oakland and State density bonus provisions, either of these approaches qualifies the proposed project for a 20-percent density bonus as well as one concession/ incentive (Government Code §§ 65915(f)(1),(2), 65915(d)(1-2); OMC §§ 17.107.040, 17.107.090A.1).[2] A 20-percent density bonus to the proposed project's base allowable density of 547 units would result in a potential 110 additional density bonus units. However, the project applicant proposes to include 88 out of the possible 110 density bonus units for a project total of up to 635 units. The concession/incentive requested by the project applicant is a waiver of the Lake Merritt Specific Area Plan height limit for the proposed tower in order to accommodate the additional units and to offset the cost impacts of the below market rate units.

The project site is located within the Lake Merritt Station Area Plan ("LMSAP"). The City certified an Environmental Impact Report ("EIR") for the LMSAP in November 2014, pursuant to the California Environmental Quality Act ("CEQA").[3] The 2014 LMSAP EIR analyzed the environmental impacts of adoption and implementation of the LMSAP. The proposed project is within the impact envelope of the reasonably foreseeable maximum development program analyzed by the LMSAP EIR, providing the basis for use of an Addendum. Public Resources Code

[1] The terms "lower income households" and "very low income households" are defined at Health and Safety Code sections 50079.5 and 50105, respectively.

[2] A "concession or incentive" is defined as a reduction in site development standards or a modification of zoning code requirements including, but not limited to, a height limitation, that results in identifiable and actual cost reductions to provide for affordable housing costs or rents. (Government Code §§ 65915(k)(1) and 65915(o)(1).)

[3] Lake Merritt Station Area Plan Final EIR, Certified November 18, 2014. SCH No. 2012032012. Oakland Case Nos. ZS11225, ER1100-17, GP13287, ZT13288, RZ13289.

Section 21166 and State CEQA Guidelines Section 15164 state that an Addendum to a certified EIR is allowed when minor changes or additions are necessary and none of the conditions for preparation of a subsequent EIR or negative declaration, per Section 15162, are satisfied. Separate and independently, qualified planning-level documents that can be used as a basis to provide CEQA clearance of the proposed project under specific CEQA provisions include Oakland's 1998 General Plan Land Use and Transportation Element EIR ("1998 LUTE EIR"), the 2010 General Plan Housing Element Update EIR and its 2014 Addendum, and the 2011 Central District Urban Renewal Plan Amendments EIR (or "Redevelopment Plan Amendments EIR"). These are referred to collectively throughout this document as "the Previous CEQA Documents" or "Prior EIRs."

II. Background

Planning Context

A portion of the project site is located within the Lake Merritt Station Area Plan ("LMSAP"), for which the City of Oakland certified an Environmental Impact Report ("EIR") in November 2014, pursuant to the California Environmental Quality Act ("CEQA").

The LMSAP encompasses approximately 286 acres of area within a half-mile radius of the Lake Merritt BART Station. Its goal is to guide actions to improve the area's vitality and to accommodate and promote future growth over a 25-year period. The LMSAP EIR analyzed the LMSAP "Development Program," which was the assumed future development for the Plan with up to 4,900 new housing units, 4,100 new jobs, 404,000 square feet of retail use, and l.3 million square feet of office uses. The project site is included in the LMSAP Development Program and the level of development currently proposed for the site is within the broader development assumptions analyzed in the EIR. Specifically, the LMSAP EIR allows for flexibility in future development in terms of the precise mix of newly developed land uses and their location within the Planning Area. As long as the actual plan area buildout stays within the impact envelope analyzed in the EIR, individual development projects need not adhere to the specific site-by-site assumptions in the Development Program.

CEQA Context

The LMSAP EIR anticipated that the environmental review of specific development projects assumed as part of the LMSAP would be streamlined in accordance with CEQA. At the time this environmental document for the proposed project is being prepared, the following seven projects are either approved or proposed within the LMSAP:

- 416-unit, seven-story (two buildings), 25,000 square feet of commercial W12 Mixed-Use Project at 285 and 301 12th Street;
- 460-unit, 24-story, 4,000 square feet of commercial Lakehouse Commons at 101 East 12th Street;
- 122-room Hampton Inn at 378 11th Street;
- 126-unit, 3,200 square feet of commercial project at 250 14th Street,
- 262-unit, 13,000 square feet of commercial project at 226 13th Street;
- 169-unit, 27-story, 3,600 square feet of commercial mixed-use building at 1331 Harrison Street;
- 382-unit, 9,000 square feet of commercial project at 325 7th Street

The analysis in this environmental review document supports determinations that (1) the proposed project, as separate and independent bases, qualifies for an exemption per CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan, General 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 for an addendum pursuant to CEQA Guidelines Section 15164 (Addendum to an EIR) as none of the conditions requiring a supplemental or subsequent EIR, as specified in Public Resources Code section 21166 and CEQA Guidelines Sections 15162 (Subsequent EIRs) and 15163 (Supplement to an EIR), are present.

LMSAP EIR

The analysis in the LMSAP EIR applies to the proposed project and provides the basis for its qualification for the aforementioned CEQA exemption and streamlining provisions. The LMSAP EIR is hereby incorporated by reference and can be obtained from the City of Oakland Bureau of Planning at 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, California 94612, and/or located at http://www2.oaklandnet.com/government/o/PBN/OurServices/Application/DOWD009157.

This CEQA Checklist is an addendum to the LMSAP EIR which provides the planning level analysis evaluating the potential significant environmental impacts that could result from the reasonably foreseeable maximum development under the plan. Specifically, it evaluates the physical and land use changes from potential development that could occur with adoption and implementation of the LMSAP. As specified in CEQA Guidelines Section 15168, the LMSAP EIR is appropriate for a Specific Plan since the degree of specificity in an EIR corresponds to the degree of specificity in the underlying activity described in the EIR. Preparation of a planning-level document simplifies the task of preparing subsequent project-level environmental documents for future projects under the LMSAP for which the details are currently unknown. As such, the LMSAP EIR presents an analysis of the environmental impacts of adoption and implementation of the LMSAP. Specifically, it evaluates the physical and land use changes from potential development that could occur with adoption and implementation of the LMSAP. Further, where feasible, and where an adequate level of detail is available such that the potential environmental effects may be understood and analyzed, the LMSAP EIR provides a project-level analysis to eliminate or minimize the need for subsequent CEQA review of projects that could occur under the LMSAP.

Environmental Effects Summary – 2014 LMSAP EIR

The 2014 LMSAP EIR (including its Initial Study Checklist) determined that development consistent with the LMSAP 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 Section III): aesthetics (degradation of existing visual character, adversely affect scenic vistas, new light or glare); air quality (conflicts with the Bay Area Clean Air Plan ("CAP")); cultural resources (archaeological, human remains, paleontological); greenhouse gases and global climate change (generation of greenhouse gas emissions); hazards and hazardous materials; geology and soils; hydrology and water quality (flooding, runoff in excess of existing capacity, groundwater depletion); noise (use and density incompatibilities, interior noise levels, violation of noise ordinance); utilities and service systems (impacts on existing stormwater, solid waste, and wastewater facilities); biological resources (fish or wildlife

species, riparian habitat, wetlands, trees); public services (except as noted below as significant)[4]; and transportation/circulation (intersection operations Downtown).

Less-than-significant impacts were identified for the following resources in the 2014 LMSAP EIR and Initial Study: land use (adjacent land uses and land use policy); parks and recreation (expansion of existing park facilities on environment and increase demand for facilities); aesthetics (shadow, conflict with existing policies); noise (in excess of applicable standards); and hydrology and water quality (exposure to loss or risk of death). **No impacts** were identified for agricultural or forestry resources, and mineral resources.

Significant unavoidable impacts were identified for the following environmental resources in the 2014 LMSAP EIR: transportation/circulation (roadway segment operations); air quality (exposure of sensitive receptors to TACs, cumulative impacts); and cultural resources (changes to historic resources). Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

Other Applicable Previous CEQA Documents

The analysis in the 2014 LMSAP EIR directly applies to the proposed project, providing the basis for use of an Addendum. The following describes EIRs that constitute the other applicable Previous CEQA Documents considered in this CEQA Analysis. Each of the following documents are hereby incorporated by reference and can be obtained from the City of Oakland Bureau of Planning at 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, California 94612, and/or located at http://www2.oaklandnet.com/government/o/PBN/OurServices/Application/DOWD009158.

Land Use and Transportation Element EIR

The City certified the EIR for its General Plan Land Use and Transportation Element (LUTE) in 1998. The LUTE identifies policies for utilizing Oakland's land as change takes 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 districts with around-the-clock activity, continued expansion of job opportunities, and growing residential population. The 1998 LUTE EIR is designated a "Program EIR" under 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 Section III.

Applicable mitigation measures identified in the 1998 LUTE EIR are largely the same as those identified in the other 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 Section III.

[4] The 1998 LUTE EIR addressed effects on solid waste demand and infrastructure facilities for water, sanitary sewer and stormwater drainage under *Public Services*.

Environmental Effects Summary – 1998 LUTE EIR

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 Section III): aesthetics (views, architectural compatibility and shadow only); air quality (construction dust [including PM10] 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)[5]; 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.

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.

Oakland Housing Element Update EIR and Addendum

The City has twice amended its General Plan to adopt updates to its Housing Element. It certified a 2010 EIR for the 2007-2014 Housing Element, and a 2014 Addendum to the 2010 EIR for the 2015-2023 Housing Element. 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* ("RHNA") process. The project site is specified as a "Housing Opportunity Site" in the 2015-2023 Housing Element, and thus the proposed project would contribute to the total number of housing units needed in the City of Oakland to meet its RHNA target. Applicable mitigation measures and SCAs identified in the 2014 Addendum to the 2010 EIR are considered in the analysis of the residential component of the proposed project in this document, and are largely the same as those identified in the 2011 Redevelopment Plan Amendments EIR. The 2010 Housing

[5] The 1998 LUTE EIR addressed effects on solid waste demand and infrastructure facilities for water, sanitary sewer and stormwater drainage under *Public Services*.

Element Update EIR was designated a "Program EIR" under 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 Section III.

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

Environmental Effects Summary – 2010 Housing Element and its 2014 Addendum

The 2010 Housing Element Update EIR (including its Initial Study Checklist) and its 2014 Addendum 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 Section III): 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).

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.

Central District Urban Renewal Plan Amendments EIR (Redevelopment Plan Amendments EIR)

The project site is located within the Central District Urban Renewal Plan Area, 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 Embarcadero West. The Oakland City Council adopted the Central District Urban Renewal Plan (the "Redevelopment Plan") for the Project Area in June 1969. The City prepared and certified an EIR for proposed amendments to the

Urban Renewal Plan in 2011, and amended or supplemented the Plan up to April 3, 2012.[6] The 2011 Redevelopment Plan EIR was designated a "Program EIR" under 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 Section III) identified in the 2011 Redevelopment Plan Amendments EIR are considered in the analysis in this document and are also largely the same as those identified in the other EIRs described in this section.

Environmental Effects Summary – 2011 Redevelopment Plan Amendments EIR

The 2011 Redevelopment Plan Amendments EIR 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 Section III): 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).

Less-than-significant impacts were identified for the following resources in the 2011 Redevelopment 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 Redevelopment 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).[7] Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

[6] The 2011 EIR addressed two amendments. A 17th Amendment to the Redevelopment Plan to (1) extend the duration of the Plan from 2012 to 2022 and extend the time period that the then-Redevelopment Agency could receive tax increment funds from 2022 to 2032, as allowed by Senate Bill (SB) 211 (codified as Health and Safety Code Section 33333.10 et seq.); (2) increase the cap on the receipt of tax increment revenue to account for the proposed time extensions; and (3) renew the then-Redevelopment Agency's authority to use eminent domain in the Project Area. An 18th Amendment further extended the then-Redevelopment Plan time limit from 2022 to 2023 and extended the time period that the then-Redevelopment Agency could receive tax increment funds from 2032 to 2033, as allowed by Health and Safety Code Section 33331.5.

[7] The 2011 Redevelopment Plan Amendments EIR also identified significant and unavoidable noise effects specifically associated with the potential development of a new baseball stadium at Victory Court, and multimodal safety at at-grade rail crossings, both near the Oakland Estuary. These effects would not pertain to the proposed project given the distance and presumably minimal contribution of multimodal trips affecting these impacts.

III. Purpose and Summary of this Document

The purpose of this document is to evaluate CEQA compliance of the proposed project. The 2014 LMSAP EIR analyzed the environmental impacts of development located within the LMSAP boundaries. The LMSAP EIR anticipated that the environmental review of specific development projects within the impact envelope assumed in the LMSAP would be streamlined in accordance with CEQA. An addendum is considered suitable for the proposed project, as demonstrated by the CEQA Checklist presented in Section VI, herein. For comprehensive review and public information, the CEQA Checklist and its supporting attachments demonstrate that the proposed project would qualify for certain other CEQA exemptions, as summarized below, which separately and independently provide a basis for CEQA compliances.

1. **Addendum.** Public Resources Code Section 21166 and CEQA Guidelines Sections 15162 and 15164 (Subsequent EIRs, Supplements and Addenda to an EIR or Negative Declaration), state that an addendum to a certified EIR is allowed when minor changes or additions are necessary, and none of the conditions for preparation of a subsequent EIR or Negative Declaration per Sections 15162 and 15164 are satisfied.

   The analysis in the 2014 LMSAP EIR directly applied to the proposed project, providing the basis for use of an Addendum.

2. **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 Previous CEQA Documents—the 1998 LUTE EIR and, for only the residential component of the proposed project, the 2010 Housing Element Update EIR and its 2014 Addendum, as well as the 2011 Redevelopment Plan Amendments EIR and 2014 LMSAP EIR—are applicable to the proposed project and are the Previous CEQA Documents providing the basis for use of the Community Plan Exemption.

3. **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. Infill projects are eligible if they are 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; satisfy the performance standards provided in CEQA Guidelines Appendix M; and are 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.

The analysis in the EIRs noted above is applicable to the proposed project as are the Previous CEQA Documents providing the basis for use of the Qualified Infill Exemption under CEQA Guidelines Section 15183.3.

4. **Other Applicable Previous CEQA Documents - Prior EIRs and Redevelopment Projects.** CEQA Guidelines Section 15168 (Program EIRs) and Section 15180 (Redevelopment Projects) provide that the 2011 Redevelopment Plan Amendments EIR can be used as a Program EIR in support of streamlining and/or tiering provisions under CEQA. The 2011 Redevelopment Plan Amendments 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 continues 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.

Previous Mitigation Measures and Current Standard Conditions of Approval (SCAs)

The CEQA Checklist provided in Section VI of this document evaluates the potential project-specific environmental effects of the proposed project, and evaluates whether such impacts were adequately covered by the 2014 LMSAP EIR (as well as the Prior EIRs previously described in Section II) to allow the above-listed provisions of CEQA to apply. The analysis conducted incorporates by reference the information contained in each of the Previous CEQA Documents. The proposed project is legally required to incorporate and/or comply with the applicable requirements of the mitigation measures identified in the 2014 LMSAP EIR. 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.

SCA Application in General

The City established its *Standard Conditions of Approval and Uniformly Applied Development Standards* ("SCAs") in 2008, and they have since been amended and revised several times.[8] 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

[8] A revised set of SCAs was recently published by the City of Oakland on July 22, 2015.

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.

SCA Application in this CEQA Analysis

Mitigation measures and SCAs identified in the 2014 LMSAP EIR that would apply to 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, which the project sponsor has agreed to do or ensure as part of the proposed project. 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.

Most of the SCAs that are identified for the proposed project were also identified in the 2014 LMSAP EIR, the 2011 Redevelopment Plan Amendments EIR, and the 2010 Oakland Housing Element Update EIR and its 2014 Addendum; the 1998 LUTE EIR was developed prior to the City's application of SCAs. As discussed specifically in Attachment A to this document, since certification of the LMSAP EIR, the City of Oakland has revised its SCAs, and the most current SCAs are identified in this CEQA Analysis. All mitigation measures identified in the LMSAP EIR that would apply to the proposed project are also identified in Attachment A to this document.

1314 Franklin Street Mixed-Use Project CEQA Compliance

The proposed project satisfies each of the CEQA provisions, as summarized below.

- **Addendum.** The analysis conducted in this document indicates that, pursuant to CEQA Guidelines Section 15162 through 15164, an addendum to the 2014 LMSAP EIR applies; therefore, this CEQA Analysis is considered to be the addendum. The level of development currently proposed for the site is within the broader development assumptions analyzed in the EIR. As stated in the LMSAP EIR, deviation from the specific site-by-site assumptions in the Development Program may be considered minor as they are anticipated and analyzed in the EIR. Therefore, the proposed project meets the requirements for an addendum, as evidenced in Attachment B to this document.

- **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 is permitted in the zoning district where the project site is located, and is consistent with the land uses envisioned for the site. The analysis herein considers the analysis in the 2010 Oakland Housing Element Update EIR and its 2014 Addendum for the evaluation of the housing component of the proposed project, and further reconsiders the analysis in the 1998 LUTE EIR and 2014 LMSAP 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 2014 LMSAP EIR; or (3) were previously identified as significant effects, but are determined to have a more severe adverse impact than discussed in the LMSAP EIR. Findings regarding the proposed project's consistency with the zoning are included as Attachment C to this document.

- **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 Table D-1 in Attachment D 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 (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 2014 LMSAP EIR; the 2011 Redevelopment Plan EIR; the 1998 LUTE EIR; and for the residential component of the proposed project only, the 2010 Housing Element Update EIR and its 2014 Addendum.

- **Other Applicable Previous CEQA Documents – Prior EIRs and Redevelopment Projects.** The analysis in the 2011 Redevelopment Plan Amendments EIR, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum, 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, per CEQA Guidelines Section 15162, because the level of development now proposed for the site is within the broader development assumptions analyzed in the Previous CEQA Documents.

Overall, based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR, as well as those of the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR (or "Redevelopment Plan Amendments EIR"), and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum—all of which are summarized in the CEQA Checklist in Section VI of this document—the potential environmental impacts associated with the proposed project have been adequately analyzed and covered in the planning-level LMSAP EIR and other Previous CEQA Documents. Therefore, no further review or analysis under CEQA is required.

IV. Project Description

1314 Franklin Street Project Site

Project Location

The 1314 Franklin Street project site ("project site") is located at 1314 Franklin Street, on the block bounded by 13th, 14th, Franklin, and Webster Streets (see **Figure 1**). The project site is approximately 1.37 acres and comprised of one privately-owned parcel (Assessor's Parcel Number 002-0055-001-00).

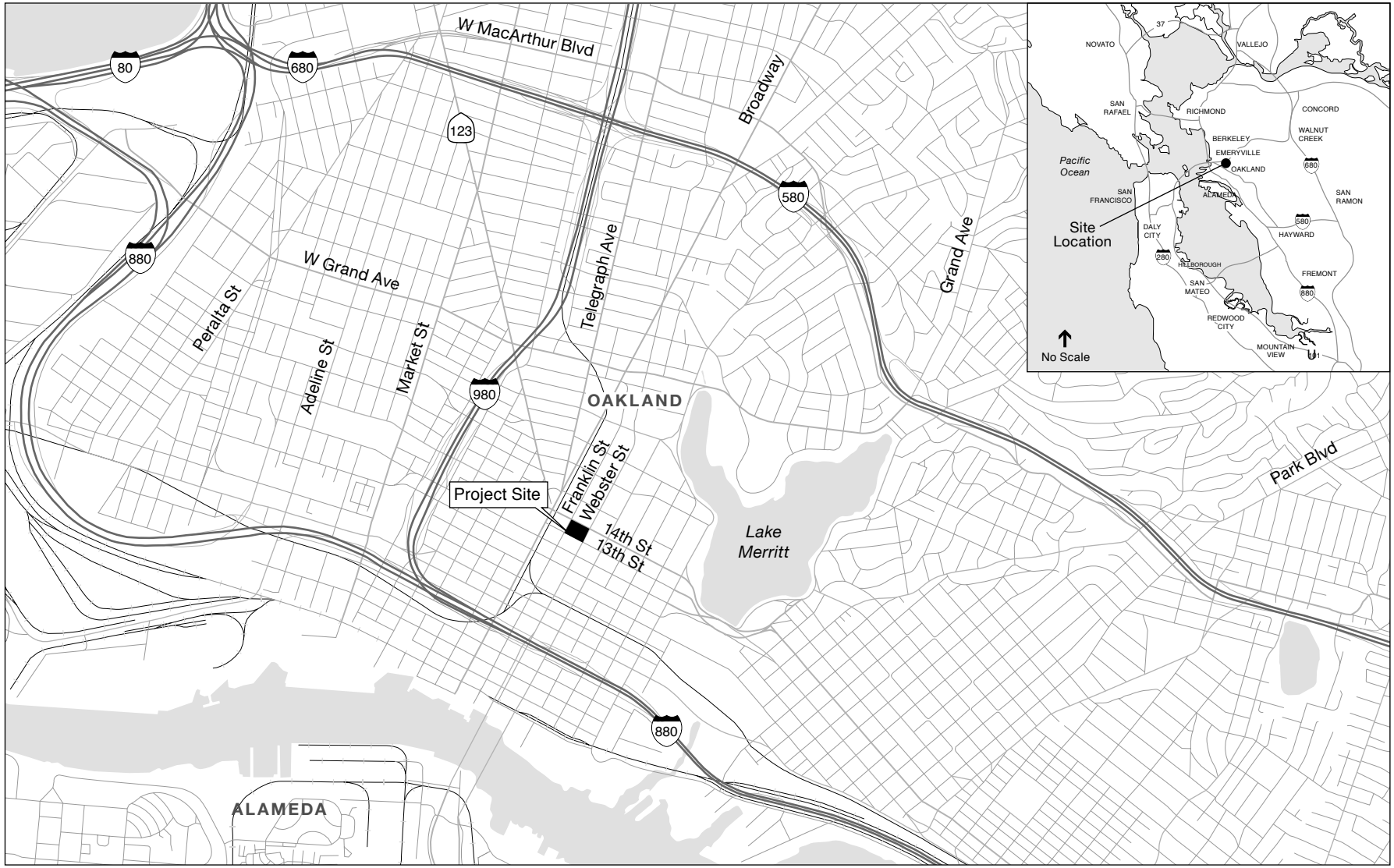
Existing Site Conditions

The project site is occupied by a three-level, 180,000 square-foot parking structure currently being used for public parking. The parking structure is privately operated and has a capacity of approximately 546 vehicles. Access to the parking garage is via an entrance driveway on Webster Street and an exit driveway on Franklin Street. The project site is surrounded by concrete sidewalks on all frontages and a total of 21 street trees representing four species as follows: four each on Franklin and Webster Streets; seven on 13th Street; and six on 14th Street.

Surrounding Context

The area immediately surrounding the project site contains primarily commercial land uses.

- Two mixed-use office buildings, one with 15 stories and one with five stories, with ground-floor retail are located to the west on Franklin Street between 13th and 14th Streets. Existing ground-level retail services include two restaurants and a copy/printing shop.
- Three buildings are located to the east on Webster Street between 13th and 14th Streets. One of the three buildings is a seven-story mixed-use residential building with ground-floor retail, one is a single-story retail building, and one is a five-story mixed-use office building with ground-floor retail and an adjacent gated surface parking lot. Existing ground-level retail services include a restaurant and a bar/lounge.
- Three buildings and a public surface parking lot are located to the south on 13th Street between Franklin and Webster Streets. Two of the three buildings are three-story office buildings, and one is a six-story hotel with ground-floor retail (a restaurant).
- Three buildings are located to the north on 14th Street between Franklin and Webster Streets. One of the three buildings is a seven-story office building with an adjacent gated surface parking lot, one is a two-story retail building, and one is a six-story vacant office building (currently being renovated to house the Greenlining Institute. Existing ground-level retail services include a restaurant and an art supply store.



SOURCE: ESA

1314 Franklin Street Mixed-Use Project . 160602

Figure 1
Project Location

The Bay Area Rapid Transit District ("BART") 12th Street City Center station entrance (14th and Broadway) is approximately 400 feet from the project site. The Lake Merritt BART station is also nearby at approximately one-half mile from the project site. Multiple transit routes serve the project site, including the Alameda-Contra Costa County Transit District ("AC Transit") that provides bus lines and major transfer points along 11th Street (one way, eastbound), 12th Street (one way, westbound), one block south of the project site and along Broadway one block west of the project site. The free Broadway shuttle also operates along Broadway from Jack London Square to approximately 20th Street. Access to and from ramps to I-980 is approximately one block south and six blocks west (via 11th and 12th Streets) of the project site; access to I-880 South is approximately one block west and eight blocks south (at 5th Street and Broadway); access to I-880 North is approximately four blocks east and seven blocks south (at 6th and Madison Streets).

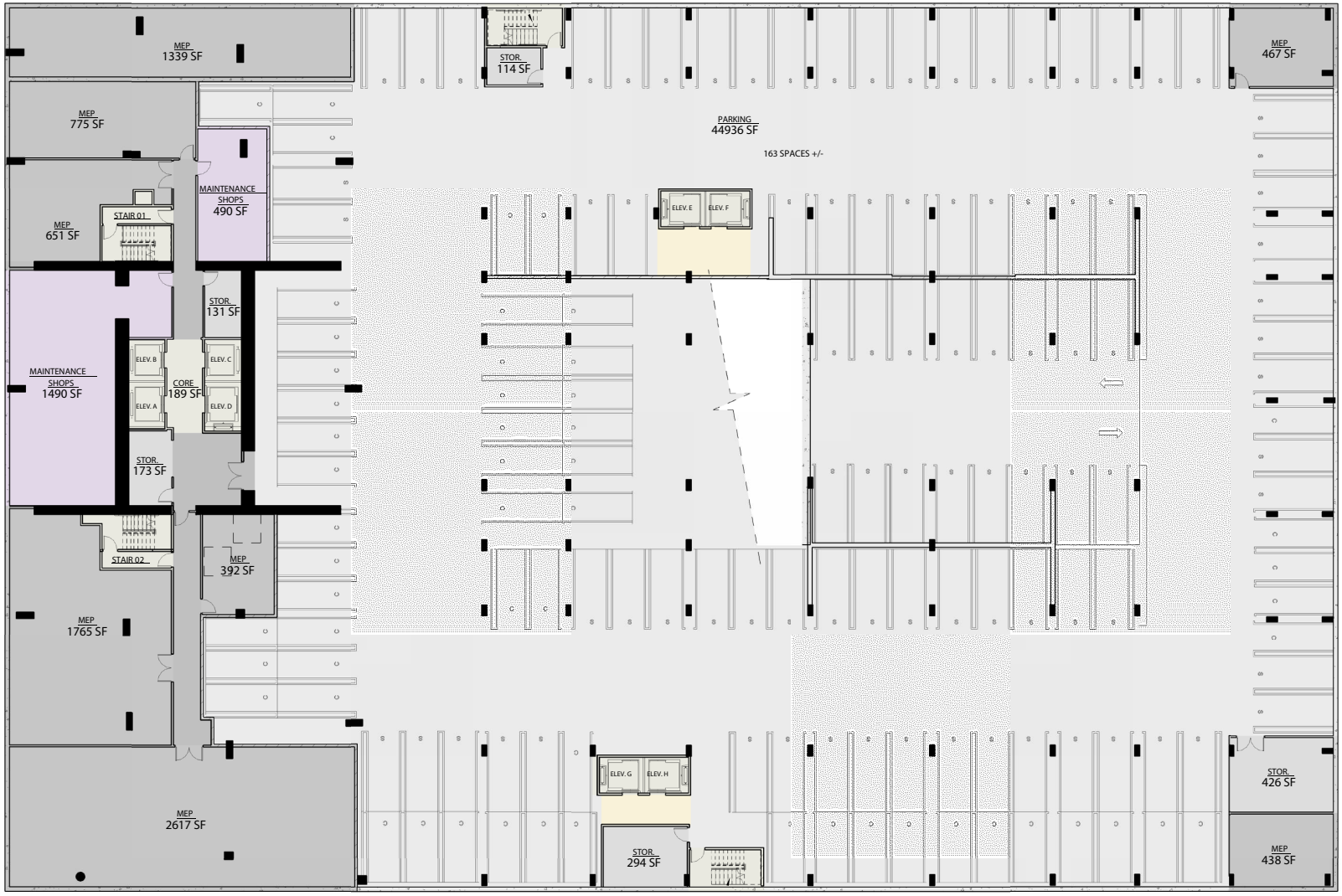
Project Characteristics

1314 Franklin Street Mixed-Use Project Program

The proposed project analyzed in this CEQA Analysis is referred to as the "1314 Franklin Street Project" (or "proposed project"). The Project Sponsor proposes to construct two residential buildings on top of a 30-foot-tall, three-story podium with ground floor retail and a total of five levels of parking, two of which would be below ground. A 40-story tower would be situated on the western side of the project site, facing Franklin Street. An eight-story building would be situated on the remainder of the project site, separated from the tower by an approximately 25-foot-wide breezeway. The proposed project would include a total of up to 635 residential units, up to 18,000 square feet of ground-floor commercial space, and up to 631 on-site parking spaces. The proposed project is consistent with the types of projects considered in the 2014 LMSAP EIR and within the overall development program analyzed in that EIR.

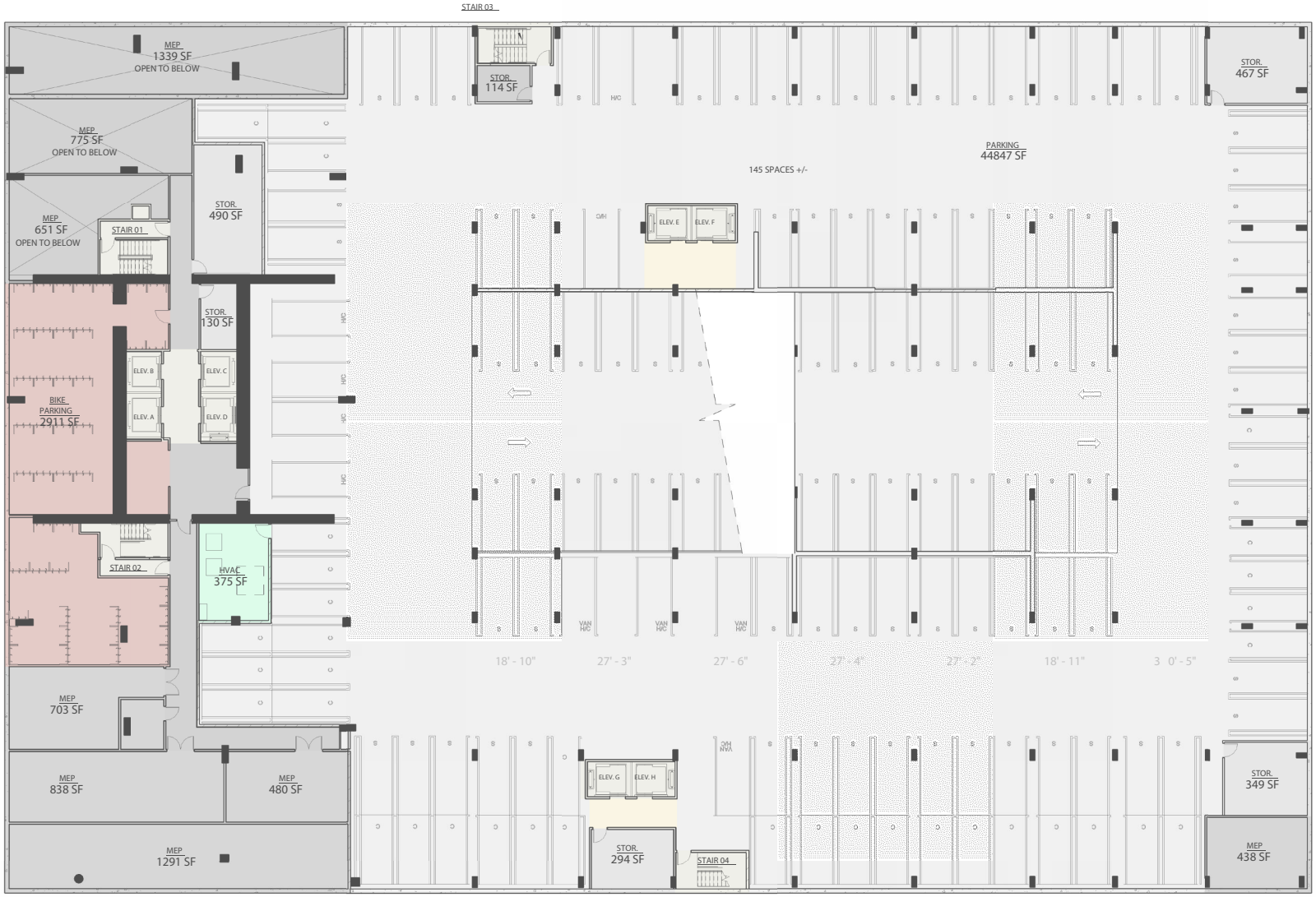
As shown in **Figures 2** through **10**, the parking garage for the proposed project would be located on two basement levels and below the eight-story building on the ground, second, and third floors. The project would provide a total of up to 631 vehicle parking spaces. The commercial spaces and residential lobbies would be located on the ground floor. Residential amenity space would be provided on the fourth floor, 40th floor, and rooftop. The commercial spaces would face Franklin and 14th Streets, as well as at the corner of Webster and 13th Streets; the residential lobby serving the tower would face 14th Street, while the residential lobby serving the eight-story building would face 13th Street. Interior residential units in both buildings would surround an approximately 16,440-square-foot central courtyard including unit terraces, amenity deck, swimming pool, pool terrace, dog run, and garden on the podium (fourth) level. The rooftop amenity deck with swimming pool would provide an additional 2,200 square feet of open space.

Figures 11 and **12** show project elevations that were prepared to illustrate the exterior elevations of the proposed project.



SOURCE: Solomon Cordwell Buenz

Figure 2
Floor Plan for Basement Level 2



SOURCE: Solomon Cordwell Buenz

1314 Franklin Street Mixed-Use Project . 160602

Figure 3

Floor Plan for Basement Level 1

SOURCE: Solomon Cordwell Buenz

1314 Franklin Street Mixed-Use Project . 160602

Figure 4

Floor Plan - Ground Floor

0 20
Feet

North

SOURCE: Solomon Cordwell Buenz

1314 Franklin Street Mixed-Use Project . 160602

Figure 5
Floor Plan - Level 2

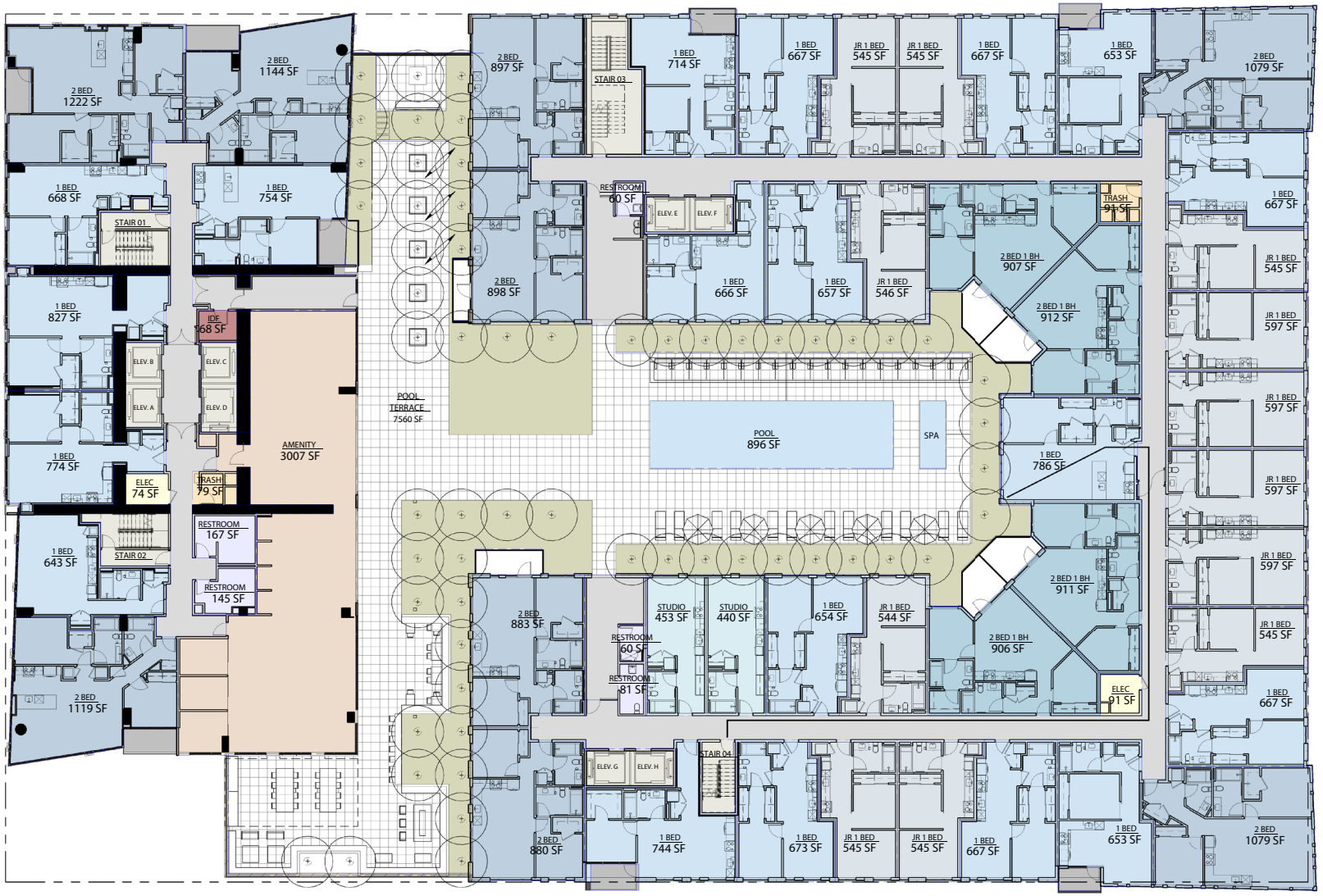
0 20
Feet

North

SOURCE: Solomon Cordwell Buenz

1314 Franklin Street Mixed-Use Project . 160602

Figure 6
Floor Plan - Level 3



SOURCE: Solomon Cordwell Buenz

1314 Franklin Street Mixed-Use Project . 160602

Figure 7

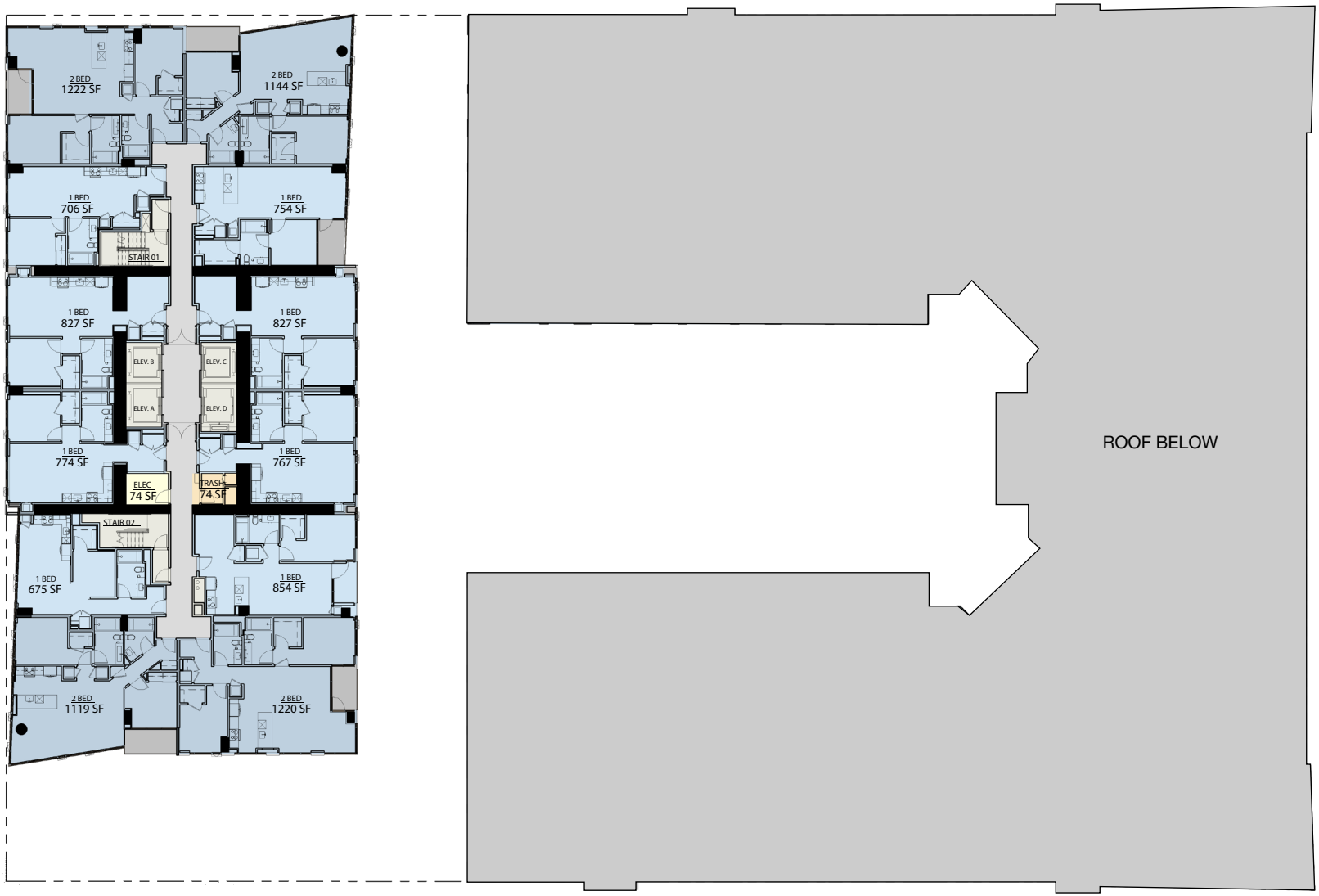
Floor Plan - Level 4 / Top of Podium

SOURCE: Solomon Cordwell Buenz

1314 Franklin Street Mixed-Use Project . 160602

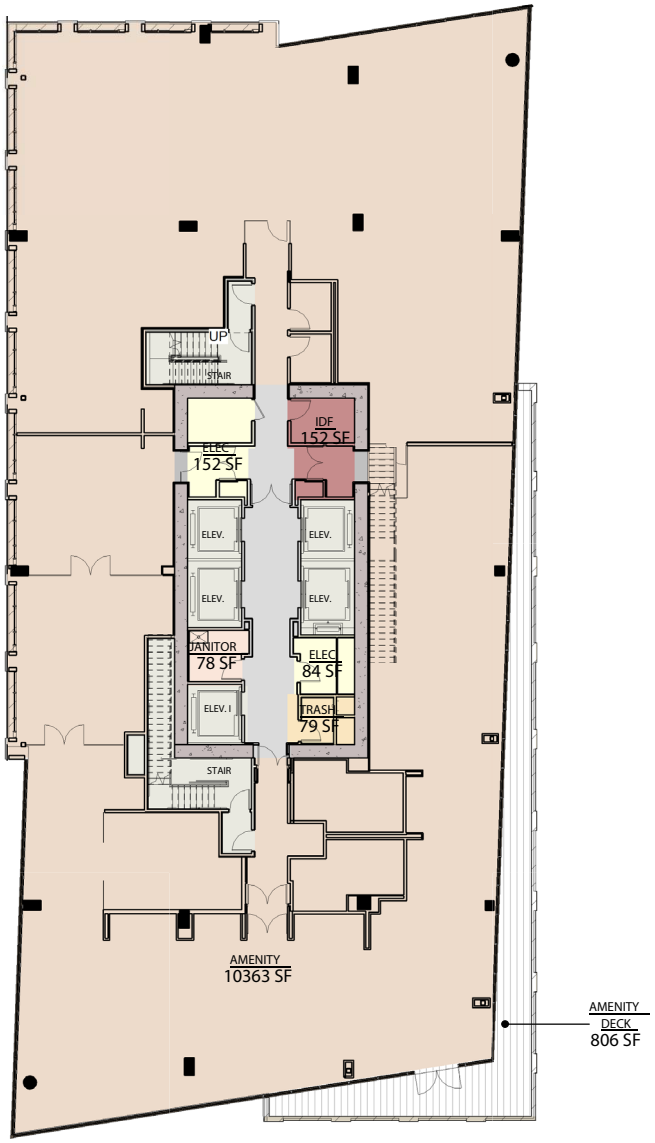
Figure 8

Floor Plan – Level 5 through Level 8

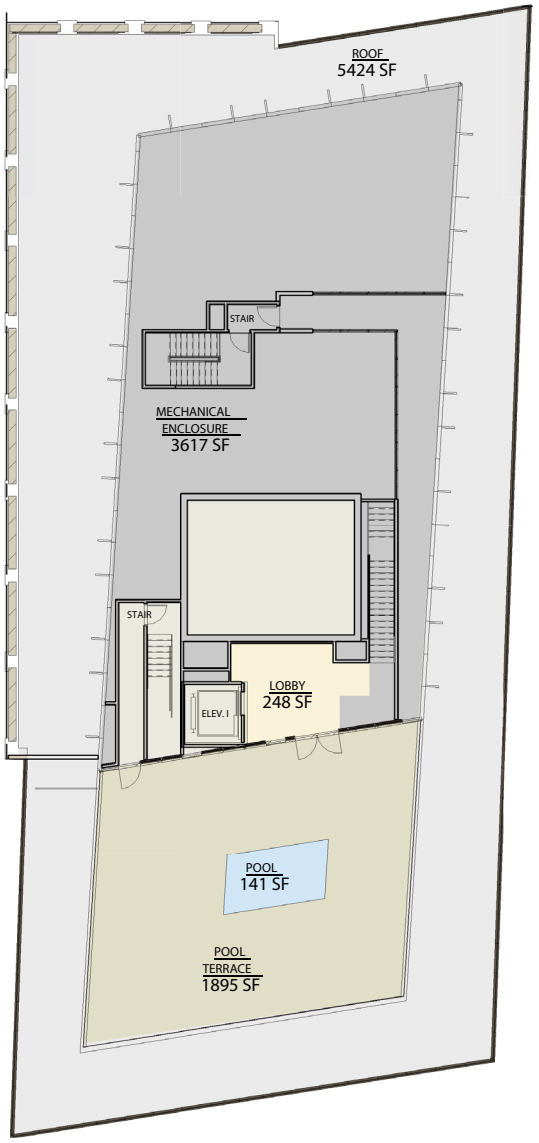


SOURCE: Solomon Cordwell Buenz

Figure 9
Floor Plan – Level 9 through Level 39



LEVEL 40 / AMENITY



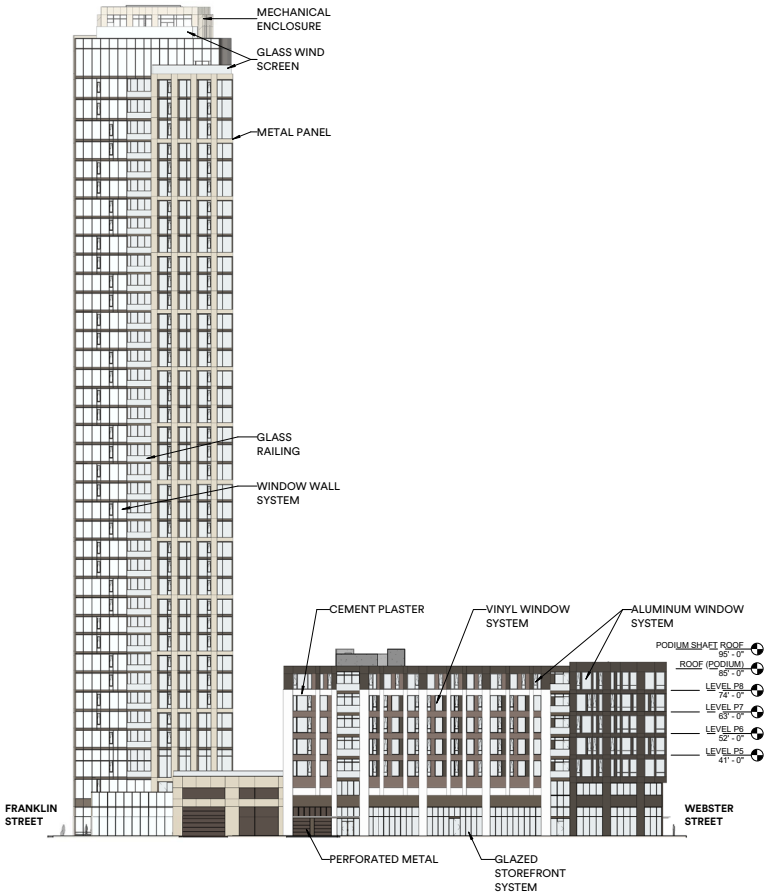
ROOF PLAN

0 20
Feet

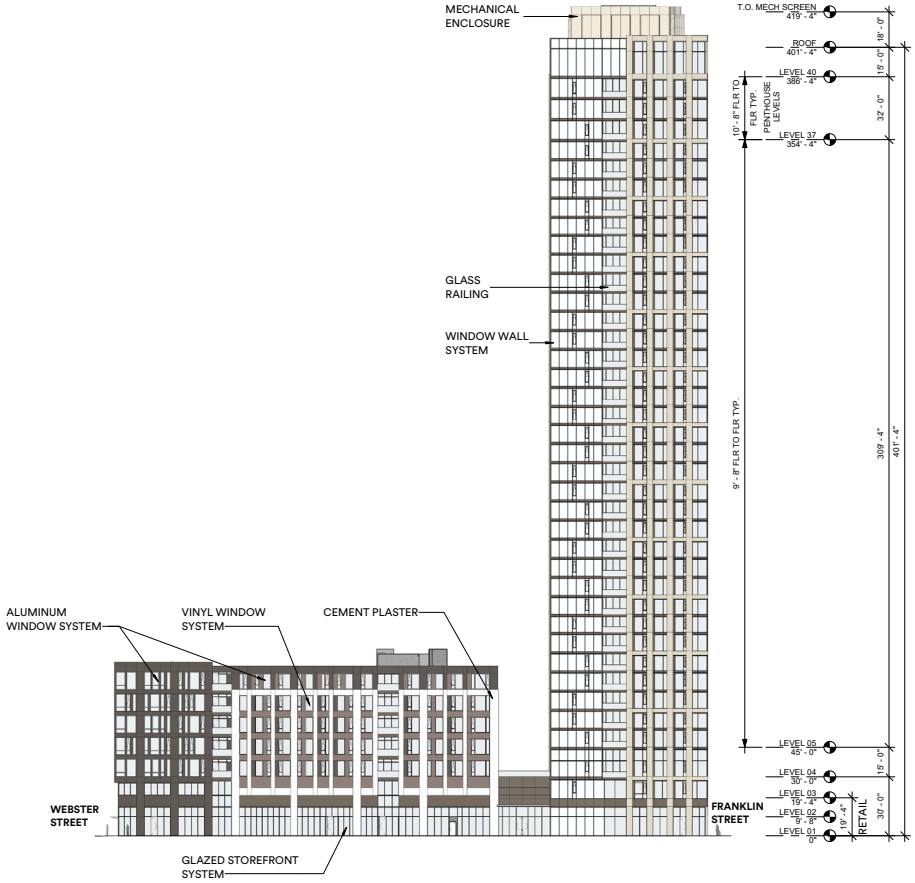
North

SOURCE: Solomon Cordwell Buenz

Figure 10
Floor Plan - Level 40 / Amenity and Roof Plan



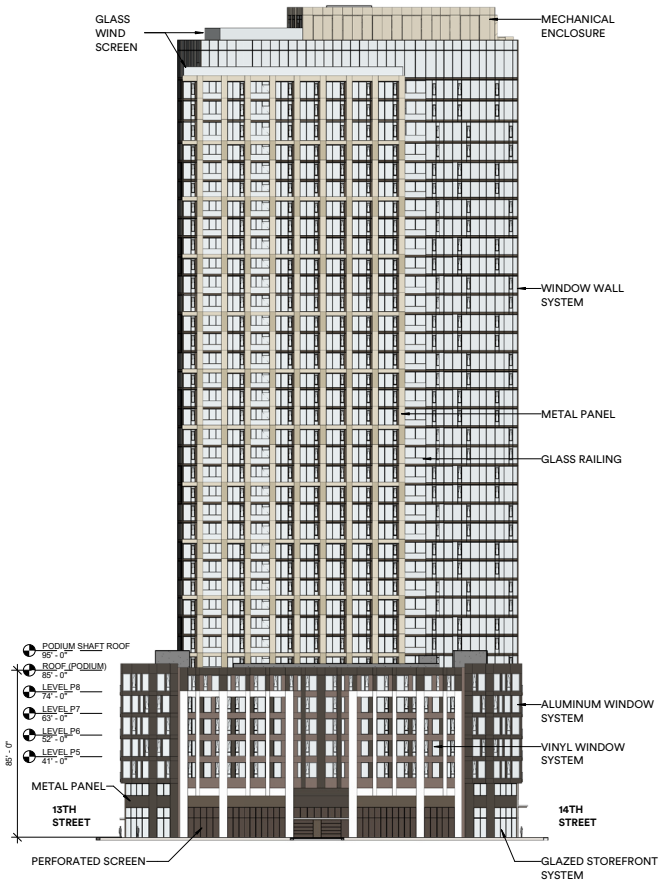
BUILDING ELEVATION - 13TH



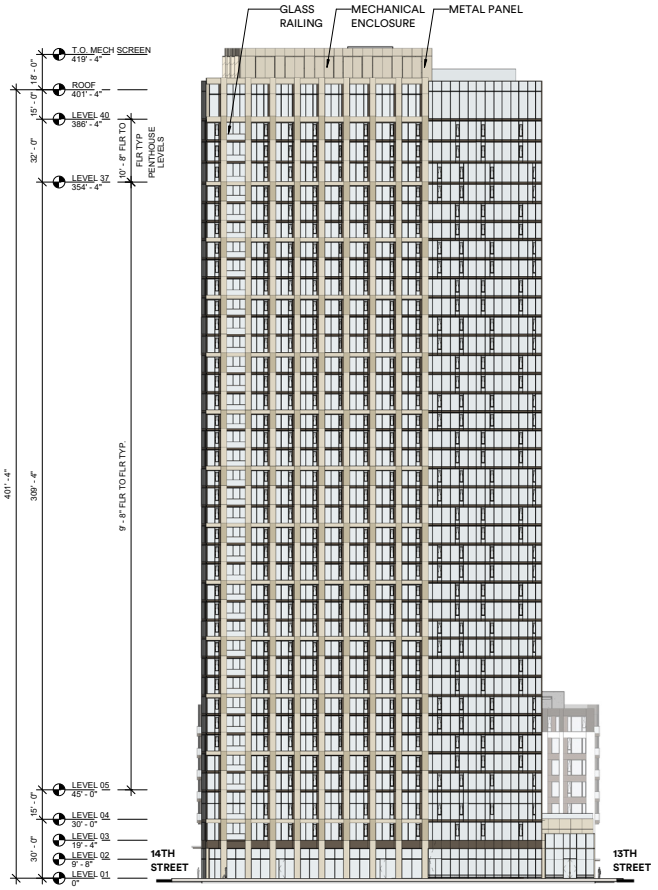
BUILDING ELEVATION - 14TH

SOURCE: Solomon Cordwell Buenz

Figure 11
North and South Elevations



BUILDING ELEVATION - WEBSTER STREET



BUILDING ELEVATION - FRANKLIN

SOURCE: Solomon Cordwell Buenz

1314 Franklin Street Mixed-Use Project . 160602

Figure 12
East and West Elevations

Other Characteristics of the Proposed Project

Landscaping, Open Space, and Tree Removal

Based on the Tree Assessment performed on May 2016, 17 of the 21 street trees on the project site qualify as protected trees per the City of Oakland Protected Trees Ordinance.[9] In order to accommodate construction of the proposed project, all of these trees would be removed following the Conditions of Approval described later in this document. In addition, the proposed project would install new street trees, as required, along all of the street frontages. The proposed project also would provide approximately 54,660 square feet of open space for residents on the podium (fourth floor), 40th floor, and rooftop. Open space and amenities include a roof deck and pool; courtyard with pool, pool terrace, garden, dog run, and amenity deck; a full level of unspecified resident amenities; and unit balconies and terraces.

Parking and Circulation

As noted previously, the proposed project would contain up to 631 vehicle parking spaces in a parking garage that would be located on two basement levels below the eight-story building on the ground, second, and third floors. Four parking spaces would be designated for carshare use, and at least three percent of the total parking spaces would provide charging stations for electric vehicles. A loading area serving both the residential and commercial uses would be provided on the first floor, accessible via 13th Street. Long-term, secured bicycle parking for 370 bicycles would be located on both basement levels of the garage, and bicycle racks along the project site street frontages are proposed to accommodate an additional 30 bicycles.

Vehicular Access. The main parking garage ingress and egress would be located in the middle of the Webster Street façade of the building. A second entrance would be located on 13th Street directly south of the loading area. These two parking garage driveway curb cuts, and the curb cut for the loading area on 13th Street, would be the only three curb cuts constructed by the proposed project. Remaining existing curb cuts would be removed.

Pedestrian Access. Primary pedestrian access to the residential component of the proposed project would be through residential lobbies accessible from Franklin Street (tower) and 14th Street (eight-story building). Pedestrian access to the commercial spaces of the proposed project would be provided via entrances on Franklin and 14th Streets (see **Figure 4**).

Sustainability and Efficiency

The Project Sponsor intends to meet GreenPoint Rated standards and comply with the Green Building ordinance and requirements. The proposed project would optimize the efficiency of its building envelope, and through the use of efficient lighting and HVAC systems it would reduce domestic energy use. The proposed project would meet the newly implemented Building Energy Efficiency Standards.

[9] HortScience, Inc., *Tree Assessment – 1314 Franklin Street Oakland CA*, May 2016.

Construction and Phasing

Project construction is anticipated to last a period of approximately 27 months. Construction activities on the project site would consist of excavation and shoring, foundation and below-grade construction, and construction of the project building and finishing interiors.

Discretionary Project Approvals Requested

The Project Sponsor requests, and the proposed project would require, a number of discretionary actions/approvals, as well as ministerial permits/approvals, as listed below.

Actions by the City of Oakland

- **Conditional Use Permit ("CUP")**: A CUP is required due to 1) the size of the proposed project (over 200,000 square feet); 2) extending the base height to 85 feet; 3) a height exception to the 175-foot height area; and 4) a minor use permit to exceed the maximum tower dimensions.
- **Vesting Tentative Parcel Map ("VTPM")**: VTPM to create commercial and residential condominiums.
- **Building and other Discretionary Development Permits**: Grading and other related onsite and offsite work permits, and minor encroachment permits.
- **Design Review and Density Bonus Approval**: The proposed project would be subject to approval according to the City's Density Bonus regulation and State Density Bonus Law, and to design criteria that are utilized as a part of the City's design review process.

Actions by Other Agencies

- **Bay Area Air Quality Management District ("BAAQMD")**: Issuance of permits for installation and operation of the emergency generator.
- **Regional Water Quality Control Board, San Francisco Bay Region ("RWQCB")**: Acceptance of a Notice of Intent to obtain coverage under the General Construction Activity Storm Water Permit, and Notice of Termination after construction is complete. Granting of required clearances to confirm that all applicable standards, regulations, and conditions for all previous contamination at the site have been met.
- **East Bay Municipal Utility District ("EBMUD")**: Approval of new service requests and new water meter installations.

V. Summary of Findings

An evaluation of the proposed project is provided in the CEQA Checklist in Section VI that follows. This evaluation concludes that the proposed project qualifies for an addendum as well as an exemption from additional environmental review. It is 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 2014 LMSAP EIR, and in the applicable Prior EIRs: the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR, and the 2010 General Plan Housing Element Update EIR and its 2014 Addendum.

The proposed project would be required to comply with the applicable mitigation measures and City of Oakland SCAs identified in the 2014 LMSAP EIR and presented in Attachment A to this document.[10] With implementation of the applicable mitigation measures and SCAs, the proposed project would not result in a substantial increase in the severity of previously identified significant impacts in the 2014 LMSAP EIR, the applicable Prior EIRs, or in any new significant impacts that were not previously identified in any of those Previous CEQA Documents.

In accordance with California Public Resources Code Sections 21083.3, 21094.5, and 21166; and CEQA Guidelines Sections 15183, 15183.3, 15162, 15164, 15168, and 15180, and as set forth in the CEQA Checklist below, the proposed project qualifies for an addendum and one or more exemptions because the following findings can be made:

- **Addendum.** The 2014 LMSAP EIR analyzed the impacts of development within the LMSAP. The proposed project would not result in substantial changes or involve new information not already analyzed in the 2014 LMSAP EIR because the level of development now proposed for the site is within the broader development assumptions analyzed in the EIR. The proposed project would not cause new significant impacts not previously identified in the 2014 LMSAP EIR, or result in a substantial increase in the severity of previously identified significant impacts. No new mitigation measures would be necessary to reduce significant impacts. No changes have occurred with respect to circumstances surrounding the LMSAP that would cause significant environmental impacts to which the proposed project would contribute considerably, and no new information has been put forward that shows that the proposed project would cause significant environmental impacts. Therefore, no supplemental environmental review is required in accordance with Public Resources Code Section 21166, and CEQA Guidelines Sections 15162 through 15164, as well as 15168 and 15180.

- **Community Plan Exemption.** The proposed project would not result in significant impacts that (1) are peculiar to the project or project site; (2) were not previously identified as significant project-level, cumulative, or offsite effects in the 2014 LMSAP EIR, or in the applicable Previous CEQA Documents: 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum; or (3) were previously

[10] Throughout this document, except where necessary for clarity, "2014 LMSAP EIR" encompasses the Initial Study, Draft EIR, and Final EIR for the Lake Merritt Station Area Plan.

identified as significant effects, but—as a result of substantial new information not known at the time the 2014 LMSAP EIR was prepared, or when the Prior EIRs were certified—would increase in severity beyond that described in those EIRs. Therefore, the proposed project would meet the criteria to be exempt from further environmental review in accordance with Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183.

- **Qualified Infill Exemption**. The proposed project would not cause any new specific effects on the environment that were not already analyzed in the 2014 LMSAP EIR or in the applicable Prior EIRs: the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum. Further, the proposed project would not cause any new specific effects on the environment that are more significant than previously analyzed in the 2014 LMSAP EIR, or the aforementioned previously certified applicable Prior EIRs. The effects of the proposed project have been addressed in the 2014 LMSAP EIR and Prior EIRs, and no further environmental documents are required in accordance with Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3.

- **Other Applicable Previous CEQA Documents - Prior EIRs and Redevelopment Projects.** The analysis in the 2011 Redevelopment Plan Amendments EIR, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum, 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, per CEQA Guidelines Section 15162, 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 that EIR and no further environmental documents are required in accordance with CEQA Guidelines Sections 15168 and 15180.

Overall, based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR, as well as those of the 1998 LUTE EIR, the 2011 Redevelopment Plan Amendments EIR (or "Redevelopment Plan Amendments EIR"), and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum—all of which are summarized in the CEQA Checklist in Section VI of this document—the potential environmental impacts associated with the proposed project have been adequately analyzed and covered in the LMSAP EIR and other Previous CEQA Documents. Therefore, no further review or analysis under CEQA is required.

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

Darin Ranelletti
Environmental Review Officer

3/16/17
Date

VI. CEQA Checklist

Overview

The analysis in this CEQA Checklist provides a summary of the potential environmental impacts that may result from the proposed project. The analysis in this CEQA Checklist also summarizes the impacts and findings of the certified 2014 LMSAP EIR[11], as well as the Prior EIRs that covered the environmental effects of various projects encompassing the project site and that are still applicable for the proposed project. As previously indicated, the Prior EIRs are referred to collectively throughout this CEQA Analysis as the "Previous CEQA Documents" and include the 1998 Land Use and Transportation Element EIR, the 2011 Central District Urban Renewal Plan (or Redevelopment Plan) Amendments EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum. 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 Section II and throughout this Checklist, the overall environmental effects identified in each are largely the same; any significant differences are noted.

Several SCAs would apply to the proposed project because of the proposed project's characteristics; the SCAs are triggered because the City is considering discretionary actions for the proposed project.

All SCAs identified in the 2014 LMSAP EIR that would apply to 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, which the Project Sponsor has agreed to do or ensure as part of the proposed project. 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.

Most of the SCAs that are identified for the proposed project were also identified in the 2014 LMSAP EIR, the 2011 Redevelopment Plan Amendments EIR, and the 2010 Oakland Housing Element Update EIR and its 2014 Addendum; the 1998 LUTE EIR was developed prior to the City's application of SCAs. As discussed specifically in Attachment A to this document, since certification of the LMSAP EIR, the City of Oakland has revised its SCAs, and the most current SCAs are identified in this CEQA Analysis. All mitigation measures identified in the LMSAP EIR that would apply to the proposed project are also identified in Attachment A to this document.

This CEQA Checklist hereby incorporates by reference the discussion and analysis of all potential environmental impact topics as presented in the certified 2014 LMSAP EIR and the Previous CEQA Documents. This CEQA Checklist provides a determination of whether the proposed project would result in:

[11] Reference to the "2014 LMSAP EIR" or the "LMSAP EIR" encompasses the Initial Study, Draft EIR, and Final EIR for the Lake Merritt Station Area Plan.

- Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents;
- Substantial Increase in Severity of Previously Identified Significant Impact in the Previous CEQA Documents; and/or
- 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 2014 LMSAP EIR and the Previous CEQA Documents, the checkbox for "Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents" is checked.

If the checkbox for "Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents" or "New Significant Impact" were checked, there would be significant impacts that are:

- Peculiar to project or project site (per CEQA Guidelines Sections 15183 or 15183.3);
- Not identified in the previous 1998 LUTE EIR, 2010 General Plan Housing Element Update EIR and its 2014 Addendum, Redevelopment Plan Amendments EIR, or 2014 LMSAP EIR (per CEQA Guidelines Sections 15183 or 15183.3), including offsite 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 Sections 15162 and 15168); and/or
- Due to substantial new information not known at the time the Previous CEQA Documents were certified (per CEQA Guidelines Sections 15162, 15168, 15183, or 15183.3).

None of the aforementioned conditions were found for the proposed project, as demonstrated throughout the following CEQA Checklist and in its supporting attachments (Attachments A through D) that specifically describe how the proposed project meets the criteria and standards specified in the CEQA Guidelines sections identified above.

1. Aesthetics, Shadow, and Wind

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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 25980-25986); 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 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.	☒	☐	☐

Previous CEQA Documents Findings

Scenic vistas, scenic resources, visual character, light and glare, and shadow were analyzed in each of the Previous CEQA Documents, which found that the effects to these topics would be less than significant. The Redevelopment Plan EIR and the Housing Element Update EIR and its 2014

Addendum cited applicable SCAs that would ensure the less-than-significant visual quality effects. The 1998 LUTE EIR identified mitigation measures that are functionally equivalent to the SCAs to reduce certain potential effects to less-than-significant levels. The 1998 LUTE EIR also identified significant and unavoidable impacts regarding wind hazards.

LMSAP EIR Findings

The 2014 LMASP EIR determined that with implementation of SCAs, impacts related to aesthetics would be less than significant with development occurring under the LMSAP. Individual projects would be subject to the design guidelines outlined in the LMSAP and would be required to comply with the height limits identified in the LMSAP. The LMSAP EIR did not analyze potential wind hazards, determining that such analysis shall be undertaken for specific projects, as applicable pursuant to the City of Oakland's thresholds of significance.

Project Analysis

Aesthetics (Criterion 1a)

The proposed project would construct one building with a 40-story tower and an eight-story building, including a three-story podium, on the project site. The project site is currently occupied by a three-story parking structure. The maximum height of the proposed high-rise tower is approximately 400 feet tall, and 85 feet tall for the eight-story building. The proposed building design and siting on the parcel would align with the adjacent buildings, and the buildings would be developed to cover the entire lot. The ground-floor commercial base would create a continuous streetwall consistent with the buildings in the immediate project site surroundings (see **Figure 4**). The proposed project would not have an adverse effect on the visual character of this portion of Downtown. As the proposed project would be constructed on an existing block in a densely built urban area and would not alter street patterns, the proposed buildings would not obstruct views of existing scenic vistas. In addition, given the relative height of the building compared to taller and varied building heights Downtown in general, as well as the limited views in the area because of the dense, multi-story development, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. The proposed project also would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

The potential impacts of the proposed project regarding scenic vistas, scenic resources and visual character would be similar to, or less severe than, those identified in the LMSAP EIR and the Previous CEQA Documents considered in this analysis. The proposed building would not obstruct views of existing scenic vistas or degrade the visual character or quality of the site and its surroundings. As shown in the project plans in **Figures 2** through **12**, the building and site layout would result in development that is compatible with the visual character and patterns in this portion of Downtown. Development of the proposed project also would be required to comply with the City of Oakland SCAs related to landscaping, street frontages, landscape maintenance, utility undergrounding, public right-of-way improvements, graffiti control, and lighting plans; therefore, the visual impacts of the proposed project would remain less than significant.

Shadow (Criteria 1b through 1d)

Except for the 1998 LUTE EIR, each of the Previous CEQA Documents found less-than-significant shadow effects, assuming incorporation of applicable SCAs. The 1998 LUTE EIR identified mitigation measures, functionally equivalent to the SCAs, to reduce potential shadow effects to less-than-significant levels.

There are no unusual circumstances regarding shadow that could reasonably cause the proposed project to have a significant effect. Shadow study diagrams illustrating project shadow at representative times of the day and year (9:00 a.m., 12 noon, and 3:00 p.m. on the summer and winter solstices and the spring equinox) were prepared to determine if the proposed project would cast adverse (prolonged) shadows on nearby public open spaces and/or historic resources (see Appendix A). The shadow diagrams indicate that the project shadow would reach Frank Ogawa Plaza on the Winter Solstice (late December) during the morning. However, the shadow cast during this time of year would be very narrow due to the low position of the sun in the sky. In addition, mid- and high-rise buildings between the project site and these nearby public open spaces could block some or all of the project shadow. Thus, the shadow from the proposed project would not result in a substantial impairment of the park's beneficial use; the new shadow would not be considered a significant effect.

In terms of historic resources, the City of Oakland's CEQA thresholds of significance state that a significant impact would occur if a project were to shade designated historic resources such that the new shadow would "materially impair" the resource's historic significance. While access to light is not typically an important characteristic of most historic buildings, it may be of historic places of worship where the light, specifically the light through stained glass windows, contributes to its architectural historical significance. A prolonged blockage of direct sunlight, throughout the day and year, could materially impair its historic significance and lead to a significance impact. Therefore, under this criterion, new and prolonged shading of stained glass windows on places of worship that are considered historic resources under CEQA, could result in a significant impact when the access to natural light during those times is a material character defining element of the historic resource.

An historic church building located approximately one-quarter mile north of the project site at 1701 Franklin Street, which was owned and operated for over 100 years by the First Church of Christ Scientist prior to being sold in January 2016 for use as a retail store, is considered to be an historical resource for CEQA purposes. Although not currently operating as a church, the use of the building could revert to church activities in the future and therefore warrants consideration. According to the Oakland Cultural Heritage Survey, the church building is rated "A3" which means the building is of highest importance and is not located in one of the City's designated historic districts. The shadow diagrams indicate the possibility of a project shadow being cast between 2:00 and 3:00 p.m. on the Winter Solstice (late December). During this timeframe, the proposed project could add some new shadow to a portion of the stained glass windows, reducing the amount of available light through the windows on its south-facing façade, as well as the amount of light penetrating the interior sanctuary space through these windows. However, the shadow cast during this time of year would be very narrow due to the low position of the sun in the sky. In addition, the 15-story AT&T Building (1587 Franklin Street) located directly across

17th Street on the south side of the church would likely block all of the project shadow. The proposed project would not materially alter other physical characteristics, including notable architectural elements, which convey the church's historical significance and which are presumed to justify its inclusion in the local register of historical resources.

Based on the above description of the limited shadow duration and the presence of existing shadow cast by another building, the project shadow would not materially impair the historic significance of this resource, and thus would not constitute a significant impact under CEQA. As discussed in preceding paragraphs, the tower form of the project is typical and encouraged in this urban CBD context, and this building form and environmental conditions regarding shadow are general circumstances of in-fill high-rise projects located in the downtown. Therefore, the project would not result in a significant effect regarding its proximity to a public park, or historic resource.

According to the City's 2016 list of permitted solar collection facilities and the shadow study diagrams (see Appendix A), the following building contains permitted solar collectors and would fall within the shadow projected to be cast by the proposed project:[12]

- 339 15th Street: three-story multi-tenant historic commercial building (the White Building)

The proposed project would introduce new shading on the White Building during the spring and fall in the late afternoon. No new shading is expected to occur during the summer or winter months. In general, solar collectors collect sun power during the period from two hours prior and two hours post solar noon—the time at which the sun is directly south. Due to daylight savings, this period ranges from approximately 11 a.m. to 3 p.m. during spring and fall months. During these months, all potential new shading would occur after 3:00 p.m. and would therefore occur during a time when there is very little sun power left. The collectors would be completely exposed during the entirety of the important 11 a.m. to 3 p.m. time periods.

While this additional shading may slightly reduce the ability of solar collectors at the White Building to collect sun power, the new shadow would not substantially compromise their effectiveness and thus would not result in a substantial loss of power, income, or use from the collectors. Moreover, the new shading would not substantially impair the function the solar collectors as they contribute to the commercial building and the impact is considered less-than-significant.

Therefore, the potential impacts of the proposed project regarding shadows would be similar to, or less severe than, those identified in the LMSAP EIR and the Previous CEQA Documents considered in this analysis.

[12] City of Oakland, Inventory of Permitted Solar Collection Facilities opened between 1/1/2013 and 7/18/2016.

Wind (Criterion 1e)

The City of Oakland considers a significant wind impact to occur if a project were to "Create winds exceeding 36 miles per hour (mph) for more than one hour during daylight hours during the year." A wind analysis is required if a project's height is 100 feet or greater and one of the following conditions exists: (a) the project is located adjacent to a substantial water body; or (b) the project is located in Downtown. Since the proposed project would be greater than 100 feet in height and is located in Downtown, a wind study was conducted for the proposed project to assess the wind environment around the project site under existing and existing plus project conditions (see Appendix B).[13] The analysis measured changes to the wind environment in terms of criterion for pedestrian comfort and the criterion for wind hazards.

The wind analysis tested wind speeds at 54 locations on a model of the project site and all relevant surrounding buildings and topography within a 1,500 foot radius of the project site. The results of the wind study showed that wind speeds around the project site are generally low with the highest winds occurring along Franklin Street at the 13th and 14th Street intersections. In the existing configuration winds currently exceed the 11 mph pedestrian comfort criterion on average two percent of the time. Under the existing plus project conditions and cumulative plus project scenarios, wind speeds generally remained similar although the pedestrian comfort criterion was exceeded on average five percent of the time. Further, the criterion for wind hazards—the 36 mph threshold for a significant wind impact—was not exceeded under any of the three scenarios tested. Therefore, the proposed project would not result in a significant impact with respect to wind hazards.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the LMSAP EIR and the Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the LMSAP EIR or the Previous CEQA Documents, nor would it result in new significant impacts related to aesthetics, shadow, or wind that were not identified in the LMSAP EIR or the Previous CEQA Documents. Implementation of **SCAs AES-1, Graffiti Control, AES-2, Landscape Plan, AES-3, Lighting, and SCA UTIL-2, Underground Utilities** (see Attachment A) would be applicable to and would be implemented by the proposed project and would further ensure that aesthetics-related impacts would be less than significant. No mitigation measures are required.

[13] RWDI, October 18, 2016. 1314 Franklin Pedestrian Wind Study.

2. Air Quality

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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 one 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 a 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 a 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.	☒	☐	☐

Previous CEQA Documents Findings

Construction and Operational Emissions and Odors. The 1998 LUTE EIR identified mitigation measures that would address operational emissions effects to less-than-significant levels, and it found significant and unavoidable cumulative effects regarding increased criteria pollutants from increased traffic regionally. The Redevelopment Plan EIR and Housing Element Update EIR and its 2014 Addendum found that emissions associated with construction and operations resulting from increased criteria pollutants would result in less-than-significant effects with incorporation of SCAs. The Redevelopment Plan EIR and Housing Element Update EIR and its 2014 Addendum also identified effective SCAs to address potentially significant effects regarding dust/Particular Matter $(PM)_{10}$, odors, and consistency with the applicable regional clean air plan.

Toxic Air Contaminants. The 1998 LUTE EIR did not quantify or address cumulative health risks, as such analysis was not required when that EIR was prepared. The Redevelopment Plan

EIR and Housing Element Update EIR and its 2014 Addendum identified significant and unavoidable impacts regarding cumulative health risks after the consideration of SCAs.

LMSAP EIR Findings

The 2014 LMSAP EIR identified less-than-significant impacts regarding consistency with the current Bay Area 2010 Clean Air Plan ("Clean Air Plan"), with implementation of applicable SCAs. The LMSAP EIR also identified impacts associated with potential exposure of sensitive receptors to substantial health risks from toxic air contaminants ("TACs") from sources including both diesel particulate matter ("DPM") and gaseous emissions. The LMSAP EIR identified SCAs to reduce DPM exposure to less-than-significant levels, but risk from gaseous TACs would (plan and cumulative level) be a significant and unavoidable impact. The LMSAP EIR also identified potential impacts associated with the installation of back-up generators (a source of TACs) and identified SCAs to reduce the potential effect to less-than-significant levels. Moreover, as discussed further below, the Bay Area Air Quality Management District's ("BAAQMD") does not permit any new generators that may have emissions levels that pose adverse health impacts.

The LMSAP EIR did not quantitatively assess criteria air pollutants from construction or operation, determining that such analysis shall be undertaken for specific projects, as applicable pursuant to the City of Oakland's thresholds of significance.

Project Analysis

Construction and Operational Emissions (Criterion 2a)

Construction Air Emissions

Methodology and Assumptions

The analysis below used the following methodology and assumptions to calculate the average daily construction emissions associated with a worst-case construction scenario for the proposed project:

- Construction emissions were estimated using CalEEMod (version 2016.3.1) assuming construction to begin in December 2017.
- The length of the various construction phases (e.g., demolition, grading, building, etc.) were provided by the project applicant;
- The number and types of construction equipment used for each phase, their activity level as well as the number of off-road vehicle trips (worker, vendor and hauling trips) during each phase were also provided by the applicant;
- Demolition of 180,000 square feet of existing structures;
- Excavation and off-haul of 46,179 cubic yards of material based on a total 60,000 square feet building footprint, 15 feet of excavation depth and a 25% percent soil expansion factor;
- Construction of up to 635 units of residential apartment use and up to 18,000 square feet of retail use.

Analysis

The average daily construction-related emissions for the proposed project, as estimated using CalEEMod based on the assumptions above, are presented in **Table AIR-1**. As shown in the table, annual average daily construction emissions for the proposed project would not exceed the City's Thresholds for ROG NO_x, PM_{10} or $PM_{2.5}$. These thresholds were developed to represent a cumulatively considerable contribution to regional air quality, and, as such, represent not only a project level threshold but a cumulative threshold as well. The LMSAP EIR did not quantitatively assess criteria air pollutants from construction. As shown in Table AIR-1, the proposed project would have less-than-significant project-level impacts with respect to construction emissions and thus would not result in a new or more severe significant impact compared with the LMSAP EIR.

TABLE AIR-1
UNMITIGATED EMISSIONS FROM CONSTRUCTION (average lbs per day)[a]

Construction Year (phase)	ROG	NO_x	PM_{10}	$PM_{2.5}$
Project				
Average Daily Construction Emissions	15.0	18.7	<1	<1
City of Oakland Thresholds	54	54	82	54
Significant (Yes or No)?	**No**	**No**	**No**	**No**

[a] Project construction emissions estimates were made using CalEEMod, version 2016.3.1. Emissions are average daily pounds per day and are estimated by dividing the total construction emissions generated by the project with the total number of construction workdays.

SOURCE: ESA, 2016.

Operational Air Emissions

Methodology and Assumptions

The analysis below used the following assumptions to calculate the daily operational emissions associated with a worst-case construction scenario for the proposed project:

- The vehicle trip generation rates that were input into CalEEMod (Version 2016.3.1) account for the 2000 Bay Area Travel Survey ("BATS") modal split adjustment factor that is required by the City of Oakland for near-transit developments as well as an adjustment factor for pass by trips. A reduction of 43 percent is assumed based on the City's Guidelines for development in an urban environment within 0.5 miles of a BART station and a 20 percent reduction in trips is assumed to account for pass by trips;
- The operational emissions generated assumed a default number of fireplaces. All fireplaces were assumed to be gas-fired. No wood burning fireplaces or woodstoves were assumed;
- Default energy consumption rates reflecting 2013 Title 24 demand were adjusted down 28 percent for residential uses and five percent for nonresidential uses to reflect improvements in the 2016 update to Title 24, which became effective on January 1, 2017;
- All wastewater generated was assumed to be aerobically processed at EBMUD plant. Septic and lagoons contributions were set to a zero percentage;

- Twenty percent reduction in indoor water use was assumed for all uses to account for required compliance with the City's CalGreen code;
- All other inputs in CalEEMod were based on model default values; and
- One backup diesel generator was assumed pursuant to California Building Code Requirements for buildings in excess of 70 feet. The generator was assumed to have a rating of 560 kW-hr (750 hp) and was assumed to be operated for maintenance purposes for 1 hour per test day and a maximum of 50 hours per year.

Analysis

The daily operational emissions for the proposed project, based on the assumptions above, are presented in **Table AIR-2**. As shown in the table, annual average daily regional emissions for the proposed project would not exceed the City's thresholds for ROG, NOx, PM_{10} or $PM_{2.5}$. As with the construction thresholds, these thresholds were developed to represent a cumulatively considerable contribution to regional air quality and, as such, represent not only a project-level threshold but a cumulative threshold as well. The LMSAP EIR did not quantitatively assess criteria air pollutants from operation under the LMSAP. As shown in Table AIR-2, the proposed project would have less-than-significant project-level impacts with respect to operational emissions and thus would not result in a new or more severe significant impact compared with the LMSAP EIR.

TABLE AIR-2
UNMITIGATED EMISSIONS FROM OPERATION (lbs per day)[a]

	ROG	NO_x	PM_{10}	$PM_{2.5}$
Project				
Area Source Emissions (lbs/day)	17.7	0.4	0.15	0.15
Energy Emissions (lbs/day)	0.2	1.8	0.15	0.15
Project Mobile Source Emissions[b] (lbs/day)	5.6	34.2	13.2	3.7
Backup Diesel Generators (lbs/day)	0.17	0.75	0.02	0.02
Average Daily Emissions (lbs/day)	**23.7**	**37.2**	**13.5**	**4.0**
City of Oakland Thresholds	54	54	82	54
Significant (Yes or No)?	**No**	**No**	**No**	**No**
Annual Emissions (tons/year)	**4.3**	**6.8**	**2.5**	**0.7**
City of Oakland Thresholds	54	54	82	54
Significant (Yes or No)?	**No**	**No**	**No**	**No**

[a] Project operational emissions estimates were made using CalEEMod, version 2016.3.1.
[b] The vehicle trip rates used to calculate the emissions accounts for mode split and internal capture as recommended by the City of Oakland for projects located in dense, urban environments such as the project site. Trips rates were also reduced to account for pass by trips.

SOURCE: ESA, 2017.

Toxic Air Contaminants (Criterion 2b)

Assumptions and Methodology

Toxic Air Contaminants (TAC) generated during project construction or project operations and the exposure of new sensitive receptors to substantial ambient levels of TACs from existing and proposed sources were evaluated based on the following assumptions.

TACs are types of air pollutants that can cause health risks. TACs do not have ambient air quality standards, but are regulated using a risk-based approach. This approach uses a health risk assessment to determine what sources and pollutants to control as well as the degree of control. The health risk assessment presented in the analysis below considers exposure to toxic substances, and human health risks from exposure to toxic substances is estimated based on the potency of the toxic substances. Such an assessment evaluates chronic, long-term effects, calculating the increased risk of cancer as a result of exposure to one or more TACs.

Additionally, the City's CEQA significance thresholds require that new projects containing sensitive receptors (such as residents) be evaluated to determine whether those receptors would be exposed to health risks from existing nearby sources of TACs.[14] When siting new sensitive receptors, existing TAC sources located within 1,000 feet including, but not limited to, stationary sources, freeways, and major roadways (10,000 or greater vehicles per day) should be considered. The BAAQMD provides a publicly available inventory of TAC-related health risks for permitted stationary sources throughout the San Francisco Bay Area Air Basin as well as for freeways. The inventory presents community risk and hazards from screening tools and tables that are intentionally conservative. The screening-level risk factors derived from the BAAQMD's tools are intended to indicate whether additional review related to the impact is necessary and are not intended to be used to assess actual risk for all projects.

Analysis

Construction Impact to Existing Receptors. Project construction activities would produce TACs such as diesel particulate matter (DPM) and $PM_{2.5}$ emissions from the exhaust of diesel fueled construction equipment such as loaders, backhoes, and cranes, as well as haul truck trips. These emissions could result in elevated concentrations of DPM and $PM_{2.5}$ at nearby receptors. Exposure of receptors to these elevated concentrations could lead to an increase in the risk of cancer or other health impacts. Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations.

The BAAQMD has developed screening tables for commercial and residential land use development projects that estimate screening distances from sensitive receptors sufficient to avoid exposure to substantial construction-related health risks. For development sites of up to 1.7 acres in

[14] A recent California Supreme Court decision clarified that CEQA requires the analysis of potential adverse effects of a project on the environment; potential effects of the environment on a project are legally not required to be analyzed or mitigated under CEQA. However, this analysis nevertheless assesses potential effects of "the environment on the project" in order to provide information to decision-makers.

area, a screening distance of 95 meters (312 feet) is identified as sufficient to avoid a construction-related TAC impact. The project site is located approximately 80 feet from the nearest sensitive receptors in a seven-story mixed-use residential building across Webster Street to the east. Therefore, a potential impact of the proposed project regarding exposure to construction-related health risks to nearby receptors would be potentially significant. The LMSAP EIR also determined that sensitive receptors in proximity to construction-related DPM emissions (generally within 200 meters) could be subject to increased cancer risk, chronic health problems and acute health risk. However, all future development projects pursuant to the LMSAP including the proposed project would be subject to construction control measures through implementation of the City's SCAs. SCA AIR-1, which for this project would also require "enhanced" construction emission control measures, would implement construction-related Best Management Practices to substantially reduce construction-related impacts. These measures require that all construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology (BACT) for emission reductions of NOx and PM. Currently, this would require construction equipment with Environmental Protection Agency (EPA)-certified Tier 4 engines, which reduce NOx and PM emissions by 90 percent. A Construction Health Risk Assessment (included in Appendix **C**) was conducted for the proposed project using the US EPA approved AERMOD dispersion model and project construction emissions estimated using the California Emissions Estimator Model (CalEEMod). DPM concentrations at eleven nearest sensitive receptors surrounding the project site were modeled using AERMOD. Cancer and chronic risk values and $PM_{2.5}$ concentration at the receptor with the highest modeled DPM concentration were estimated using California Air Resources Board's Risk Assessment Standalone Tool (RAST). Without implementation of the City's SCA AIR-1, modeled cancer risk at the nearest sensitive receptor (Maximum Exposed Individual Receptor [MEIR]) would be 112 in a million and would exceed the project level threshold of 10 in a million. However, implementation of SCA AIR-1 with the use of all Tier 4 equipment for project construction would reduce this risk at the MEI to 4 in a million, a less than significant impact. Regarding the feasibility of obtaining Tier 4 off-road construction equipment, some jurisdictions have adopted Clean Construction Ordinances and implementation guidance, which is relevant to the implementation of best available control technology under SCA-AIR-1. The implementation guidance presents the results of a statewide data summary gathered by the California Air Resources Board as part of compliance with the In-Use Off-Road Diesel Regulation.[15] The data indicate the available construction equipment at various engine tier levels. These data indicate that in 2014 approximately 59 percent of all off-road equipment in the state were operating with Tier 2 engines or better, with 22 percent of statewide inventory consisting of Tier 4 equipment. Though the mitigated scenario shows results with the use of Tier 4 equipment, similar reductions in PM and associated health risk can be achieved with the use of Level 3 particulate filters on equipment Tier 2 or higher. Given that the majority of equipment statewide is capable of complying with the conditions of SCA-AIR-1, it is reasonable to conclude that the measure represents feasible mitigation. Application of this SCA, as stated on page 3.3-39 of the LMSAP Draft EIR, would be necessary for potential construction-related health risk impacts to be reduced to a less-than-significant level.

[15] San Francisco Department of the Environment et.al., *San Francisco Clean Construction Ordinance Implementation Guide for San Francisco Public Projects*, Final August 2015 available online at https://www.sfdph.org/dph/EH/Air/CleanConstruction.asp. Accessed September 10, 2015.

Project-Level Operational Impact. The backup diesel generator assumed for the proposed project (given its high-rise height, as previously described under *Assumptions for Operational Emissions*) would be the only new source of TACs associated with the proposed project. The LMSAP EIR acknowledged that stationary sources complying with applicable BAAQMD permit requirements generally would not be considered to have an individual significant air quality impact as the BAAQMD would deny an Authority to Construct or would deny a Permit to Operate any new or modified source of TACs that exceeds a cancer risk of 10 in one million or a chronic or acute hazard index of 1.0. Therefore, the health risks impact of the proposed project on the environment would be less than significant.

However, the LMSAP EIR also acknowledged that such sources may result in a cumulative TAC impacts. Therefore, the project's backup diesel generators are assumed along with existing stationary sources in the cumulative analysis below.

Cumulative Impact. To evaluate the cumulative health risks to existing sensitive receptors in the vicinity of the project site, the BAAQMD recommends using their online screening tools to evaluate existing TAC emissions from stationary and mobile sources within 1,000 feet of the project site. The nearest sensitive receptor is located 80 feet east of the project site across Webster Street. The BAAQMD's screening tools provide conservative estimates of how much existing TAC sources would contribute to cancer risk, chronic HI, and $PM_{2.5}$ concentrations in a community. The individual health risks associated with each source are summed to find the cumulative impact at the these receptors.

According to this conservative BAAQMD's Stationary Source Screening Analysis Tool for Alameda County, there are twenty stationary TAC sources within 1,000 feet of the project site. Two of these facilities are dry cleaning businesses that no longer use perchloroethylene (as verified in the latest BAAQMD air toxic inventory) and hence no longer represent a source of localized TAC contributions. The BAAQMD's Diesel Internal Combustion Engine Distance Multiplier Tool was used to refine the screening values of sources that include diesel engines to account for distance between receptors on the project site and the stationary TAC sources. **Table AIR-3** presents the results of this refined, project-specific, screening effort that also includes the risks posed by the proposed project's construction and backup diesel generators. As shown, the cumulative cancer risks, Hazard Index and $PM_{2.5}$ concentration for existing receptors in the vicinity of the proposed project would be below the City's significance criteria. Therefore, the cumulative TAC impact would be less than significant.

The cumulative TAC impact to future sensitive receptors of the proposed project would be similar to that shown in Table AIR-3 for existing receptors and therefore less than the City's cumulative thresholds. The impact would in fact be slightly less for the new receptors as they would not be exposed to health risk impacts from construction of the proposed project. CEQA requires the analysis of potential adverse effects of a project on the environment. Potential effects of the environment on a project are legally not required to be analyzed or mitigated under CEQA. However, this analysis nevertheless assesses potential effects of "the environment on the project" in order to provide information to decision-makers.

TABLE AIR-3
CUMULATIVE HEALTH IMPACTS FOR EXISTING RECEPTORS

Site #	Facility Name & Address	Source Type	Distance from Project Boundary (feet)	Cancer Risk (persons per million)	Chronic Hazard Impact	$PM_{2.5}$ Concentration (µg/m3)
13071	Mark Bosuk Esq. 1432 Harrison Street	Not Specified	300	0	0	0
19039	Hotel Oakland 270 13th Street	Diesel Engine	725	0.53	0.003	0.00014
378a	Ideal Cleaners 322 14th Street	Dry Cleaner	790	0	0	0
18912	Paetec 427 14th Street	Diesel Engine	330	0.34	0.0005	0.00035
13728	East Bay MUD 375 11th Street	Diesel Engine	540	2.17	0.012	0.15
14837	Trans Pacific Centre 1000 Broadway	Diesel Engine	960	2.2	0.02	0.0005
16836	FEMA 1111 Broadway	Diesel Engines	750	1.66	0.008	0.0005
17739	Cushman & Wakefield Jack London Square	Diesel Engine	720	2.1	0.01	0.0005
13308	The Clorox Company 1221 Broadway	Diesel Engine	600	0.007	0	0.0012
14742	Alameda County GSA 393 13th Street	Diesel Engine	185	2.4	0.002	0.0004
10345	Best Instrument Repair Company 564 14th Street	Not Specified	970	0	0	0
12765	MCI, dba Verizon Business 1330 Broadway	Diesel Engine	610	2.6	0.01	0.0046
18110	Level 3 Communications, LLC 1330 Broadway	Diesel Engine	610	1.2	0.005	0.0003
17607	Washington Mutual[b] 1333 Broadway	Diesel Engine	650	0	0	0
14423	Oakland 14th Office 475 14th Street	Diesel Engine	855	3.5	0.025	0.0008
16713	Alameda County Employees Retirement Association 475 14th Street	Diesel Engine	875	0	0	**0**
14607	Rotunda Partners II 300 Frank Ogawa Plaza	Diesel Engine	960	1.3	0.012	0.0003
13494	Pacific Bell 1587 Franklin Street	Diesel Engine	875	25.7	0.18	0.05
14532	AC Transit 1600 Franklin Street	Diesel Engine	875	2.5	0	0
10397a	Le Magic Cleaners 1706 Franklin Street	Dry Cleaner	750	0	0	0
			Project Construction	4.6	0.003	0.013
			Project Generator	<10	<0.004	<0.02
			Broadway[c]	3.4	NA	0.07
			Harrison Street[d]	2.1	NA	0.04

TABLE AIR-3 (Continued)
CUMULATIVE HEALTH IMPACTS FOR EXISTING RECEPTORS

Site #	Facility Name & Address	Source Type	Distance from Project Boundary (feet)	Cancer Risk (persons per million)	Chronic Hazard Impact	$PM_{2.5}$ Concentration (µg/m3)
			Cumulative Impacts[e]	<68.3	<0.3	<0.35
			City of Oakland Cumulative Significance Criteria (existing and new receptors)	100	10	0.8
			Potentially Significant Impact?	No	No	No

[a] According to the BAAQMD inventory, these facilities no longer use perchloroethylene and hence no longer pose a risk from TACs.
[b] According to the BAAQMD, this facility is no longer operational.
[c] Risks and concentrations from roadway traffic on Broadway are for an assumed distance of 430 feet from the edge of the nearest travel lane of a north-south directional roadway in Alameda County. Broadway has an existing AADT of 15,600 per Fehr & Peers. Risks presented assume AADT of 20,000.
[d] Risks and concentrations from roadway traffic on Harrison Street are for an assumed distance of 400 feet from the edge of the nearest travel lane of a north-south directional roadway in Alameda County. Harrison Street has an existing AADT of 15,500 per Fehr & Peers. Risks presented assume AADT of 20,000.
e Cumulative totals may not add up due to rounding.

SOURCE: BAAQMD, 2012; ESA, 2017.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents considered throughout this analysis, the proposed project would not result in any more severe significant impacts identified in the LMSAP EIR or the Previous CEQA Documents, nor would it result in new significant impacts related to air quality that were not identified in the LMSAP EIR or the Previous CEQA Documents**.** Based on the analysis, with implementation of the applicable SCAs, the proposed project would not exceed any of the City's applicable significance thresholds related to air quality. Therefore, project construction and operation would result in less-than-significant impacts relating to air quality, including health risk. Based on the health risk analysis above, implementation of the proposed project would result in less-than-significant impacts related to construction, operation, and cumulative TAC emissions; which were addressed in the LMSAP EIR and found to be significant and unavoidable. **SCA AIR-1, Construction-Related Air Pollution Controls (Dust and Equipment Emissions), SCA AIR-2, Exposure to Air Pollution (Toxic Air Contaminants)**, and **SCA AIR-3, Stationary Sources of Air Pollution (Toxic Air Contaminants)** (see Attachment A) would be applicable to and implemented by the proposed project to further ensure that, to the extent feasible, air quality impacts associated with the proposed project are less than significant. Therefore, no mitigation measures are required.

3. Biological Resources

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents identified less-than-significant impacts related to biological resources, with the Redevelopment Plan Amendments EIR and Housing Element Update EIR and its 2014 Addendum identifying applicable of City of Oakland SCAs. No mitigation measures were necessary.

LMSAP EIR Findings

The LMSAP EIR identified 12 special status species that are known to have the potential to occur within the LMSAP Area. Within the Plan Area, Lake Merritt and the Lake Merritt Channel are places where there are particularly sensitive areas with regard to biological resources. The project site is located six to eight blocks from Lake Merritt and the Lake Merritt Channel, respectively, and has no suitable habitat for special status species.

Project Analysis

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

As previously described, the project site is located in the fully developed urban area of Downtown. The project site, covered fully by a parking structure, does not contain vegetation and hydrology conditions suitable for sustaining wetlands, nor are any known special status species or sensitive habitats, including those that could support migratory fish or birds, located on the site. A Bird Survey conducted at the project site in August 2016 did not detect any migratory birds nor any evidence of breeding behavior from the birds that were observed.[16]

Based on the Tree Assessment conducted on May 2016, there are a total of 21 street trees on the project site on all four street frontages.[17] Species include Brisbane box (*Lophostemon confertus*), London plane (*Platanus x hispanica*), Callery pear (*Pyrus calleryana cv.*), and Sycamore (*Platanus occidentalis*). Seventeen of the trees qualify as protected trees per the City of Oakland Protected Trees Ordinance. However, they are not connected to other nearby natural habitats, and therefore would not constitute a wildlife corridor. There are also no natural sensitive communities in the area.

In order to accommodate construction of the proposed project, all of these trees would be removed following the Conditions of Approval described later in this document. In addition, the proposed project would install new street trees, as required, along all of the street frontages.

Conclusion

The proposed project would not result in any new or more severe significant impacts related to biological resources than those identified in the LMSAP EIR or the Previous CEQA Documents. Because the setting of the project site is not near any sensitive biological or recreational areas and does not possess any potential sensitive habitat or protected vegetation, certain SCAs identified in the LMSAP EIR would not pertain to the project, such as those pertaining to creek protection or the Creek Protection Ordinance, bird collisions, or Alameda Whipsnake protection measures. **SCA BIO-1, Tree Removal During Bird Nesting Season**; and **SCA BIO-2, Tree Permit** (see Attachment A) would be applicable to and implemented by the proposed project to further ensure that, to the extent feasible, birds in existing trees at the project site during the nesting season are avoided and protected and the existing street trees are protected during project construction, respectively. The LMSAP EIR did not identify any mitigation measures related to biological resources, and none would be needed for the proposed project.

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[16] Olofson Environmental, Inc., *Bird Survey at 1314 Franklin St, Oakland, CA*, August 12, 2016.
[17] HortScience, Inc., *Tree Assessment – 1314 Franklin Street Oakland CA*, May 2016.

4. Cultural Resources

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The 1998 LUTE EIR identified potentially significant impacts to historic resources, and identified mitigation measures to reduce the impact to less-than-significant levels. The Redevelopment Plan EIR, which addresses much of the oldest part of Downtown Oakland, identified a significant and unavoidable impact to historic resources, even with the implementation of mitigation measures. The Housing Element Update EIR and its 2014 Addendum identified City of Oakland SCAs pertaining to historic resources, and found a less-than-significant impact. Each of the Prior EIRs identified less-than-significant effects to archaeological and paleontological resources and human remains, specifically with the incorporation of City of Oakland SCAs, except that the LUTE EIR identified mitigation measures to reduce the effects to archaeological resources to less-than-significant levels.

LMSAP EIR Findings

The LMSAP EIR does not include a project-level analysis of historic resources, indicating project-level analysis shall be conducted for individual development projects in the LMSAP. The LMSAP EIR further determined that impacts to archaeological resources, paleontological resources, and human remains would be less than significant with the implementation of applicable SCAs. The LMPSAP EIR indicates that paleontological sensitivity of the geologic units underlying the Plan Area is considered to be low to moderate.

Project Analysis

Historical Resources (Criterion 4a)

The project would include demolition of the three-story parking structure, built in 1952-1953, currently occupying the project site. This parking facility is currently being used for public parking. The structure does not qualify as a CEQA historic resource and demolition would not result in a new impact.

An official State bronze historical plaque is affixed to the wall of the southwest corner of the parking garage building that commemorates the site as California Historical Landmark No. 45: Site of College of California – Original Campus of University of California. All traces of the original campus are gone. The project proposes to remove the plaque prior to demolition, storing it, and then reinstalling the plaque at some appropriate time and place near the end of construction. Based on preliminary consultation with the California Office of Historic Preservation (OHP), this is in accordance with the recommended procedure and would not trigger a review, revision, or update to the Landmark nomination documents.

Although the project site is not situated in a designated historic district, it is across the street from the Downtown Oakland Historic District on three sides: Franklin Street, a portion of 13th Street, and 14th Street. The following three district contributors, currently designated as Oakland City Landmarks, are located within one block of the project site: the Breuner Company-Oakland Tribune Building (a Beaux Arts – Renaissance Revival office building at 409 13th Street), the Alameda County Title Insurance Company Building, AKA the Holland Building and the Everis Building (a Beaux Arts store and office building at 1404 Franklin Street), and the Financial Center Building (an Art Deco office building at 405 14th Street). Construction of the proposed project would not directly affect these historic resources. None of these resources is within or adjacent to the project site and thus potential effects from construction vibration would be less than significant. None of these resources possess any sunlight-sensitive features such as stained glass, elaborately carved ornamentation, or design elements that depend on the contrast between light and dark (e.g., open galleries, arcades, or recessed balconies) and potential effects from the project shadow would be less than significant.

An historic church located at 1701 Franklin Street, owned and operated for over 100 years by the First Church of Christ Scientist, is an historical resource for CEQA purposes. Although not currently operating as a church, the use of the building could revert to church activities in the future and therefore warrants consideration. According to the Oakland Cultural Heritage Survey,

the church building is rated "A3" which means the building is of highest importance and is not located in one of the City's designated historic districts. As described previously in Section 1, *Aesthetics, Shadow, and Wind*, the project shadow would not materially impair the historic significance of this resource due to the limited shadow duration (between 2:00 and 3:00 pm in late winter) and the presence of existing shadow cast by another building (the 15-story AT&T Building at 1587 Franklin Street), and thus would not constitute a significant impact under CEQA.

Based on the discussion above, the impacts of the proposed project on historic resources would be less severe than those identified in the Previous CEQA Documents.

Archaeological and Paleontological Resources and Human Remains (Criteria 4b through 4d)

The proposed project would involve grading and excavation activities up to depths of approximately 15 feet below the existing basement of the parking garage, which is located approximately 10 feet below grade; therefore, there is the potential to impact unknown archeological resources, as well as potential unknown paleontological resources or human remains, as noted in the LMSAP EIR and Previous CEQA Documents. However, applicable SCAs would require all work within 50 feet of inadvertent discoveries of any subsurface archaeological materials to be halted and a qualified archaeologist or paleontologist hired to both assess the significance of the find, and deal with the find according to regulatory guidance. As noted in the LMSAP EIR, implementation of the SCAs would ensure that archaeological resources are recovered and that appropriate procedures are followed in the event of accidental discovery.

Implementation of the SCAs also would require a qualified paleontologist to document a discovery and that appropriate procedures be followed in the event of a discovery, and would ensure that the appropriate procedures for handling and identifying human remains are followed.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents considered throughout this analysis, the proposed project would not result in any more severe significant impacts identified in the LMSAP EIR or the Previous CEQA Documents, nor would it result in new significant impacts related to cultural resources that were not identified in the LMSAP EIR or the Previous CEQA Documents**. Implementation of SCAs CUL-1, Archaeological and Paleontological Resources – Discovery During Construction, CUL-2, Archaeologically Sensitive Areas – Pre-Construction Measures, and CUL-3, Human Remains – Discovery During Construction** (see Attachment A), would further ensure that potential impacts associated with cultural resources would be less than significant. No mitigation measures are required.

5. Geology, Soils, and Geohazards

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents identified that impacts to geology, soils, and geohazards would be less than significant, with the Redevelopment Plan Amendments EIR and Housing Element Update EIR and its 2014 Addendum identifying applicable City of Oakland SCAs. No mitigation measures were necessary.

LMSAP EIR Findings

The LMSAP EIR determined that with implementation of SCAs, impacts related to seismic hazards and unstable soils would be less than significant with development occurring under the LMSAP.

Project Analysis

Seismic Hazards, Expansive Soils, and Soil Erosion (Criteria 5a and 5b)

A preliminary geotechnical evaluation was completed for the proposed project site by Langan Treadwell Rollo on May 25, 2016. The evaluation determined that the proposed project site is not within a seismic hazard zone and is in an area of low liquefaction susceptibility, as mapped by the California Geologic Survey (CGS).[18] The site is flat and not located in a landslide area or in an

[18] CGS, *State of California Seismic Hazard Zones, Oakland West Quadrangle Official Map*, February 14, 2003.

area of known unstable soil conditions. The proposed project would require a grading permit. Therefore, per City of Oakland SCAs, the project applicant will be required to prepare an Erosion and Sedimentation Control Plan, the recommendations and provision of which the applicant will be required to implement. The proposed project also would be required to comply with the California Building Code's current seismic standards, which require specific design parameters for construction in various seismic environments per City of Oakland SCAs, to ensure that development of the proposed project would avoid and minimize potential geologic impacts through compliance specifically with local and state regulations governing design and construction practices. It is possible that unknown groundwater wells and abandoned structures (pits, mounts, septic tank vaults, sewer lines, etc.) could be present and disturbed during grading and construction activities, which would be appropriately addressed through implementation of SCAs applicable if the project requires a grading permit.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents considered in this analysis, implementation of the proposed project would not result in any new or more significant impacts related to geology and soils than those identified in the LMSAP EIR or the Previous CEQA Documents. Furthermore, implementation of **SCA GEO-1, Construction-Related Permit(s), SCA GEO-2, Soils Report**, and **HYD-1, Erosion and Sedimentation Control Plan for Construction** (see Attachment A), would ensure that potential impacts associated with hazardous geologic and soils conditions would be less than significant. No mitigation measures are required.

6. Greenhouse Gas and Climate Change

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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 land use development, produce total emissions of more than 1,100 metric tons of CO_2e annually AND more than 4.64 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.	☒		

Previous CEQA Documents Findings

Climate change and greenhouse gas emissions ("GHG") were not expressly addressed in the 1998 LUTE EIR. The Redevelopment Plan Amendments EIR and Housing Element Update EIR and its 2014 Addendum identified less-than-significant GHG impacts with the incorporation of applicable City of Oakland SCAs. No mitigation measures were necessary.

LMSAP EIR Findings

The LMSAP EIR included GHG emissions and impacts analyses, and identified less-than-significant impacts with the incorporation of the applicable City of Oakland SCAs, and no mitigation measures were necessary. The LMSAP EIR determined that development occurring under the LMSAP would not generate greenhouse gas emissions, either directly or indirectly, that would have a significant impact on the environment at the plan level or at the project-level. The estimate of emissions from service population annually, was less than the applicable significance threshold, and implementation of the LMSAP would not fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions. The LMSAP EIR determined that development of specific projects under the Plan would be subject to all applicable regulatory requirements adopted for the purpose of reducing greenhouse gas emissions.

Project Analysis

Greenhouse Gas Emissions (Criterion 6a)

An analysis of the proposed project using the previously recommended May 2011 BAAQMD CEQA Guidelines and Thresholds was conducted and found that the proposed project would not result in a significant effect (cumulative) relating to GHG emissions, as shown below. Both BAAQMD and the California Air Pollution Control Officers Association ("CAPCOA") consider GHG impacts to be exclusively cumulative impacts, in that no single project could, by itself, result in a substantial change in climate. Therefore, the evaluation of GHG emissions impacts evaluates whether the proposed project would make a considerable contribution to cumulative climate change effects.

Construction GHG Emissions

The CalEEMod model run for the proposed project (see Section 2. *Air Quality,* above) also calculated the GHG emissions that would be generated by construction activities of the proposed project. Construction-related emissions would total approximately 1,224 metric tons of CO_2 equivalents ("CO_2e") during the entirety of the construction period. Annualized over an assumed project life of 40 years, construction-related GHG emissions would be approximately 30.6 metric tons per year of CO_2e. These emissions are factored into the total operational GHG emissions calculation in **Table GHG-1** below to determine significance.

Operational GHG Emissions

The proposed project would generate GHG emissions from many of the same sources as presented in air quality Tables AIR-1 and AIR-2 (see Section 2. *Air Quality*, above). Additionally, GHGs would be generated indirectly by increased electrical demand, increased water and wastewater demand, and increased solid waste generation.

The total operational GHG emissions for the proposed project are presented in **Table GHG-1**. This table presents the project-related GHG emissions from all sources and assesses the impact relative to City thresholds. Emissions from stationary sources permitted by the BAAQMD are assessed separately from other emissions relative to a threshold of 10,000 metric tons per year of CO_2e. As shown in **Table GHG-2**, emissions from the backup diesel generator would be below this threshold and therefore less than significant.

The project site is located within a "Regional Center" Priority Development Area pursuant to the Plan Bay Area which represents the Sustainable Communities Strategy (SCS) for the greater San Francisco Bay Area (MTC, 2013). Per CEQA guidelines Section 15183.5 (c), environmental documents for certain residential and mixed-use projects and transit priority projects, as defined in Section 21155 of the Public Resources Code, that are consistent with the general use designation, density, building intensity and applicable policies specified for the project area in an applicable SCS or alternative planning strategy, need not analyze global warming impacts resulting from cars and light duty trucks. A lead agency should consider whether such projects may result in GHGs from other sources, however, consistent with the CEQA Guidelines. Consequently, if the project meets the requirements of a transit priority project, its mobile source emissions need not be included in the assessment of GHG impacts.

TABLE GHG-1
PROPOSED PROJECT GHG EMISSIONS (metric tons per year)[a]

Project Component	CO_2e
Project	
Area Source Emissions	33
Energy Emissions	1,257
Mobile Emissions [b]	3,042
Solid Waste	202
Water and Wastewater	106
Annualized Construction Emissions (Over 40 Years)	30.6
Total Increase with Mobile Sources	4,670
Total Increase without Mobile Sources	**1,628**
City of Oakland Screening Threshold	1,100
Total Emissions with Mobile Sources per Service Population (1,289 residents and 13 employees)	3.6
Total Emissions without Mobile Sources per Service Population (1,289 residents and 13 employees)	**1.3**
City Emissions per Service Population Threshold	4.6
Significant?	**No**

[a] Project operational emissions estimates were made using CalEEMod, version 2016.3.1.
[b] GHG emissions from mobile sources relied on inputs from the Transportation Analysis by Fehr & Peers.

TABLE GHG-2
AVERAGE GREENHOUSE GAS EMISSIONS FROM THE BACKUP GENERATOR

Source	CO_2e[a] (metric tons per year)
Project Backup Generator	14.3
City of Oakland's Threshold	10,000
Exceeds Threshold?	No

[a] CO2e – Carbon dioxide equivalents

Section 21155 of the *California Public Resources Code* defines transit priority projects as projects which:

1. Contain at least 50 percent residential use, based on total building square footage and, if the project contains between 26 percent and 50 percent nonresidential uses, a floor area ratio of not less than 0.75;

2. Provide a minimum net density of at least 20 dwelling units per acre; and

3. Be located within one-half mile of a major transit stop or high-quality transit corridor included in a regional transportation plan. A major transit stop is as defined in Section 21064.3, except that, for purposes of this section, it also includes major transit stops

> that are included in the applicable regional transportation plan. For purposes of this section, 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. A project shall be considered to be within on-half mile of a major transit stop or high-quality transit corridor if all parcels within the project have not more than 25 percent of their area farther than one-half mile from the stop or corridor and if not more than 10 percent of the residential units or 100 units, whichever is less, in the project are farther than one-half mile from the stop or corridor.

The project proposes an approximately 650,751 net square feet of residential uses and up to 18,000 square feet of non-residential (commercial) use, which is well over 50 percent residential use. So, the proposed project meets condition (1) above for qualification as a transit priority project. The project would include up to 635 residential units on a 1.38-acre-parcel, which is equivalent to 460 dwelling units per acre. Consequently, the Project meets condition (2) above for qualification as a transit priority project. Finally, a major transit stop is defined in Section 21064.3 of the California Public Resources Code 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 period. The 12th Street and 19th Street BART stations are located approximately 0.1 miles to the west and 0.4 miles north of the project site, respectively. AC Transit, the primary bus service provider for the City of Oakland also operates several routes in the vicinity of the project with stops within one-half mile from the project site. Consequently, the project meets all three conditions above for qualification as a transit priority project. Therefore, pursuant to Section 15183.5 (c) of the CEQA Guidelines, the mobile source of the project need not be included in the assessment of GHG impacts in the environmental document.

Table GHG-1 presents the project-related GHG emissions with and without the mobile emissions. As the proposed project qualifies as a transit priority project, for the purposes of assessing the impact relative to the City's thresholds, mobile emissions are not included. While the project would exceed the threshold of 1,100 metric tons of CO_2e per year, it would not exceed the City's 4.6 metric tons of CO_2e per service population threshold. As an impact under the City's significance thresholds occurs when **both** thresholds are exceeded, the total operational GHG emissions would be less than significant.

As the project would construct more than 500 residential units, it would be considered a "very large project" and be required to prepare a GHG Reduction Plan in accordance with SCA GHG-1 (City SCA 38). The goal of the GHG Reduction Plan shall be to increase energy efficiency and reduce GHG emissions to below at least one of the BAAQMD's CEQA Thresholds of Significance (1,100 metric tons of CO_2e per year or 4.6 metric tons of CO_2e per year per service population). The GHG Reduction Plan shall include, at a minimum, (a) a detailed GHG emissions inventory for the project under a "business-as-usual" scenario with no consideration of project design features, or other energy efficiencies, (b) an "adjusted" baseline GHG emissions inventory for the project, taking into consideration energy efficiencies included as part of the project (including the City's Standard Conditions of Approval, proposed mitigation measures, project design features, and other City requirements), (c) a comprehensive set of quantified additional GHG reduction measures available to further reduce GHG emissions beyond the adjusted GHG emissions, and (d) requirements for ongoing monitoring and reporting to demonstrate that the additional GHG

reduction measures are being implemented. The goal of the GHG Reduction Plan has already partly been met because of the unique CEQA conditions for a *Transit Priority Project*. Numerous other City of Oakland SCAs that would contribute to minimizing potential GHG emissions from construction and operations of development projects would apply to the proposed project; they pertain to alternative transportation facilities (bicycles and BART), construction equipment emissions, transportation demand management, construction waste reduction and recycling, as well as California Green Building Standards.

Consistency with GHG Emissions Plans and Policies (Criterion 6b)

The proposed project would comply with the Oakland Energy and Climate Action Plan, current City Sustainability Programs, and General Plan policies and regulations regarding GHG reductions and other local, regional and statewide plans, policies and regulations that are related to the reduction of GHG emissions and relevant to the proposed project.

Specifically, the proposed project would also be consistent with the State's Updated Climate Change Scoping Plan and the City of Oakland's Energy and Climate Action Plan in that it will include a number of sustainability design features. The Project Sponsor intends to meet GreenPoint Rated standards and comply with the Green Building ordinance and requirements. The proposed project would optimize the efficiency of its building envelope, and through the use of efficient lighting and HVAC systems it would reduce domestic energy use. The proposed project would meet the newly implemented Building Energy Efficiency Standards. Additionally, as noted above and discussed earlier, the proposed project is located within a "Regional Center" PDA pursuant to the Plan Bay Area, and meets all conditions for qualification as a transit priority project with respect to the SCS.

Conclusion

Based on the analysis above, implementation of the proposed project would not result in a significant impact regarding GHG emissions or compliance with applicable plans, policies, or regulations adopted for the purposes of reducing greenhouse gas emissions. Additionally, because of the size of the project, City of Oakland SCAs related to GHG emissions would be required to ensure a less-than-significant impact with the proposed project. The implementation of **SCA GHG-1, Greenhouse Gas Reduction Plan, SCA AES-2, Landscape Plan, SCA AIR-1, Construction-Related Air Pollution Controls (Dust and Equipment Emissions), SCA UTIL-1, Construction and Demolition Waste Reduction and Recycling, and SCA UTIL-4, Green Building Requirements** (see Attachment A), would further ensure that impacts associated with greenhouse gas emissions would be less than significant. No mitigation measures are required.

7. Hazards and Hazardous Materials

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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 one-quarter 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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents found less-than-significant effects regarding hazards and hazardous materials including risk of upset in school proximity and emergency response/evacuation plans, with the Redevelopment Plan Amendments EIR and Housing Element Update EIR and its 2014 Addendum identifying applicable City of Oakland SCAs. The 1998 LUTE EIR identified mitigation measures to reduce potentially significant effects regarding exposing workers and the public to hazardous substances to less-than-significant levels. These mitigation measures are now incorporated into the applicable City of Oakland SCAs.

LMSAP EIR Findings

The LMSAP EIR determined that with implementation of SCAs, impacts related to hazards and hazardous materials would be less than significant with development occurring under LMSAP.

Project Analysis

Exposure to Hazards, Hazardous Materials Use, Storage and Disposal (Criterion 7a)

A Phase I Environmental Site Assessment (ESA) was conducted for the proposed project site in June 2016.[19] In addition, a Phase II ESA was prepared in May 2016.[20] The following is a summary of the Phase I and Phase II ESA findings.

The ESA reviewed local, state, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance amps, and physical setting sources. It also included a reconnaissance of the project site to review site use and current conditions to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials. Finally, interviews were conducted with persons knowledgeable about current and past site use.

The reconnaissance and records research did not identify documentation or physical evidence of soil and groundwater impairments associated with the current or past use of the project site. A review of regulatory databases maintained by county, state and federal agencies did not identify documentation of hazardous materials violations or discharge on the project site, and did not identify contaminated facilities within the appropriate American Society for Testing and Materials (ASTM) search distances that would reasonably be expected to impact the project site. Based on the findings of this assessment, no historic or current Recognized Environmental Conditions (RECs) were identified for the project site. The Phase I ESA recommended that soil samples below the parking garage structure be collected in order to characterize the soil for offhaul. In addition, it recommended that, given the age of the existing parking structure, an environmental professional should be retained to determine if asbestos-containing materials and/or lead-based paint are present.

The Phase II ESA collected eight soil samples from borings at depths of one to five feet beneath the basement level of the parking structure. Soil samples were then evaluated in a laboratory to determine concentrations of target analytes, which include total petroleum hydrocarbons (TPH), volatile and semi-volatile organic compounds (VOCs), and CAM-17 metals. Laboratory results indicated that concentrations of target analytes in the soil samples were below respective Regional Screening Levels (RSLs) issued by the United States Environmental Protection Agency (USEPA) Region IX for residential land uses. Arsenic was detected in both composite soil samples analyzed. Although the detected concentrations are above the respective arsenic residential screening level, the detected concentrations are below expected background concentrations for the San Francisco Bay Area. In addition, eight other metals (barium, chromium, cobalt, copper, lead, nickel, vanadium and zinc) were detected in both composite soil samples. In each case, these detected concentrations are below their respective screening levels for residential land use and/or typical background concentrations. However, one sample contained a chromium concentration greater than or equal to 50 mg/kg, which is 10 times the soluble threshold limit

[19] Engeo Incorporated, *Phase I Environmental Site Assessment – 1314 Franklin Street Oakland, California*, June 7, 2016.
[20] Engeo Incorporated, *Phase II Environmental Site Assessment – 1314 Franklin Street Parcel APN 2-55-1 Oakland, California*, May 20, 2016.

concentration (STLC) for chromium. Analysis of soluble concentrations of chromium may be requested by the contractor, prior to the transport and disposal of the characterized soil.

The transportation, use, and storage of all hazardous materials involved with the proposed project (construction and operation) would be required to follow the applicable laws and regulations adopted to safeguard workers and the general public, including preparation of a Hazardous Materials Management Plan and Hazardous Materials Business Plan, as required by Alameda County and the City of Oakland SCAs. Since development of the proposed project would be subject to the SCAs pertaining to the handling of hazardous materials related to construction activities and the remedial actions required when site contamination is encountered, consistent with the findings and conclusions of the 2014 LMSAP EIR, the potential impacts would be reduced to less-than-significant levels.

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

The project site is located two blocks (approximately 400 feet) south of Envision Academy of Arts and Technology at 1515 Webster Street; however, the proposed project would be required to comply with existing local regulations that require hazardous material handlers within 1,000 feet of a school or other sensitive receptor to prepare a Hazardous Materials Assessment Report and Remediation Plan.

Emergency Access Routes (Criteria 7c)

The proposed project would not significantly interfere with emergency response plans or evacuation plans. Construction in the urban Downtown setting may result in temporary road closures, which would require traffic control plans to ensure at least two emergency access routes are available for streets exceeding 600 feet in length, per the City of Oakland's Ordinances and General Plan Policies; however, the proposed project would not permanently change the surrounding streets or roadways.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents, implementation of the proposed project would not result in any new or more severe significant impacts related to hazards and hazardous materials than those identified in the LMSAP EIR or the Previous CEQA Documents. Implementation of **SCA HAZ-1, Hazards Materials Related to Construction, SCA HAZ-2, Site Contamination, and SCA TRA-1, Construction Activity in the Public Right-of-Way** (see Attachment A), would further ensure that potential impacts associated with hazardous conditions would be less than significant.

8. Hydrology and Water Quality

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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	☒	☐	☐
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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents found less-than-significant impacts related to hydrology or water quality, primarily given required adherence to existing regulatory requirements, many of which are incorporated in the City of Oakland's SCAs identified as applicable in the Housing Element Update EIR and its 2014 Addendum. The Redevelopment Plan Amendments EIR found less-than-

significant effects regarding stormwater and 100-year flood hazard with implementation of applicable City of Oakland SCAs. The 1998 LUTE EIR acknowledged that areas considered under that EIR could potentially occur within a 100-year flood boundary. Adherence to existing regulatory requirements that are incorporated in the City of Oakland's SCAs would address potentially significant effects regarding flooding. No mitigation measures were warranted.

LMSAP EIR Findings

The LMSAP EIR determined that with implementation of SCAs impacts related to hydrology and water quality, groundwater, and flooding would be less than significant with development occurring under the LMSAP.

Project Analysis

Water Quality, Stormwater, and Drainages and Drainage Patterns (Criteria 8a and 8c)

The project would not directly impact the water quality for receiving water bodies by generating polluted runoff or soils, particularly since the nearby water body, Lake Merritt and its Channel, are located approximately six to eight blocks east of the project site. The project site is approximately 1.37 acres and the proposed development would comply with numerous SCAs relating to stormwater runoff from construction. The project site is currently entirely covered with a three-story structure. Therefore, the project would not increase existing area of impervious surface on the site since the new buildings and pavement (sidewalks) would cover the entire site. Landscaped open spaces would be incorporated on the fourth floor courtyard (above the podium) and roof levels, and new street trees are proposed on all street frontages bordering the project site. As identified in the LMSAP EIR, the proposed project site is not located within a flood hazard zone or tsunami-inundation zone. The proposed project would not utilize groundwater resources and would not substantially affect groundwater recharge. The proposed project also would not substantially alter existing drainage patterns. The project site is a fully-paved parking lot in an urban setting; therefore, the proposed building would essentially cover the entire site and not alter existing flows.

Use of Groundwater (Criterion 8b)

Some dewatering may be required for construction of the proposed project, but the dewatering is not anticipated to substantially lower the groundwater level. Potable water is supplied by the East Bay Municipal Utility District ("EBMUD"), and groundwater is generally not considered potable and is not utilized in the public drinking water supply. The 2014 LMSAP EIR also assumed project compliance with existing City practices, which are stated City of Oakland SCAs that address all applicable regulatory standards and regulations pertaining to remediation and grading and excavation activities. The proposed project would adhere to these SCAs and therefore would have a less-than-significant impact on water quality or groundwater supplies, as identified in the LMSAP EIR and the Previous CEQA Documents.

Flooding and Substantial Risks from Flooding (Criteria 8d)

The project site is not located in either a 100-year or 500-year flood boundary. In addition, the project site is not located near a levee or a dam. Therefore, the proposed project would not result in a significant impact with respect to flood-related risks.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents, implementation of the proposed project would not would not result in any new or more severe significant impacts related to hydrology and water quality, groundwater, and flooding than those identified in the LMSAP EIR or the Previous CEQA Documents. Implementation of **SCA HYD-1, Erosion and Sedimentation Control Plan for Construction, SCA HYD-2, State Construction General Permit, SCA HYD-3, NPDES C.3 Stormwater Requirements for Regulated Projects, SCA GEO-1, Construction-Related Permit(s), SCA GEO-2, Soils Report, SCA UTIL-6, and Storm Drain System**, (see Attachment A), would ensure that potential impacts to hydrology and water quality would be less than significant. No mitigation measures are required.

9. Land Use, Plans, and Policies

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents, including the Redevelopment Plan Amendments EIR and the Housing Element Update EIR and its 2014 Addendum, found less-than-significant impacts related to land use, plans, and policies, and no mitigation measures were warranted. The 1998 LUTE EIR, however, identified a significant and unavoidable effect associated with inconsistencies with policies in 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 Transportation Demand Management ("TDM"), which apply to all projects within the City of Oakland.

LMSAP EIR Findings

The LMSAP EIR determined that impacts related to land use and planning would be less than significant with development occurring under the LMSAP. No mitigation measures were required and no City of Oakland SCAs apply to the proposed project. Compliance with LUTE Policies Dl0.2, N5.2, and N8.2 would ensure that development under the LMSAP would not conflict with surrounding land uses, or with existing plans, policies, and regulations adopted for the purpose of mitigating an environmental effect.

Project Analysis

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

The proposed project would not physically divide an established community. The proposed project also would not result in a fundamental conflict with adjacent land uses. The proposed residential and commercial land uses would be consistent and compatible with nearby commercial, office, and residential land uses. The proposed project would not conflict with an

applicable land use plan, policy, or regulation of an agency with jurisdiction over the project site. The proposed project would redevelop a an existing three-story parking garage located wholly within the Central Business District ("CBD") General Plan land use designation and the following three Lake Merritt Station Area Districts: D-LM-2 Pedestrian Commercial; D-LM-3 General Commercial; and D-LM-4 Mixed Commercial, each of which support the proposed residential buildings and ground-floor retail land uses.

As stated above in the Project Description, pursuant to City of Oakland Municipal Code (OMC) Chapter 17.107 and the State Density Bonus Law (Government Code §§ 65915 et seq.), the project applicant is applying for a density bonus and a related concession/incentive. The proposed project would qualify for a density bonus by the inclusion of on-site affordable housing units equal to either ten percent of the base allowable density restricted for lower income households, or five percent of the base allowable density restricted for very low income households.[21]

Consistent with City of Oakland and State density bonus provisions, either of these approaches qualifies the proposed project for a 20-percent density bonus as well as one concession/incentive (Government Code §§ 65915(f)(1),(2), 65915(d)(1-2); OMC §§ 17.107.040, 17.107.090A.1).[22] A 20-percent density bonus to the project's base allowable density of 547 units would result in a potential 110 additional density bonus units. However, the project applicant proposes to include 88 out of the possible 110 density bonus units for a project total of up to 635 units. The concession/ incentive requested by the project applicant is a waiver of the LMSAP height limit for the proposed tower in order to accommodate the additional units and to offset the cost impacts of the below market rate units.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and Previous CEQA Documents, the proposed project would not result in any new or more severe significant impacts related to land use and planning than those identified in the LMSAP EIR or the Previous CEQA Documents. The LMSAP EIR did not identify any mitigation measures related to land use, and no City of Oakland SCAs directly addressing land use and planning apply to the proposed project.

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[21] The terms "lower income households" and "very low income households" are defined at Health and Safety Code sections 50079.5 and 50105, respectively.

[22] A "concession or incentive" is defined as a reduction in site development standards or a modification of zoning code requirements including, but not limited to, a height limitation, that results in identifiable and actual cost reductions to provide for affordable housing costs or rents. (Government Code §§ 65915(k)(1) and 65915(o)(1).)

10. Noise

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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 p.m. to 7 a.m. on weekdays and 8 p.m. to 9 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 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 groundborne vibration that exceeds the criteria established by the Federal Transit Administration (FTA).	☒	☐	☐

Previous CEQA Documents Findings

The Redevelopment Plan Amendments EIR identified less-than-significant effects related to roadway noise and found construction and operational noise impacts would be mitigated to a less-than-significant level with incorporation of SCAs. The Housing Element Update EIR and its 2014 Addendum identified less-than-significant noise impacts with incorporation of SCAs. The 1998 LUTE EIR identified mitigation measures to address potential noise conflicts between different land uses.[23] Regarding construction noise, the 1998 LUTE EIR identified a significant and unavoidable construction noise and vibration impact in Downtown, even after the incorporation of mitigation measures.

LMSAP EIR Findings

The LMSAP EIR determined that with implementation of SCAs construction and operation period noise would be less than significant with development occurring under the LMSAP. The LMSAP EIR determined that while activities occurring under the Plan could expose residential uses near construction to noise levels exceeding the General Plan standard of 80 and 85 dBA, construction of individual development projects implemented under the LMSAP would be temporary in nature and that associated impacts would be less than significant with implementation of applicable SCAs.

The LMSAP EIR also determined that operation-period noise associated with projects developed under the Plan would be less than significant, and that implementation of applicable SCAs would ensure that operation noise is reduced to a less-than-significant level.

Project Analysis

Construction and Operational Noise and Vibration, Exposure of Receptors to Noise (Criteria 10a, 10b, 10d, and 10e)

Construction Noise

Construction activities for the proposed project would be expected to occur over approximately 27 months and would entail excavation and shoring, foundation and below-grade construction, and construction of the building and finishing interiors. Implementation of applicable City of Oakland SCAs would minimize construction noise and vibration impacts by limiting hours of construction activities, by requiring best available noise control technology and notification of any local residents of construction activities, and by tracking and responding to noise complaints. As a result, the construction noise impacts of the proposed project would be less than significant, as identified for the LMSAP EIR.

[23] The 2011 Redevelopment Plan EIR also identified significant and avoidable noise effects specifically associated with the potential development of a new baseball stadium at Victory Court, and multimodal safety at at-grade rail crossings, both near the Oakland Estuary. These effects would not pertain to the proposed project given the distance and presumably minimal contribution of multimodal trips affecting these impacts.

Operational Noise

Once operational, the Project would include stationary sources such as heating, ventilating, and air conditioning (HVAC) mechanical equipment standardized for noise reduction as well as an emergency generator. Stationary equipment would be located on rooftops and operate within the restrictions of the City's Noise Ordinance. Chapter 17.120.050 of the City of Oakland Planning Code specifies the maximum sound level received at residential, public open spaces and commercial land uses. Development of the proposed project would incorporate all applicable SCAs to ensure compliance with noise limits in the City's Noise Ordinance and would result in a less-than-significant impact with respect to noise from stationary sources on the project site.

Traffic Noise (Criterion 10c)

For operational noise impacts from project related-traffic increase, the analysis relies on vehicle trip generation and distribution in the Traffic Impact Assessment (TIA) for the proposed project. Peak hour intersection turning data from the TIA were analyzed using the Federal Highway Administration (FHWA) Traffic Noise Prediction Model to evaluate traffic volume increases and resulting traffic-generated noise increases on roadway links most affected by project-related traffic. The roadway segments analyzed and the noise increases as determined by the FHWA modeling are shown in **Table NOI-1**, below.

TABLE NOI-1
PEAK-HOUR TRAFFIC NOISE LEVELS IN THE VICINITY OF THE PROJECT

Roadway Segment[a,b]	(A) Existing	(B) Existing Plus Project	(B-A) Difference between Existing Plus Project and Existing[c]	(C) Cumulative No Project (2035)	(D) Cumulative Plus Project (2035)	(D-A) Difference between Cumulative Plus Project and Existing	(D-C) Difference between Cumulative Plus Project and Cumulative No Project[d]
Webster south of 14th Street	62.8	63.6	+0.8	64.1	64.7	+1.9	+0.6
13th Street east of Franklin	58.6	59.3	+0.7	60.0	60.5	+1.9	+0.5
13th Street west of Franklin	58.6	59.3	+0.7	60.0	60.5	+1.9	+0.5
Franklin north of 13th Street	59.2	59.6	+0.4	60.4	60.7	+1.5	+0.3
Franklin south of 13the Street	59.1	59.6	+0.5	60.4	60.7	+1.6	+0.3
13th Street west of Webster	60.2	60.8	+0.6	61.4	61.8	+1.6	+0.4
Franklin north of 12th Street	59.3	59.8	+0.5	60.5	60.9	+1.6	+0.4

[a] Road center to receptor distance is 10 meters (approximately 32 feet) for all roadway segments. Noise levels were determined using the FHWA Traffic Noise Prediction Model.
[b] The analysis considered the vehicle mix based on – cars 97 percent, medium trucks two percent, and heavy trucks one percent. Traffic speeds for all vehicle classes were set at 30 mph.
[c] Considered significant if the incremental increase in noise from traffic is greater than the existing ambient noise level by 5.0 dBA Leq, per City of Oakland, CEQA Thresholds/Criteria of Significance Guidelines.
[d] Considered a cumulatively considerable contribution to a significant noise increase if the incremental increase in noise from the project is greater than 3 dBA when the cumulative noise increase is greater than 5 dBA.

SOURCE: ESA, 2017.

Cumulative Noise

Table NOI-1 shows that the increase in traffic between the Cumulative Plus Project (2040) scenario and Cumulative No Project (2040) scenario would increase peak hour noise levels by less than 3.0 dBA at all roadway segments. Thus, the cumulative roadway noise impact would be less than significant.

The City considers cumulative noise from all sources—mobile and stationary. The project site is located approximately 80 feet from the nearest sensitive receptors across Webster Street to the east of the project site. The proposed project would generate noise from heating, ventilating, and air conditioning (HVAC) mechanical equipment. HVAC equipment would operate within the restrictions of the City's Noise Ordinance. Chapter 17.120.050 of the City of Oakland Planning Code specifies the maximum sound level received at residential, public open spaces and commercial land uses. This restriction can be used in combination with the predicted roadway noise level increase presented in Table NOI-1 to estimate a worst-case prediction of cumulative noise increase from both stationary and roadway noise sources. **Table NOI-2** presents the cumulative noise increase at the existing sensitive receptors across Webster Street from the project site from both roadway and stationary sources. These noise levels reflect evening peak hour conditions which are when peak traffic contributions would occur. Stationary source noise levels are considered in terms of the L_{33} (the noise levels exceeded 20 minutes of a one hour period) as this is the noise descriptor of the City's noise ordinance which best lends itself to add to roadway noise estimates which are calculated in terms of a peak-hour hourly average. The roadway noise contribution is assumed to occur from the greatest cumulative increase analyzed in Table NOI-1. This analysis uses the existing monitored noise level as a baseline for comparison, unlike the analysis in Table NOI-1, which solely analyzes modeled traffic volumes, because this cumulative analysis considers multiple sources, not just vehicle traffic.

TABLE NOI-2
PEAK-HOUR CUMULATIVE NOISE LEVELS AT SENSITIVE RECEPTORS IN THE PROJECT AREA

Location	(A) Monitored Noise Level (Leq, dBA)	(B) Stationary Source Restriction (L_{33}, dBA)	(C) Cumulative Roadway only Noise Level Increase(Leq)	(D) (A+B)+C Resultant Cumulative Noise Level (Leq)	(D-A) Increase in Noise Level over Existing Monitored
Webster Street (between 13th and 14th Streets)	67.0	60	+1.9	67.8	+0.8

[1] Monitored existing noise levels are greater than those predicted from roadway noise on Webster Street as a result of contributions from traffic on other nearby streets and noise from parking and pedestrian activities.

SOURCE: ESA, 2016.

A cumulative noise increase of less than 5.0 dBA over existing monitored conditions is predicted to occur at existing sensitive receptors along Webster Street across from the project site. This determination assumes a stationary source operating at an adjacent property at the maximum property line limit allowed by the Noise Ordinance. When the contribution from maximum

allowable stationary source noise is added to cumulative traffic increase, and the proposed project's contribution from both stationary and mobile sources is compared to existing monitored noise levels, the cumulative increase would be 0.8 dBA and would be considered less-than-significant.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the LMSAP EIR and Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of impacts identified in the LMSAP EIR or Previous CEQA Documents, nor would it result in new significant impacts related to noise that were not identified in the LMSAP EIR and Previous CEQA Documents. Implementation of **SCA NOI-1, Construction Days/Hours, SCA NOI-2, Construction Noise, SCA NOI-3, Extreme Construction Noise, SCA NOI-4, Construction Noise Complaints, SCA NOI-5, Exposure to Community Noise, and SCA NOI-6, Operational Noise** (see Attachment A)**,** would be applicable and would be implemented with the proposed project, and would ensure that noise-related impacts associated with the proposed project would be less than significant.

11. Population and Housing

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents, including the Redevelopment Plan Amendments EIR and the Housing Element Update EIR and its 2014 Addendum, found less-than-significant impacts related to population and housing, as well as employment. The 1998 LUTE EIR identified mitigation measures to address unanticipated employment growth (compared to regional ABAG projections), and no other mitigation measures were warranted.

LMSAP EIR Findings

The LMSAP EIR determined that impacts related to population and housing would be less than significant with development occurring under the LMSAP. No mitigation measures or SCAs would be required. The LMSAP EIR assumes that associated growth in the number of households and population occurring from development under the LMSAP would be in line with regional growth projections, including ABAG's 2009 growth forecast for 2035 and would not result in unplanned population growth.

Project Analysis

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

The proposed project would result in an estimated 12 permanent employees on the site.[24] Construction of the proposed project also would involve temporary employees. The proposed

[24] The 2014 LMSAP EIR considered the development of approximately 21,000 square feet of retail on the project site. The retail employment density of 0.74 employees per 1000 square feet (1,352 square feet/worker) noted in the following document was used to determine the number of employees generated by the proposed project: http://www.eia.gov/consumption/commercial/data/2012/bc/cfm/b1.cfm.

project would introduce up to 635 residential units and approximately 1,289 new residents.[25] However, the additional approximate 1,279 residents and 13 employees would not result in substantial growth beyond what was projected in the overall development program in the LMSAP EIR. The project site is currently a parking garage; therefore, the proposed project would not displace any housing or people.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents, the proposed project would not result in any new or more severe significant impacts related to population and housing than those identified in the LMSAP EIR or the Previous CEQA Documents. The LMSAP EIR did not identify any mitigation measures related to population and housing, and none would be required for the proposed project. Also no SCAs would apply related to population and housing.

[25] According to Table ES-1 in the LMSAP EIR, the LMSAP population analysis employed a factor of approximately 2.03 persons per residential unit.

12. Public Services, Parks and Recreation Facilities

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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.	☒	☐	☐

Previous CEQA Documents Findings

The Redevelopment Plan Amendments EIR found less-than-significant impacts related to public services and recreational facilities; no mitigation measures were warranted nor City of Oakland SCAs identified. The Housing Element Update EIR and its 2014 Addendum identified less-than-significant public services and recreation impacts with the exception of impacts related to police and fire protection, which were found to be less than significant with incorporation of SCAs and mitigation measures identified in the 1998 LUTE EIR. The 1998 LUTE EIR identified a significant and unavoidable impact for fire safety, with mitigation measures pertaining to the North Oakland Hills area; the 1998 LUTE EIR also identified a significant and unavoidable impact regarding increased student enrollment, particularly in Downtown (and the Waterfront), and identified mitigation measures that would not reduce the effect to a less-than-significant level. Thus the impact was significant and unavoidable.[26]

[26] The 1998 LUTE EIR addressed effects on solid waste demand and infrastructure facilities for water, sanitary sewer and stormwater drainage under *Public Services*. These topics are addressed in this document under *14. Utilities and Service Systems*, consistent with current City approach.

LMSAP EIR Findings

The LMSAP EIR determined that the increase in demand for public services (i.e., fire, police, and schools) and park and recreation services from development under the LMSAP would be less than significant. The Oakland Police Department and Fire Department would adjust service capacity as needed and the City is responsible for coordinating service provisions to adjust to the expected increase in demand for these services. New development, including the proposed project, is required to adhere to appropriate building and fire code requirements that would be incorporated into project construction. The Plan area is exceptionally well-served by libraries, and the LMSAP includes the creation of new parks and open spaces, and improved access to the regional parks system. Potential impacts to public services would be less than significant with implementation of SCAs. No mitigation measures or SCAs were required regarding recreation.

Project Analysis

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

The proposed project would create demands on public services typical of a mixed-use building containing up to 635 residential units and up to 18,000 square feet of commercial space. However, the development would occur in an urban area already served by public services and recreation facilities, and recent CEQA analyses have consistently determined that the anticipated growth would not impose a burden on existing public services to create a significant impact. Compliance with standard City practices would further ensure the less-than-significant impact. These included City practices and requirements, such as the Oakland Fire Services' review of proposed project plans, and project applicants' required contributions to school impact fees to offset any impacts to school facilities from the proposed project.

City of Oakland SCAs incorporate most of these standard practices and requirements to address potential public services and park and recreation facilities impacts. The proposed project would comply with City of Oakland SCAs related to the increased need for fire protection by requiring all projects to implement safety features, and to comply with all applicable codes and regulations. In addition, adherence to the General Plan's Open Space, Conservation and Recreation Element policies 3.1, 3.3, and 3.10 would reduce potential impacts to recreational facilities. In addition, any increases in need for police protection, fire protection, schools, or other public facilities would be mitigated by adherence to General Plan policies N.12.1, N.12.2, N.12.5, FI-1, and FI-2.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents, the proposed project would not result in any new or more severe significant impacts related to public services and parks and recreation services than those identified in the LMSAP EIR and the Previous CEQA Documents.

13. Transportation and Circulation

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Conflict with a plan, ordinance, or policy addressing the safety or 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)	☒	☐	☐
b. Cause substantial additional vehicle miles traveled (VMT) per capita, per service population, or other appropriate efficiency measure	☒	☐	☐
c. Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network.	☒	☐	☐

Previous CEQA Documents Findings

The Prior EIRs considered for this analysis identified significant and unavoidable impacts regarding intersection and/or roadway segment operations. Various mitigation measures and City of Oakland SCAs are identified (except in the LUTE EIR, which does not identify SCAs). Other transportation/ circulation effects identified in each of the document are reduced to less than significant with adherence to City of Oakland SCAs or mitigation measure, as follows.

The LUTE EIR identified significant and unavoidable impacts regarding degradation of the level of service (LOS) for several roadway segments citywide. A mitigation measure was identified for one Downtown intersection to reduce the intersection operations impacts to less than significant. All other topics were found less than significant. The LUTE EIR did not identify an impact at the intersections that are affected by the proposed project.

The Housing Element EIR and Redevelopment Plan EIR and Addendum identified significant and unavoidable impacts to roadway segment operations as well as railroad crossing safety, after the implementation of identified mitigation measures. Neither of these Prior EIRs identified an impact in the area affected by the proposed project.

LMSAP EIR Findings

The LMSAP EIR evaluated 45 intersections and 10 freeway segments within the vicinity of the LMSAP Area (including within the City of Alameda) for potential impacts. The thresholds of significance for the LMSAP EIR were based on vehicle level of service (LOS).

Under Existing Plus LMSAP Project conditions, significant LOS impacts at a total of seven intersections were identified during one or both peak hours. Impacts at three of these intersections would be reduced to a less-than-significant level with implementation of the recommended

mitigation measures. However, impacts to the First Avenue and International Boulevard, Oak Street and 10th Street, Oak Street and Sixth Street, and Jackson Street and Fifth Street intersections would be significant and unavoidable. Under Existing Plus LMSAP Project conditions, impacts to the I-880 freeway segment between Oak Street and Fifth Street would be significant and unavoidable. In addition, under Existing Plus LMSAP Project conditions, impacts related to pedestrian circulation at the Constitution Way and Marina Village Parkway and Constitution Way and Atlantic Avenue intersections would be significant and unavoidable because these intersections are located in the City of Alameda and the City of Oakland does not have the authority to construct recommended improvements.

Under Interim 2020 Plus LMSAP Project conditions, significant unavoidable impacts were identified at a total of three intersections, including Jackson Street and Sixth Street, Oak Street and Sixth Street, and Oak Street and Fifth Street.

Under Cumulative 2035 Plus LMSAP Project conditions, significant unavoidable impacts were identified at a total of 13 intersections including: Madison Street and 14th Street; Madison Street and 11th Street; Madison Street and 10th Street; Oak Street and 10th Street; Harrison Street and Eighth Street; Jackson Street and Eighth Street; Oak Street and Eighth Street; Jackson Street and Seventh Street; Oak Street and Seventh Street; Fifth Avenue and Seventh Street/Eighth Street; Jackson Street and Sixth Street; Oak Street and Sixth Street; and Oak Street and Fifth Street. In addition, under Cumulative 2035 Plus LMSAP Project conditions impacts to the segment of Oak Street between 2nd Street and Embarcadero would also be significant and unavoidable.

All the mitigation measures identified in the LMSAP EIR are included in the citywide Transportation Impact Fee (TIF). Therefore, the project applicant shall mitigate the project impacts by paying the required TIF.

Several SCAs related to transportation and circulation were identified as required to be implemented for projects developed under the LMSAP, three of which are applicable to the proposed project (see Attachment A).

Project Analysis

Vehicle Miles Travelled (VMT)

On September 21, 2016, the City of Oakland's Planning Commission directed staff to update the City of Oakland's California Environmental Quality Act (CEQA) Thresholds of Significance Guidelines related to transportation impacts in order to implement the directive from Senate Bill 743 (Steinberg 2013) to modify local environmental review processes by removing automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion, as a significant impact on the environment pursuant to CEQA. The Planning Commission direction 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.

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.

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

Estimating VMT

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

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

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

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

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

Based on the MTC Travel Model, the regional average daily VMT per capita is 15.0 under 2020 conditions and 13.8 under 2040 conditions, and the regional average daily VMT per worker is 21.8 under 2020 conditions and 20.3 under 2040 conditions.

Thresholds of Significance

According to the interim *Update to CEQA Thresholds of Significance and Transportation Impact Study Guidelines* dated October 17, 2016, 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 a net increase in total VMT.

Screening Criteria

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

1. Small Projects: The project generates fewer than 100 vehicle trips per day
2. Low-VMT Areas: The project meets map-based screening criteria by being located in an area that exhibits below threshold VMT, or 15 percent or more below the regional average, as illustrated on maps provided by MTC
3. Near Transit Stations: The project is located in a Transit Priority Area or within a one-half mile of a Major Transit Corridor or Stop[27] 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); and
    - Is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Transportation Commission).

Impact Analysis

The Project satisfies the Low-VMT Area (number 2) and Near Transit Station (number 3) screening criteria, as detailed below.

[27] 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.

Criterion Number 1: Small Projects

The project would generate more than 100 trips per day and therefore does not meet criterion Number 1.

Criterion Number 2: Low-VMT Area

Table TRA-1 describes the 2020 and 2040 VMT for TAZ 968, the TAZ in which the project is located as well as applicable VMT thresholds of 15 percent below the regional average. Considering that the proposed project would provide less than 50,000 square feet of retail space, the retail is considered to be local serving and the VMT per employee criterion is used to screen the VMT for the commercial component of the proposed project.

TABLE TRA-1
DAILY VEHICLE MILES TRAVELED PER CAPITA

	Bay Area				TAZ 968	
	2020		2040			
Land Use	Regional Average	Regional Average minus 15%	Regional Average	Regional Average minus 15%	2020	2040
Residential (VMT per Capita)[1]	15.0	12.8	13.8	11.7	3.6	2.8
Commercial (VMT per employee)[2]	21.8	18.5	20.3	17.3	13.7	11.4

[1] MTC Model results at analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerCapita and accessed in November 2016.
[2] MTC Model results at analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerWorker and accessed in November 2016.

SOURCE: Fehr & Peers, 2016

As shown in Table TRA-1, 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.

Criterion Number 3: Near Transit Station

The proposed project would be located about 0.1 miles from the 12th Street BART Station and within one-half mile of frequent bus service along Broadway and 14th Street. The proposed project would satisfy criterion number 3 because it would also meet the following three conditions for this criterion:

- The project has an FAR greater than 0.75
- The project would include 631 parking spaces for the project residents, which corresponds to 0.99 spaces per unit. The project would not designate any spaces for project visitors or retail employees. The City of Oakland Municipal Code Section 17.116.060 has no parking minimum requirement and allows a maximum of 1.25 spaces per unit for multi-family

residential developments in the D-LM zone. The project would provide parking within the minimum and maximum parking supply required by the Municipal Code. Therefore, the project would not provide more parking for use by residents, customers, or employees of the project than other typical nearby uses, or more parking than required by the City.

- The 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

VMT Screening Conclusion

The project would satisfy the Low-VMT Area criterion (number 2) and the Near Transit Stations criterion (number 3). Therefore, project impacts with respect to VMT would be less than significant.

Consistency with Plan, Ordinances, or Policies Addressing the Safety or Performance of the Circulation System

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, state 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 (PMP) and Bicycle Master Plan (BMP) by not making major modifications to existing pedestrian or bicycle facilities in the surrounding areas and would not adversely affect installation of future facilities. 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 TRA-4 in Attachment A to this document).

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. Further, the following analysis supports the conclusion that the proposed project is within the impact envelope of the reasonably foreseeable maximum development program analyzed by the LMSAP EIR, providing the basis for use of an Addendum pursuant to CEQA Guidelines Section 15164.

Consistency with LMSAP EIR

As noted in the LMSAP EIR, the Development Program represents the reasonably foreseeable development expected to occur in the next 20 to 25 years in the Plan area. The LMSAP and the LMSAP EIR intend to provide flexibility in the location, amount, and type of development. Thus, as long as the trip generation for the overall Plan area remains below the levels estimated in the EIR, the traffic impact analysis presented in the EIR continues to remain valid.

Project Automobile Trip Generation

Trip generation is the process of estimating the number of vehicles that would likely access the project. **Table TRA-2** summarizes the trip generation for the proposed project. Trip generation data published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual* (Ninth Edition) was used as a starting point to estimate the project vehicle trip generation.

TABLE TRA-2
AUTOMOBILE TRIP GENERATION SUMMARY[1]

Land Use	Units[1]	ITE Code	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Residential	635 DU	220[2]	4,230	65	259	324	256	138	394
Retail	9.6 KSF	820[3]	410	6	3	9	17	19	36
Restaurant	8.4 KSF	932[4]	1,070	50	41	91	50	33	83
Subtotal			5710	121	303	424	323	190	513
Non-Auto Reduction (43%)[5]			(2,460)	(52)	(130)	(182)	(139)	(82)	(221)
Pass-by Reduction[6]			(180)	0	0	0	(14)	(14)	(28)
Adjusted Project Trips			**3,070**	**69**	**173**	**242**	**170**	**94**	**264**

[1] DU = Dwelling Units, KSF = 1,000 square feet
[2] ITE Trip Generation *(9th Edition)* land use category 220 (Apartment):
Daily: 6.65
AM Peak Hour: 0.51 (20% in, 80% out)
PM Peak Hour: 0.62 (65% in, 35% out)
[3] ITE Trip Generation *(9th Edition)* land use category 820 (Shopping Center):
Daily: 42.70
AM Peak Hour: 0.96 (62% in, 38% out)
PM Peak Hour: 3.71 (48% in, 52% out)
[4] ITE Trip Generation *(9th Edition)* land use category 932 (High Turnover Sit Down Restaurant):
Daily: 127.5
AM Peak Hour: 10.81 (55% in, 45% out)
PM Peak Hour: 9.85 (60% in, 40% out)
[5] Reduction of 43.0% assumed based on City of Oakland Transportation Impact Study Guidelines data for development in an urban environment within 0.5 miles of a BART Station.
[6] PM peak hour pass-by rates based on ITE Trip Generation Handbook (3rd Edition). The weekday PM peak hour average pass-by rates for land use category 820 is 34% and category 932 is 43%. Pass-by rates are not applied to the AM peak hour. 20% reduction is applied to the daily trips.

SOURCE: Fehr & Peers, 2016.

The ITE data is based on data collected at mostly single-use suburban sites where the automobile is often the only travel mode. However, the project site is in a dense mixed-use urban environment where many trips are walk, bike, or transit trips. Since the proposed project is about 0.1 miles from the 12th Street BART Station, this analysis reduces the ITE based trip generation by 43 percent to account for the non-automobile trips. This reduction is consistent with City of Oakland *Transportation Impact Study Guidelines* and is based on the Bay Area Travel Survey (BATS) 2000 which shows that the non-automobile mode share within one-half mile of a BART Station in Alameda County is about 43 percent. A 2011 research study shows reducing ITE based trip generation using BATS data results in a more accurate estimation of trip generation for urban mixed use developments than just using ITE based trip generation.[28]

Pass-by trips are trips attracted to a site from adjacent roadways as an intermediate stop on the way to a final destination. Pass-by trips alter travel patterns in the immediate study area, but do not add new vehicle trips to the roadway network, and should therefore be excluded from trip generation estimates. According to ITE's *Trip Generation Handbook* (3rd Edition), the average weekday PM peak hour pass-by reduction is 34 percent for retail and 43 percent for restaurant. No pass-by reductions were applied to the AM peak hour and it was assumed that on a daily basis there would be a 20 percent reduction.

The proposed project would eliminate about 500 existing public parking spaces. The trip generation estimates conservatively do not account for the existing trips generated by the existing parking garage. Although the demolition of the public parking spaces is expected to eliminate some of the automobile trips, other off-street parking facilities in the vicinity would accommodate most of the motorists that currently park at the project site. Thus, these motorists would continue to travel to and from this area after the demolition of the existing garage.

As summarized in Table TRA-2, the project would generate approximately 3,070 net new daily, 242 net new AM peak hour, and 264 net new PM peak hour trips.

Non-Auto Trip Generation

Consistent with City of Oakland Transportation Impact Study Guidelines, **Table TRA-3** presents the estimates of project trip generation for all travel modes.

Total LMSAP Area Trip Generation

Since the approval of the LMSAP EIR, six developments, including this project, have been proposed and are in some stage of the City's approval process at this time. **Table TRA-4** summarizes the trip generation for these developments. The six developments combined would generate about 8,684 daily trips, 545 AM peak hour, and 759 PM peak hour trips. The combined trip generation is less than the total trip generation estimated in the LMSAP EIR. Likewise, inclusive of the proposed project, the six developments currently proposed and under consideration within the Plan Area are substantially less than the total cumulative development approved within Plan Area by the LMSAP EIR.

[28] *Evaluation of the Operation and Accuracy of Five Available Smart Growth Trip Generation Methodologies.* Institute of Transportation Studies, UC Davis, 2011.

TABLE TRA-3
TRIP GENERATION BY TRAVEL MODE

Mode	Mode Share Adjustment Factors[1]	Daily	AM Peak Hour	PM Peak Hour
Automobile	57.0%	3,070	242	264
Transit	30.4%	1,640	129	141
Bike	3.9%	210	17	18
Walk	23.0%	1,240	98	106
Total Trips		6,160	486	529

[1] Based on *City of Oakland Transportation Impact Study Guidelines* assuming project site is in an urban environment within 0.5 miles of a BART Station.

SOURCE: Fehr & Peers, 2016.

TABLE TRA-4
TRIP GENERATION FOR DEVELOPMENT PROJECTS WITHIN THE LMSAP AREA

Project Name	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
378 11th Street (Hampton Inn)[1]	580	26	18	44	23	23	46
250 14th Street[2]	738	11	41	52	43	25	68
226 13th Street[3]	1,285	19	64	83	72	46	118
301/385 12th Street (W12)[4]	2,202	-16	80	64	127	71	198
Lakehouse Commons[5]	809	19	41	60	40	25	65
1314 Franklin Street[6]	3,070	69	173	242	170	94	264
Total Projects trips	**8,684**	**128**	**417**	**545**	**475**	**284**	**759**
LMSAP Estimated Trip Generation	26,837	1,370	725	2,095	996	1,399	2,395
Percent Complete	*32%*	*9%*	*58%*	*26%*	*48%*	*20%*	*32%*

[1] Source: *378 11th Street, Oakland, CA* letter (June 17, 2015)
[2] Source: *14th and Alice Residential Project – Transportation Assessment* (January 7, 2016)
[3] Source: 226 *13th Street Project –Transportation Assessment* (March 18, 2016)
[4] Source: *12th and Webster Street Residential Project – Transportation Assessment* (March 25, 2016)
[5] Source: *Lakehouse Commons Project – Transportation Assessment* (May 24, 2016)
[6] See Table TRA-2

SOURCE: Fehr & Peers, 2016.

Since the uses proposed by the project are consistent with the assumptions in LMSAP EIR and the proposed project would generate fewer automobile trips than assumed in LMSAP EIR, the proposed project would not result in additional impacts on traffic operations at the intersections analyzed in the LMSAP EIR.

Intersection Operations at Intersection not evaluated in LMSAP EIR

Although City of Oakland is not considering automobile congestion as a CEQA topic, this document evaluates the impacts of the proposed project on intersection operations to inform decision makers and the public. According to the City of Oakland's Transportation Impact Study Guidelines (November 2013), the criteria for the intersections to be analyzed include the following:

- All intersection(s) of streets adjacent to project site;
- All signalized intersection(s), all-way stop-controlled intersection(s) or roundabouts where 50 or more peak hour trips are added by the project;
- Side-street stop-controlled intersection(s) where 10 or more peak hour trips are added by the project to any individual movement other than the major-street through movement; and,
- At the discretion of TPFD staff, signalized intersection(s), all-way stop-controlled intersection(s) or roundabouts where 25 or more peak hour trips are added by the project.

The process used to select the intersections meeting the above criteria and not evaluated in the LMSAP, followed by the evaluation of these intersections using Level of Service (LOS)[29] calculated based on the 2010 *Highway Capacity Manual* (HCM) methodologies, are described below.

Trip Distribution and Study Intersection Selection

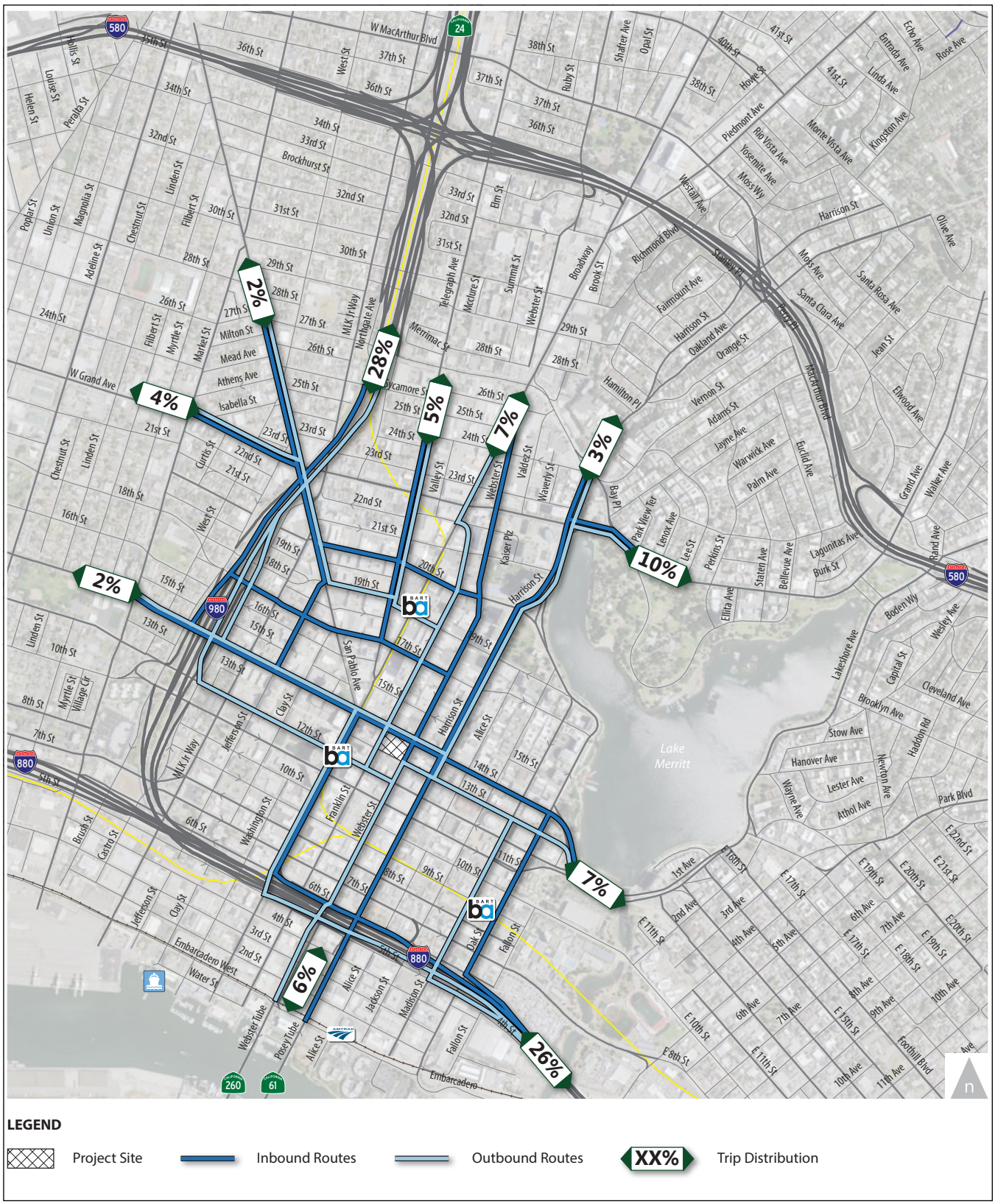
The trip distribution and assignment process is used to estimate how the trips generated by a project site would be distributed across the roadway network. Based on existing travel patterns, locations of complementary land uses, results of the Alameda County Transportation Commission's (ACTC) Travel Demand Model, and the one-way street network and turn restrictions in Downtown Oakland, we determined directions of approach to and departure from the project site. **Figure 13** shows the resulting trip distribution.

Trips generated by the proposed project, as shown in Table TRA-2, were assigned to the roadway network according to the trip distribution shown on Figure 13. **Figure 14** shows the resulting trip assignment by roadway segment. **Figure 15** shows the trip assignment at study intersections.

Based on the criteria described above, the following intersections that were not evaluated in the LMSAP EIR were evaluated:

1. Franklin Street/14th Street
2. Webster Street/14th Street
3. Harrison Street/14th Street
4. Franklin Street/13th Street
5. Webster Street/13th Street
6. Harrison Street/13th Street
7. Franklin Street/12th Street
8. Webster Street/12th Street

[29] The operations of roadway facilities are typically described with the term level of service (LOS), a qualitative description of traffic flow based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, which reflects free-flow conditions where there is very little interaction between vehicles, to LOS F, where the vehicle demand exceeds the capacity and high levels of vehicle delay result. LOS E represents "at-capacity" operations. When traffic volumes exceed the intersection capacity, stop-and-go conditions result and a vehicle may wait through multiple signal cycles before passing through the intersection; these operations are designated as LOS F.

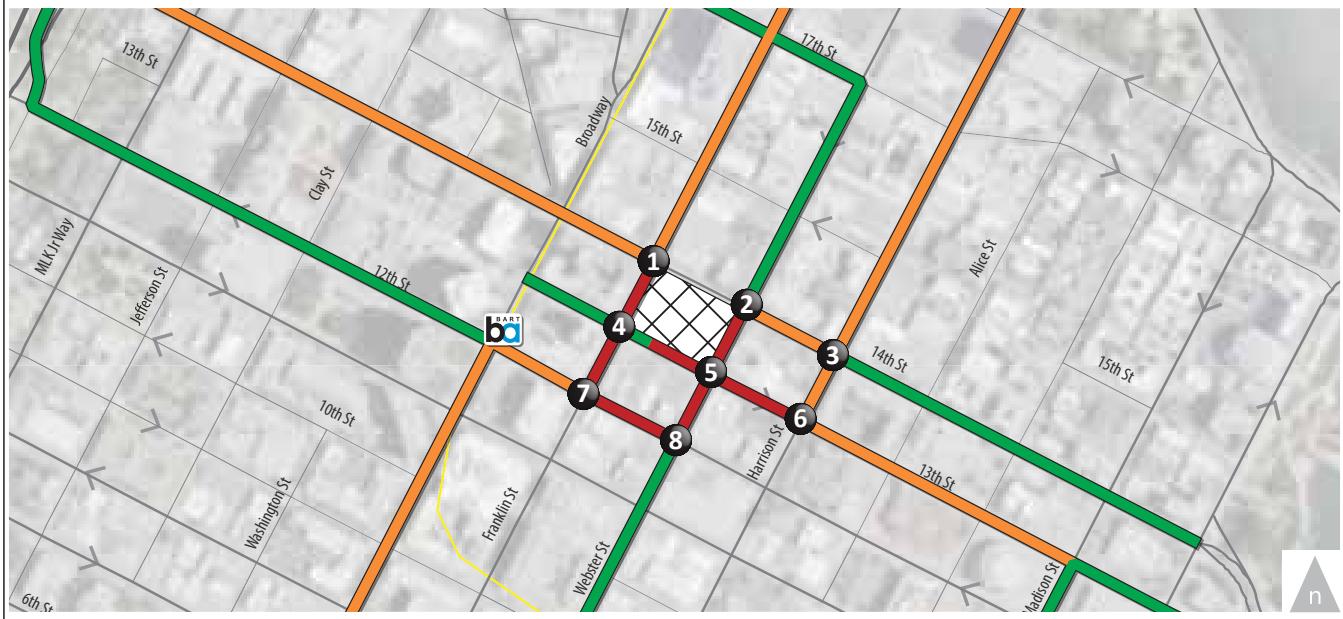


SOURCE: Fehr & Peers

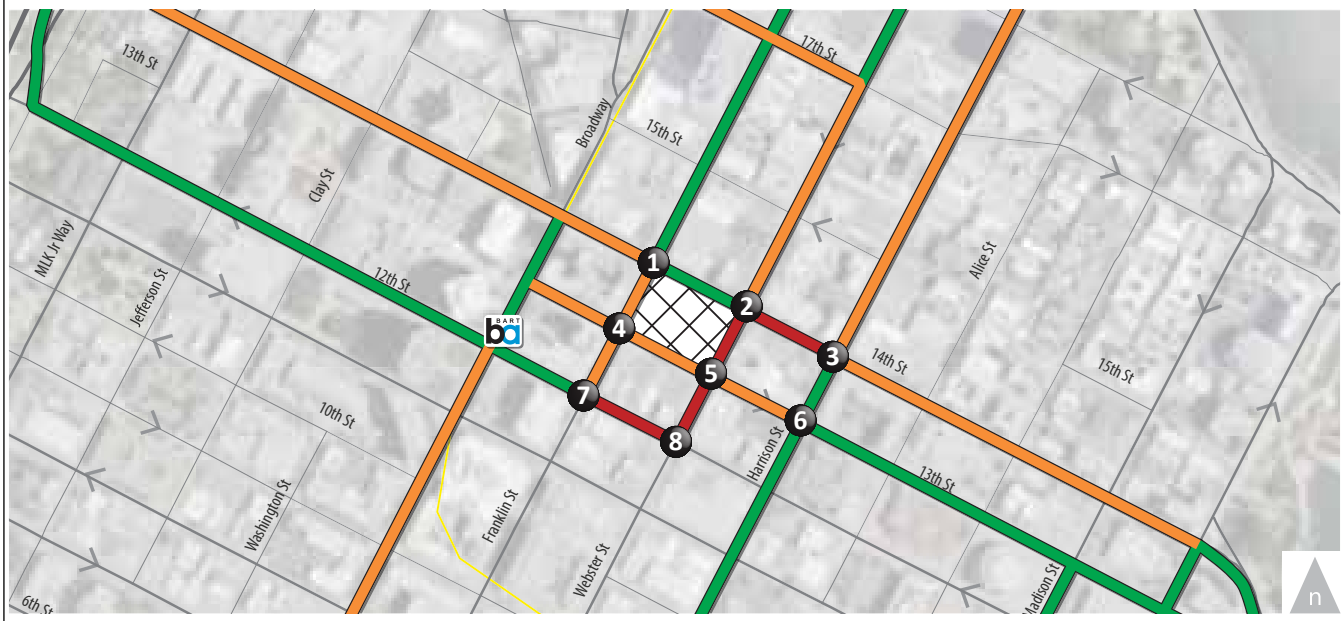
1314 Franklin Street Mixed-Use Project . 160602

Figure 13
Project Trip Distribution

AM PEAK HOUR TRIP ASSIGNMENT



PM PEAK HOUR TRIP ASSIGNMENT



LEGEND

Project Site

Study Intersection

Peak Hour Project Trips

10 to 24

25 to 49

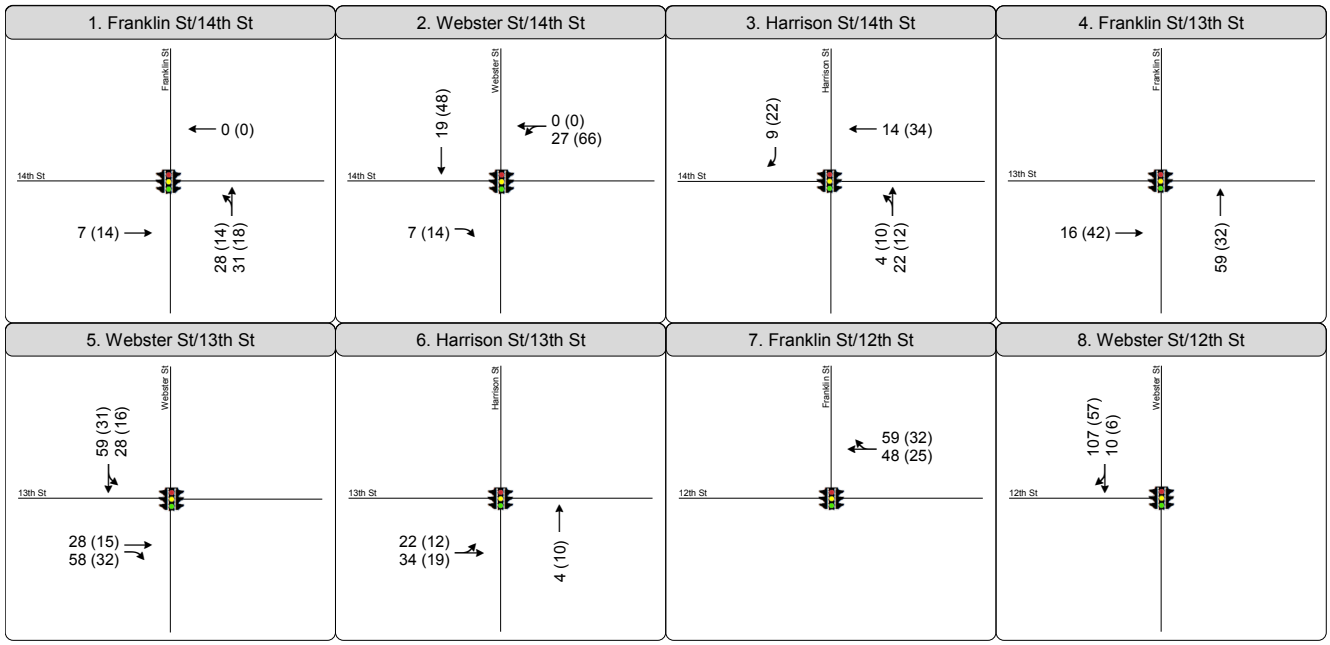
50+

SOURCE: Fehr & Peers

1314 Franklin Street Mixed-Use Project . 160602

Figure 14

AM and PM Peak Hour Trip Assignment



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Project Site

Study Intersection

SOURCE: Fehr & Peers

1314 Franklin Street Mixed-Use Project . 160602

Figure 15
Project Trip Assignment

Existing Traffic Conditions

Traffic data, consisting of automobile turning movement, as well as pedestrian and bicycle counts, were collected on clear days, while area schools were in normal session. The traffic data collection was conducted from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM on October 26, 2016. These time periods were selected because trips generated by the proposed project, in combination with background traffic, are expected to represent typical worst traffic conditions.

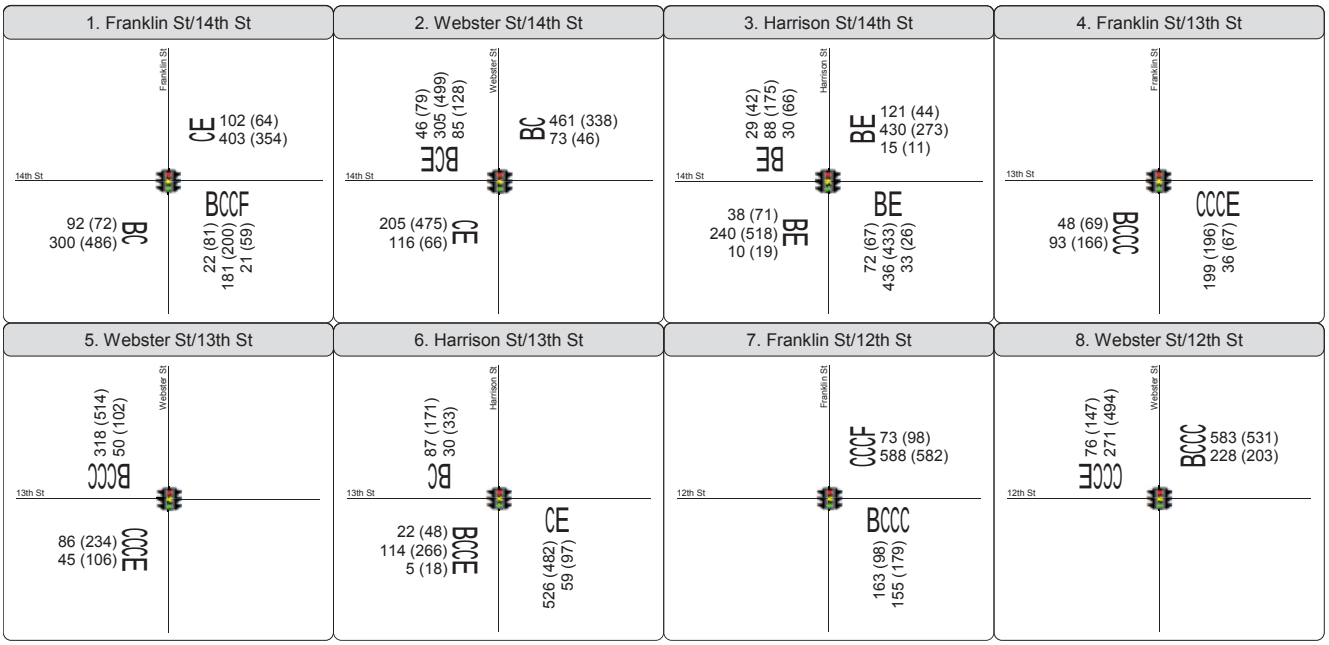
Figure 16 presents existing intersection lane configurations, traffic control devices, and peak hour traffic volumes. **Figure 17** presents exiting pedestrian and bicycle peak hour traffic volumes. **Table TRA-5** summarizes intersection operations under Existing Conditions. As shown in the table, all study intersections currently operate at LOS B or better during the weekday AM and PM peak hours. **Appendix A** provides the detailed LOS calculation sheets.

TABLE TRA-5
INTERSECTION LOS SUMMARY – EXISTING AND EXISTING PLUS PROJECT CONDITIONS

Intersection	Control[1]	Peak Hour	Existing No Project		Existing Plus Project		Signif. Impact?
			Delay[2] (sec)	LOS	Delay[2] (sec)	LOS	
1. Franklin Street/ 14th Street	Signal	AM	5.1	A	5.4	A	No
		PM	6.2	A	6.4	A	No
2. Webster Street/ 14th Street	Signal	AM	10.7	B	11.0	B	No
		PM	10.6	B	11.3	B	No
3. Harrison Street/ 14th Street	Signal	AM	11.7	B	11.8	B	No
		PM	12.8	B	12.9	B	No
4. Franklin Street/ 13th Street	Signal	AM	7.4	A	7.3	A	No
		PM	8.0	A	8.1	A	No
5. Webster Street/ 13th Street	Signal	AM	7.2	A	7.5	A	No
		PM	11.3	B	11.5	B	No
6. Harrison Street/ 13th Street	Signal	AM	8.0	A	8.6	A	No
		PM	9.6	A	9.9	A	No
7. Franklin Street/ 12th Street	Signal	AM	8.4	A	8.4	A	No
		PM	8.2	A	8.2	A	No
8. Webster Street/ 12th Street	Signal	AM	9.8	A	10.0	B	No
		PM	11.3	B	11.5	B	No

[1] Signal = intersection is controlled by a traffic signal
[2] For signalized intersections, average intersection delay and LOS based on the 2010 HCM method is shown.

SOURCE: Fehr & Peers, 2016.



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Project Site

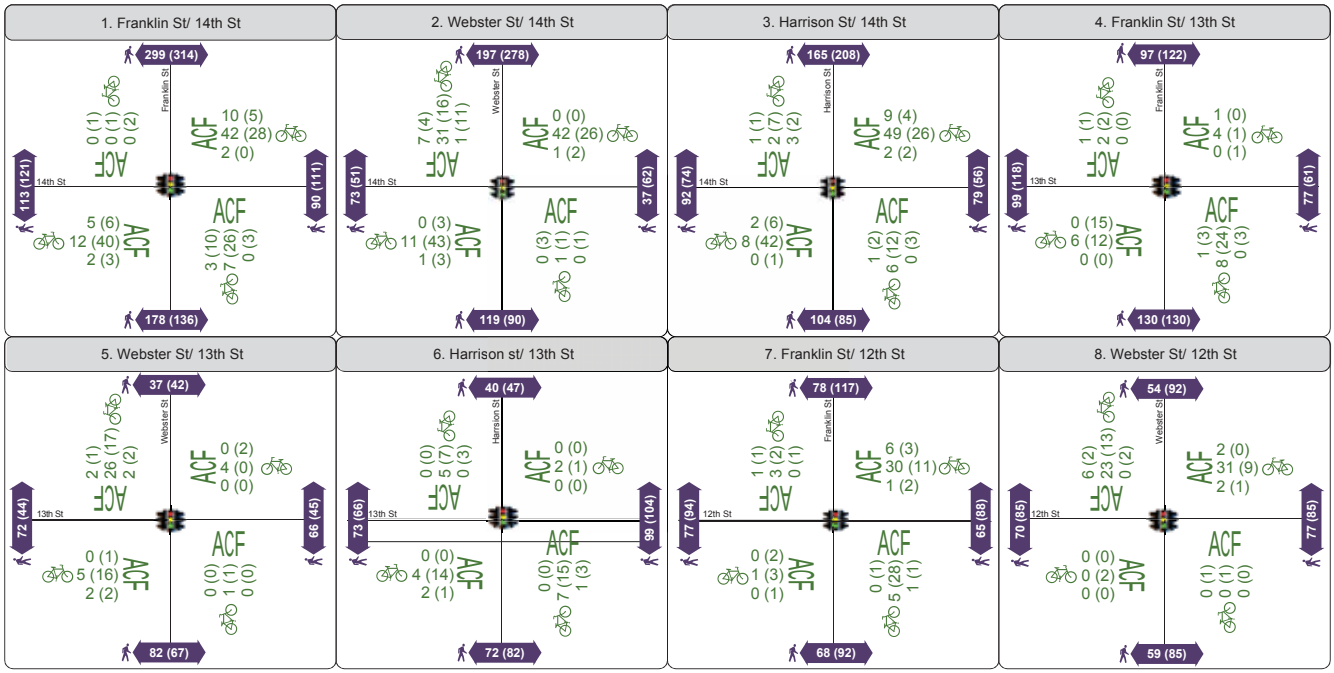
Study Intersection

SOURCE: Fehr & Peers

1314 Franklin Street Mixed-Use Project . 160602

Figure 16

Existing Intersection Configurations and Peak Hour Volumes



SOURCE: Fehr & Peers

1314 Franklin Street Mixed-Use Project . 160602

Figure 17

Existing Peak Hour Bicycle and Pedestrian Volumes

Existing Plus Project Traffic Conditions

Figure 18 shows traffic volumes under Existing Plus Project conditions, which consist of Existing Conditions traffic volumes plus added traffic volumes generated by the proposed project.

Table TRA-5 summarizes the intersection operations results for the Existing Plus Project conditions. Under Existing Plus Project conditions, the study intersections would continue to operate at LOS B or better during AM and PM peak hours. The proposed project would not cause a significant impact, per the LMSAP EIR, at the study intersections under Existing Plus Project conditions. **Appendix A** provides the detailed LOS calculation sheets.

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

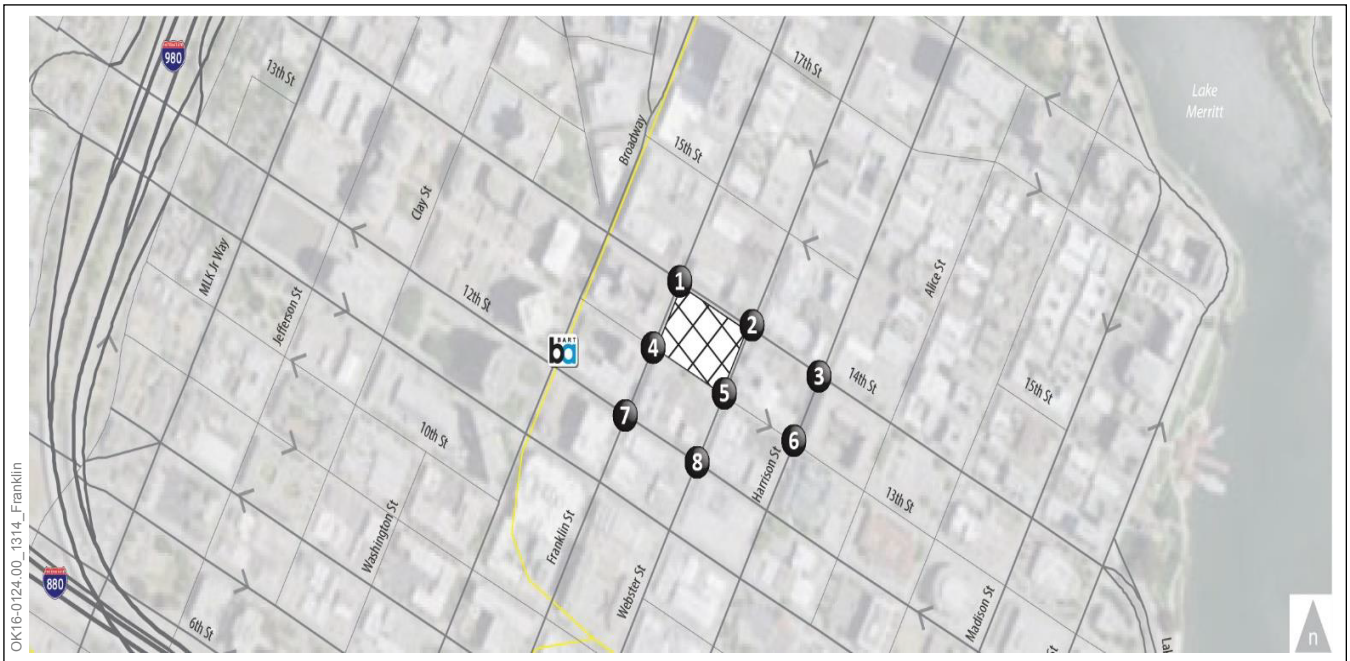
The proposed project would provide a five-level parking garage which would be accessed through driveways on Webster Street, about 60 feet south of 14th Street, and on 13th Street, about 50 feet east of Franklin Street. Both driveways would provide inbound and outbound access. The garage would provide up to 631 spaces (including 105 tandem spaces) for project residents.

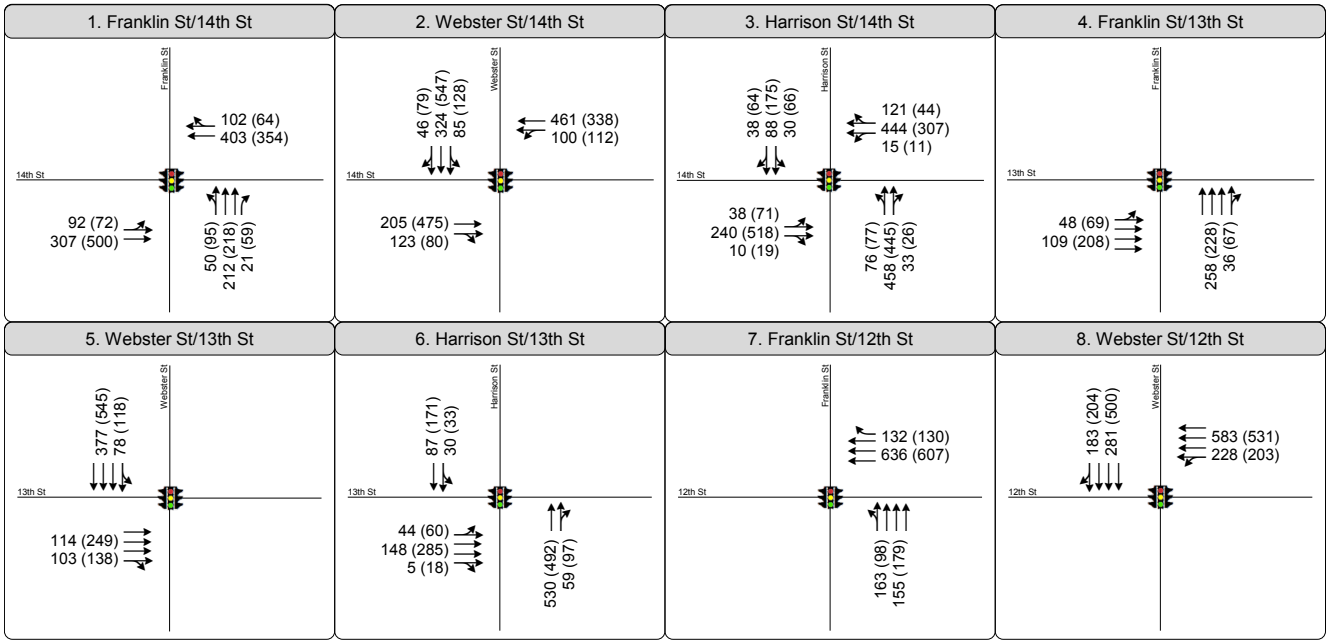
The project driveway on Webster Street would provide adequate sight distance between exiting motorists and pedestrians on the adjacent sidewalk because it would provide a clear line-of-sight between a motorist ten feet back from the sidewalk and a pedestrian ten feet away on each sides of the driveway. The project driveway on 13th Street may not provide adequate sight distance between exiting motorists and pedestrians on the adjacent sidewalk approaching from the west. Both driveways would provide adequate sight distance between existing motorists and vehicles on the adjacent street.

> **Recommendation TRA-1:** While not required to address a CEQA impact, the following should be monitored as part of the final design for the proposed project:
>
> - Ensure that the project driveway on 13th Street would provide adequate sight distance between motorists exiting the driveway and pedestrians on the adjacent sidewalks. This may require redesigning and/or widening the driveway. If adequate sight distance cannot be provided, provide audio/visual warning devices at 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. The Code requires one long-term space (with a minimum of one space for each 12,000 square feet of commercial floor area and one short-term space for each 5,000 square of commercial floor area.





LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

Signalized Intersection

Project Site

Study Intersection

SOURCE: Fehr & Peers

1314 Franklin Street Mixed-Use Project . 160602

Figure 18

Existing Plus Project Intersection Configurations and Peak Hour Volumes

Table TRA-6 presents the bicycle parking requirements for the proposed project. The proposed project is required to provide 37 short-term bicycle parking spaces and 161 long-term bicycle parking spaces to meet Oakland's City Code.

TABLE TRA-6
BICYCLE PARKING REQUIREMENTS

Land Use	Size[1]	Long-Term		Short-Term	
		Spaces per Unit[2]	Spaces	Spaces per Unit[2]	Spaces
Apartments	635 DU	1:4 DU	159	1:20 DU	32
Commercial	18.0 KSF	1:12,000 SF	2	1:5,000 SF	5
Total Required Bicycle Spaces			161		37
Total Bicycle Parking Provided			360		40
Bicycle Parking Surplus/Deficit			**+199**		**+3**

[1] DU = dwelling unit; KSF = 1,000 square feet
[2] Based on Oakland Municipal Code Sections 17.117.090 and 17.117.110

SOURCE: Fehr & Peers, 2016

The proposed project would provide a total of 360 long-term bicycle parking spaces in two approximately 3,150 square foot bicycle parking facilities at each basement level and an approximately 2,100 square foot bicycle parking facility at the ground level. Bicycle racks along the project site street frontages are proposed to accommodate an additional 40 bicycles (short-term). The long-term bicycle-parking spaces would be located adjacent to the elevators/stairs and would be accessed by elevators/stairs through the building lobbies or using the driveways on Webster or 13th Streets and biking through the garage.

Class 2 bicycle lanes are currently provided along northbound Franklin Street and southbound Webster Street north of 14th Street. In addition, City of Oakland is planning to provide Class 4 bikeways in both directions of 14th Street by eliminating one of the two automobile travel lanes in each direction.

Recommendation TRA-2: While not required to address a CEQA impact, the following should be considered as part of the final design for the proposed project:

- Implement a continuation of the existing Class 2 bicycle lanes on Webster Street and Franklin Street along the project frontage between 13th and 14th Streets.
- Ensure that the project driveway on Webster Street would provide adequate sight distance between motorists exiting the driveway and passing bicyclists on Webster Street. Potential improvements may include implementing a raised crossing, parking-protected bikeway, or other high-visibility treatment at the driveway entrance.
- Ensure that long-term bicycle parking includes adequate space for cargo bicycles or bicycle trailer storage.

- Final P. Job Plans shall include improvements consistent with the City of Oakland Improvement Plans for 14th Street subject to review and approval by the Department of Public Works.

Pedestrian Access and On-Site Circulation Impacts

The proposed project would provide adequate pedestrian facilities throughout the site. The primary pedestrian access would be through the main lobby located on 14th Street, with a smaller lobby located on 13th Street. Continuous sidewalks are provided on both sides of 13th, Franklin, 14th, and Webster Streets in the vicinity of the project where pedestrians can access the commercial/ retail space directly. These project features ensure safe pedestrian access to and throughout the site.

The City of Oakland Pedestrian Master Plan (PMP) recommends nine foot sidewalks with five foot clear pedestrian passage zones for local streets such as 13th, Franklin, 14th, and Webster Streets. The project proposes minimum 10–foot wide sidewalks on the streets surrounding the project site. With the development of the proposed project, the sidewalks along the project frontage would be adequately wide to accommodate potential sidewalk encroachment (e.g. bicycle racks and planted trees) and continue to provide five feet of clear sidewalk space for pedestrians.

> **Recommendation TRA-3:** While not required to address a CEQA impact, the following should be considered as part of the final design for the project:
>
> - Explore the feasibility of installing directional curb ramps at all four corners of the four intersections adjacent to the site. Considering that fire hydrants, signal poles, and/or light poles are provided at all the corners, construction of curb extensions (bulbouts) may also be required to provide directional curb ramps.

Transit Access Impacts

Transit service providers in the project vicinity include Bay Area Rapid Transit (BART) and AC Transit.

BART provides regional rail service throughout the East Bay and across the Bay. The nearest BART station to the project site is 12th Street, about 0.1 miles west of the project. 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 the following routes in the vicinity of the proposed project:

- Route 26 operates along 14th Street with nearest stops to the project site at Franklin Street. The eastbound stop is located just west of Franklin Street and provides a bench; the westbound stop is located just east of Franklin Street and provides a bench and shelter.
- Routes 6, 11, 12, 14, 18, 20, 26, 31, 40, 51A, 72, 72M, 72R, 88, 800, 801, 802, 805, 840, and 851 have stops along Broadway between 12th and 14th Streets which is approximately 0.1 to 0.2 miles from the project site.

AC Transit is currently planning the following changes to bus service in the project vicinity:

- Relocate the eastbound Route 26 stop on 14th Street from just west of to just east of Franklin Street, which would be closer to the project site.
- Currently, AC Transit is planning to implement a 14.4 mile long East Bay Bus Rapid Transit (BRT) project. The future BRT line alignment follows 11th and 12th Street from Broadway to Lake Merritt Boulevard. The BRT stops would be within short walking distance (i.e. one to two blocks) from the project site to 11th and12th Streets at Webster Street.

No other major 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 beyond the one discussed above.

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 Code does not require any loading berths for commercial uses totaling less than 25,000 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 berths for the commercial component of the proposed project.

The proposed project would provide a loading area with access from 13th Street about 40 feet east of Franklin Street, serving both the residential and commercial uses, that can accommodate up to two trucks, which satisfies the Code requirement.

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.

Parking Requirements

The City of Oakland Municipal Code established minimum and maximum parking requirements. According to the code, the residential component of the proposed project would require a minimum of zero and a maximum of one and one quarter parking spaces per residential unit. The commercial 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 retail. **Table TRA-7** 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 794 parking spaces for the residential units and a minimum of zero and maximum of 60 parking spaces for the retail uses. The project proposes up to 631 spaces combined for both the residential units and the retail uses. The proposed parking supply is within the range of City of Oakland Municipal Code requirements.

TABLE TRA-7
AUTOMOBILE PARKING CODE REQUIREMENTS

Land Use	Size[1]	Required Parking Supply		Provided Parking Supply	Within Range?
		Minimum	Maximum		
Apartments[2]	635 DU	0	794	631	**Yes**
Retail[3]	18.0 KSF	0	60		**Yes**

[1] DU = dwelling unit; KSF = 1,000 square feet
[2] City of Oakland off-street parking requirement for residential in zone D-LM is a minimum of zero space and a maximum of one and one quarter and per unit (section 17.116.060).
[3] City of Oakland off-street parking requirement for retail uses in zone D-LM is a minimum of zero space and a maximum of one space per 300 square foot of ground retail (section 17.116.080).

SOURCE: Fehr & Peers, 2016

As described in the Project Description, the proposed project would provide up to 631 parking spaces. All parking spaces would be accessible via the garage driveways on Webster Street and 13th Street. It is expected that residential visitors and retail visitors would use on-street parking.

Estimated Parking Demand

The parking demand analysis compares proposed parking supply to project parking demand estimated using average vehicle ownership rates from American Community Survey estimates data and the parking demand rates published in the ITE *2010 Parking Generation, 4th Edition*.

Table TRA-8 summarizes the parking demand of the proposed project. The parking demand values represent average parking demand. Parking demand for the residential component of the proposed project was determined by using average vehicle ownership rates in downtown Oakland. According to American Community Survey estimates, average vehicle ownership in the study area is 0.63 vehicles per multi-family dwelling unit. Based on this data, residential parking demand would be about 400 parking spaces. Residential visitor demand was estimated using an adjusted Urban Land Institution Shared Parking rate of 0.09, resulting in a visitor demand of 57 spaces. Based on ITE data for shopping center and applying a non-auto reduction of 43 percent (Oakland City guidelines for mode split adjustment within half a mile from BART), the adjusted shopping center parking demand is 14. Based on ITE data for high-turn over restaurant in an urban location, the parking demand for restaurant is 47 spaces.

The parking demand estimate presents a reasonable worse-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, it is likely that the retail component of the proposed project would be local-serving with minimal new automobile trips. 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 TRA-3 in Attachment A to this document).

TABLE TRA-8
PROJECT PARKING SUPPLY AND DEMAND

Land Use	Units[1]	Rate	Weekday
Apartment (Residents)	635 DU	0.63[2]	400
Apartment (Visitors)	635 DU	0.09[3]	57
Retail	9.6 KSF	1.45[4]	14
Restaurant	8.4 KSF	5.55[5]	47
Parking Demand			**518**
Parking Supply			**631**
Parking Surplus			**113**

[1] DU = dwelling unit; KSF = 1,000 square feet
[2] Based on 2013 ACS average automobile ownership of 0.63 vehicles per residential unit.
[3] Based on ULI Shared Parking and applying a non-auto reduction of 43% results on an average rate of 0.086 spaces per DU.
[4] Based on ITE Parking Generation(4th Edition) land category 820 (shopping center) and applying a non-auto reduction of 43% results on an average rate of 1.42 spaces per KSF
[5] Based on ITE Parking Generation (4th Edition) land category 932 (High-Turn Over Restaurant for urban location) with an average rate of 5.55 spaces per KSF

SOURCE: Fehr & Peers, 2016; ESA, 2016

Recommendation TRA-4: While not required to address a CEQA impact, the following should be considered as part of the final design for the proposed project:

- Provide at least three on-site car share spaces, as required by Code Section 17.116.105.
- Unbundle parking from the rent or sale of dwelling units, as required by Code Section 17.116.310.
- Provide a monthly transit benefit to each dwelling unit in an amount equal to either one-half the price of an Adult 31-Day AC Transit Pass (valued at $75 as of March 2017), or an AC Transit Easy Pass, as required by Code Section 17.116.105
- Establish a policy of no monthly permits for commercial parking uses, and minimum price floor for public parking.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the LMSAP EIR and the Previous CEQA Documents, implementation of the proposed project would not increase the severity of significant impacts identified in the LMSAP EIR or the Previous CEQA Documents, nor would it result in new significant impacts related to transportation and circulation that were not identified in the LMSAP EIR or the Previous CEQA Documents, as summarized below.

The proposed project would contribute trips to the significant impacts previously identified in the LMSAP EIR. However, as noted above, the total cumulative development contemplated and

approved within the LMSAP EIR is substantially larger than that which is currently proposed and under consideration within the Specific Plan Area. The impacts of the proposed project are considered equal to, or less severe than, those previously identified and disclosed in the LMSAP EIR.

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

Further, implementation of **SCA TRA-1, Construction Activity in the Public Right-of-Way**, **SCA TRA-2, Bicycle Parking**, **SCA TRA-3, Transportation Improvements**, and **SCA TRA-4, Transportation and Parking Demand Management** 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). No mitigation measures other than those already identified in the LMSAP EIR would be required. Overall, with implementation of applicable SCAs and LMSAP Mitigation Measures, the proposed project would not result in new or more severe significant impacts related to transportation and circulation than those already analyzed and disclosed in the LMSAP EIR.

14. Utilities and Service Systems

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	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;	☒	☐	☐
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.	☒	☐	☐

Previous CEQA Documents Findings

The Redevelopment Plan Amendments EIR and Housing Element Update EIR and its 2014 Addendum found less-than-significant impacts related to water, wastewater, or stormwater facilities, solid waste, and energy finding no mitigation measures were warranted but adhering to

certain City of Oakland SCAs. The 1998 LUTE EIR identified significant effects regarding these topics and identified mitigation measures that reduced the effects to less-than-significant levels.

LMSAP EIR Findings

The LMSAP EIR identified less-than-significant impacts to utilities and service systems, with the incorporation of City of Oakland SCAs in certain instances where new infrastructure would be required to be constructed. The LMSAP EIR determined that the capacity of existing service systems would meet increased service demand of development analyzed for the LMSAP; wastewater demand would not exceed wastewater treatment requirements or capacity, surface water runoff would not exceed the capacity of the storm drain system, water demand would not exceed available water supplies, and solid waste generated would not exceed landfill capacity.

Project Analysis

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

As the proposed project is located in an already built out urban area, no new infrastructure would be required for the proposed project. Development of the proposed project may increase sewer demand; however, implementation of SCAs requiring stormwater control during and after construction would address any potential impacts on stormwater treatment and sanitary sewer as a result of the proposed project. Therefore, the proposed project would not result in any new or more substantial impacts on water and sewer services than those identified in the LMSAP EIR and, with the implementation of SCAs requiring stormwater control during and after construction, the impact on water and sewer services would remain less than significant.

Solid Waste Services (Criterion 14c)

As described in the LMSAP EIR, impacts associated with solid waste as a result of the proposed project would remain less than significant. Nonhazardous solid waste from the development of the proposed project would be ultimately hauled to the Altamont Landfill and Resource Facility, which has 53 percent capacity remaining and an estimated closure date of January 2025, and hence would have sufficient capacity to accept waste generated by development of the proposed project.[30] The proposed project also would comply with City of Oakland SCAs pertaining to waste reduction and recycling. Therefore, the impact regarding solid waste services would remain less than significant as identified in the LMSAP EIR.

Energy (Criterion 14d)

The proposed project would result in less-than-significant impacts related to energy standards and use, and would comply with the standards of Title 24 of the California Code of Regulations. In addition, City of Oakland SCAs pertaining to compliance with the green building ordinance would require construction projects to incorporate energy-conserving design measures, which would ensure the proposed project's impacts on energy would remain less than significant.

[30] CalRecycle: http://www.calrecycle.ca.gov/SWFacilities/Directory/01-AA-0009/Detail/

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the LMSAP EIR or Previous CEQA Documents, nor would it result in new significant impacts related to utilities and service systems that were not identified in the LMSAP EIR or the Previous CEQA Documents. The LMSAP EIR did not identify any mitigation measures related to utilities and service systems, and none would be required for the proposed project. Implementation of **SCA UTIL-1, Construction and Demolition Waste Reduction and Recycling, SCA UTIL-2, Underground Utilities, SCA UTIL-3, Recycling Collection and Storage Space, SCA UTIL-4, Green Building Requirements, SCA UTIL-5, Sanitary Sewer System, SCA UTIL-6, Storm Drain System, UTIL-7, Recycled Water, SCA HYD-1, Erosion and Sedimentation Control Plan for Construction, and SCA HYD-2, Site Design Measures to Reduce Stormwater Runoff** (see Attachment A), as well as compliance with Title 24 and CALGreen requirements would ensure that impacts to sewer capacity, stormwater drainage facilities, solid waste services, and energy would be less than significant.

VII. References

(All references cited below are available at the Oakland Bureau of Planning, Agency, 250 Frank Ogawa Plaza, Suite 3330, Oakland, California, unless specified otherwise.)

Lake Merritt Station Area Plan EIR

City of Oakland, Draft EIR, 2014.

City of Oakland, Final EIR, 2014.

Housing Element Update

City of Oakland, Draft EIR for the 2007-2015 Housing Element Update, 2009.

City of Oakland, Final EIR for the 2007-2015 Housing Element Update, 2010.

City of Oakland, 2015-2023 Housing Element Addendum to the 2010 Housing Element EIR, 2014.

Central District Urban Renewal Plan Amendment (Redevelopment Plan)

Oakland Redevelopment Agency, Draft EIR for the Proposed Amendments to the Central District Urban Renewal Plan, March 2011.

Oakland Redevelopment Agency, Final EIR for the Proposed Amendments to the Central District Urban Renewal Plan, June 2011.

Oakland Redevelopment Agency, 2012. *Central District Urban Renewal Plan*, Adopted June 12. 1969, as amended through April 3, 2012.

General Plan Land Use and Transportation Element

City of Oakland, 1998 LUTE Draft EIR, October 1997.

City of Oakland, 1998 LUTE Final EIR, February 1998.

City of Oakland, 2007. Land Use and Transportation Element of the Oakland General Plan, March 24, 1998, amended to June 21, 2007.

Plan Bay Area

Metropolitan Transportation Commission and Association of Bay Area Governments, 2014. Plan Bay Area, Strategy for a Sustainable Region. Adopted July 18, 2014.

Oakland Planning Code

City of Oakland, 2014. City of Oakland Planning Code. CEDA: Planning and Zoning. http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak032032.pdf, accessed August 8, 2016.

Attachments

A. Standard Conditions of Approval and Mitigation Monitoring and Reporting Program
B. Criteria for Use of Addendum, Per CEQA Guidelines Sections 15162, 15164, and 15168
C. Project Consistency with Community Plan or Zoning, Per CEQA Guidelines Section 15183
D. Infill Performance Standards, Per CEQA Guidelines Section 15183.3

Appendices

A. Shadow Diagrams
B. Wind Analysis
C. Health Risk Assessment

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ATTACHMENT A

Standard Conditions of Approval and Mitigation Monitoring and Reporting Program

This Standard Conditions of Approval ("SCAs") and Mitigation Monitoring and Reporting Program ("SCAMMRP") is based on the CEQA Analysis prepared for the 1314 Franklin Street Mixed-Use Project.

This SCAMMRP is in compliance with Section 15097 of the CEQA Guidelines, which requires that the Lead Agency "adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." The SCAMMRP lists mitigation measures recommended in the 2014 LMSAP EIR that apply to the proposed project. The SCAMMRP also lists other SCAs that apply to the proposed project, most of which were identified in the LMSAP EIR and some of which have been subsequently updated or otherwise modified by the City. Specifically, on July 22, 2015, the City of Oakland released a revised set of all City of Oakland SCAs, which largely still include SCAs adopted by the City in 2008, along with supplemental, modified, and new SCAs. SCAs are measures that would minimize potential adverse effects that could result from implementation of the proposed project, to ensure the conditions are implemented and monitored. The revised set of the City of Oakland SCAs includes new, modified, and reorganized SCAs; however, none of the revisions diminish or negate the ability of the SCAs considered "environmental protection measures" to minimize potential adverse environmental effects. As such, the SCAs identified in the SCAMMRP reflect the current SCAs only. Although the SCA numbers listed below may not correspond to the SCA numbers in the 2014 LMSAP EIR, all of the environmental topics and potential effects addressed by the SCAs in the LMSAP EIR are included in this SCAMMRP (as applicable to the proposed project). This SCAMMRP also identifies the mitigation monitoring requirements for each mitigation measure and SCA.

This CEQA Analysis is also based on the analysis in the following Prior EIRs that apply to the proposed project: Oakland's 1998 General Plan Land Use and Transportation Element ("LUTE") EIR ("1998 LUTE EIR"), the 2010 General Plan Housing Element Update EIR and its 2014 Addendum, and the 2011 Central District Urban Renewal Plan Amendments EIR (or "Redevelopment Plan Amendments EIR"). None of the mitigation measures or SCAs from these EIRs are included in this SCAMMRP because they, or an updated or equally effective mitigation measure or SCA, is identified in the 2014 LMSAP EIR, its addenda, or in this CEQA Analysis for the proposed project.

To the extent that there is any inconsistency between any mitigation measures and/or SCAs, the more restrictive conditions shall govern; to the extent any mitigation measure and/or SCA identified in the CEQA Analysis were inadvertently omitted, they are automatically incorporated herein by reference.

- The first column of the SCAMMRP table identifies the mitigation measure or SCA applicable to that topic in the CEQA Analysis. While a mitigation measure or SCA can apply to more than one topic, it is listed in its entirety only under its primary topic (as indicated in the mitigation or SCA designator). The SCAs are numbered to specifically apply to the proposed project and this CEQA Analysis; however, the SCAs as presented in the City's *Standard Conditions of Approval and Uniformly Applied Development Standards* document[31] are included in parenthesis for cross-reference purposes.
- 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.

The Project Sponsor is responsible for compliance with any recommendations identified in City-approved technical reports, all applicable mitigation measures adopted, and with all SCAs set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or condition of approval, and subject to the review and approval of the City of Oakland. Overall monitoring and compliance with the mitigation measures will be the responsibility of the Bureau or Planning, Zoning Inspections 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.

[31] Dated July 22, 2015, as amended.

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
General		
SCA GEN-1 (Standard Condition Approval 15) *Regulatory Permits and Authorizations from Other Agencies* Requirement: The project applicant shall obtain all necessary regulatory permits and authorizations from applicable resource/regulatory agencies including, but not limited to, the Regional Water Quality Control Board, Bay Area Air Quality Management District, Bay Conservation and Development Commission, California Department of Fish and Wildlife, U. S. Fish and Wildlife Service, and Army Corps of Engineers and shall comply with all requirements and conditions of the permits/authorizations. The project applicant shall submit evidence of the approved permits/authorizations to the City, along with evidence demonstrating compliance with any regulatory permit/authorization conditions of approval.	Prior to activity requiring permit/authorization from regulatory agency.	City of Oakland Bureau of Planning and Building
Aesthetics, Shadow, and Wind		
SCA AES-1 (Standard Condition of Approval 16) *Graffiti Control* 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). b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following: i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system. ii. Covering with new paint to match the color of the surrounding surface. iii. Replacing with new surfacing (with City permits if required).	Ongoing.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA AES-2 (Standard Condition of Approval 17) *Landscape Plan* 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.	a. Prior to approval of construction-related permit. b. Prior to building permit final. c. Ongoing	a. City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Aesthetics, Shadow, and Wind (cont.)		
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.		
SCA AES-3 (Standard Condition of Approval 18): *Lighting* Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties.	Prior to building permit final.	City of Oakland Bureau of Building Services Division, Zoning Inspections
Also **SCA UTIL-2, Underground Utilities.** See *Utilities and Service Systems*, below.		
Air Quality		
SCA AIR-1 (Standard Condition of Approval 19) *Construction-Related Air Pollution Controls (Dust and Equipment Emissions)* 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 (using reclaimed water if possible). 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 possible. 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., as soon as feasible. In addition, building pads should be laid as soon as possible after grading 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").	During construction.	City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Air Quality (cont.)		
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 offsite. 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.		
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.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Air Quality (cont.)		
SCA AIR-2 (Standard Condition of Approval 20) *Exposure to Air Pollution (Toxic Air Contaminants)* ***a. Health Risk Reduction Measures*** Requirement: The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. The project applicant shall choose one of the following methods: i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. - or - ii. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: • Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required. • Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph). • Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible. • The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods. • Sensitive receptors shall be located on the upper floors of buildings, if feasible. • Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (*Pinus nigra* var. *maritima*), Cypress (*X Cupressocyparis leylandii*), Hybrid popular (*Populus deltoids X trichocarpa*), and Redwood *(Sequoia sempervirens*). • Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible.	a. Prior to approval of construction-related permit. b. ongoing	a. City of Oakland Bureau of Planning and Building; City of Oakland Bureau of Building Services Division, Zoning Inspections b. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Air Quality (cont.)		
• Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible. • Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible: – Installing electrical hook-ups for diesel trucks at loading docks. – Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards. – Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels. – Prohibiting trucks from idling for more than two minutes. – Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented. ***b. Maintenance of Health Risk Reduction Measures*** Requirement: The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.		
SCA AIR-3 (Standard Condition of Approval 21) *Stationary Sources of Air Pollution (Toxic Air Contaminants)* 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. The project applicant shall choose one of the following methods: a. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk associated with proposed stationary sources of pollution in the project. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. - or – b. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: i. Installation of non-diesel fueled generators, if feasible, or; ii. Installation of diesel generators with an EPA-certified Tier 4 engine or engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy, if feasible.	Prior to approval of construction-related permit.	City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Biological Resources		
SCA BIO-1 (Standard Condition of Approval 26): *Tree Removal During Bird Nesting Season* To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.	Prior to removal of trees.	City of Oakland Public Works Department, Tree Division; Bureau of Buildings
SCA BIO-2 (Standard Condition of Approval 27): *Tree Permit* ***a. Tree Permit Required*** Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit. ***b. Tree Protection During Construction*** <u>Requirement</u>: Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist: i. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree. ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree. iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.	a. Prior to approval of construction-related permit b. During construction.	a. City of Oakland Public Works Department, Tree Division; Bureau of Buildings b. City of Oakland Public Works Department, Tree Division; Bureau of Buildings

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Biological Resources (cont.)		
iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration. v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed. vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.		
Cultural Resources		
SCA CUL-1 (Standard Condition of Approval 29): *Archaeological and Paleontological Resources – Discovery During Construction* Requirement: Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented. In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense. In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Cultural Resources (cont.)		
SCA CUL-2 (Standard Condition of Approval 30): *Archaeologically Sensitive Areas – Pre-Construction Measures* Requirement: The project applicant shall implement either Provision A (Intensive Pre-Construction Study) or Provision B (Construction ALERT Sheet) concerning archaeological resources. ***Provision A: Intensive Pre-Construction Study.*** The project applicant shall retain a qualified archaeologist to conduct a site-specific, intensive archaeological resources study for review and approval by the City prior to soil-disturbing activities occurring on the project site. The purpose of the site-specific, intensive archaeological resources study is to identify early the potential presence of history-period archaeological resources on the project site. At a minimum, the study shall include: a. Subsurface presence/absence studies of the project site. Field studies may include, but are not limited to, auguring and other common methods used to identify the presence of archaeological resources. b. A report disseminating the results of this research. c. Recommendations for any additional measures that could be necessary to mitigate any adverse impacts to recorded and/or inadvertently discovered cultural resources. If the results of the study indicate a high potential presence of historic-period archaeological resources on the project site, or a potential resource is discovered, the project applicant shall hire a qualified archaeologist to monitor any ground disturbing activities on the project site during construction and prepare an ALERT sheet pursuant to Provision B below that details what could potentially be found at the project site. Archaeological monitoring would include briefing construction personnel about the type of artifacts that may be present (as referenced in the ALERT sheet, required per Provision B below) and the procedures to follow if any artifacts are encountered, field recording and sampling in accordance with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation, notifying the appropriate officials if human remains or cultural resources are discovered, and preparing a report to document negative findings after construction is completed if no archaeological resources are discovered during construction. ***Provision B: Construction ALERT Sheet.*** The project applicant shall prepare a construction "ALERT" sheet developed by a qualified archaeologist for review and approval by the City prior to soil-disturbing activities occurring on the project site. The ALERT sheet shall contain, at a minimum, visuals that depict each type of artifact that could be encountered on the project site. Training by the qualified archaeologist shall be provided to the project's prime contractor, any project subcontractor firms (including demolition, excavation, grading, foundation, and pile driving), and utility firms involved in soil- disturbing activities within the project site. The ALERT sheet shall state, in addition to the basic archaeological resource protection measures contained in other standard conditions of approval, all work must stop and the City's Environmental Review Officer contacted in the event of discovery of the following cultural materials: concentrations of shellfish remains; evidence of fire (ashes, charcoal, burnt earth, fire-cracked rocks); concentrations of bones; recognizable Native American artifacts (arrowheads, shell beads, stone mortars [bowls], humanly shaped rock); building foundation remains; trash pits, privies (outhouse holes); floor remains; wells; concentrations of bottles, broken dishes, shoes, buttons, cut animal bones, hardware, household items, barrels, etc.; thick layers of burned building debris (charcoal, nails, fused glass, burned plaster, burned dishes); wood structural remains (building, ship, wharf); clay roof/floor tiles; stone walls or footings; or gravestones. Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, and supervisory personnel. The ALERT sheet shall also be posted in a visible location at the project site.	Prior to approval of construction-related permit; during construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Cultural Resources (cont.)		
SCA CUL-3 (Standard Condition of Approval SCA 31): *Human Remains – Discovery During Construction* Requirement: Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
Geology, Soils, and Geohazards		
SCA GEO-1 (Standard Condition of Approval 33): *Construction-Related Permit(s)* Requirement: The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA GEO-2 (Standard Condition of Approval 34): *Soils Report* Requirement: 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections
See **SCA HYD-1, Erosion and Sedimentation Control Plan for Construction**, See *Hydrology and Water Quality*, below.		
Greenhouse Gases and Climate Change		
SCA GHG-1 (Standard Condition of Approval SCA 38): *Greenhouse Gas (GHG) Reduction Plan* ***a. Greenhouse Gas (GHG) Reduction Plan Required*** Requirement: The project applicant shall retain a qualified air quality consultant to develop a Greenhouse Gas (GHG) Reduction Plan for City review and approval and shall implement the approved GHG Reduction Plan. The goal of the GHG Reduction Plan shall be to increase energy efficiency and reduce GHG emissions to below at least one of the Bay Area Quality Management District's (BAAQMD's) CEQA Thresholds of Significance (1,100 metric tons of CO2e per year or 4.6 metric tons of CO2e per year per service population) AND to reduce GHG emissions by 36 percent below the project's 2005 "business-as-usual" baseline GHG emissions (as explained below) to help implement the City's Energy and Climate Action Plan (adopted in 2012) which calls for reducing GHG emissions by 36 percent below 2005 levels. The GHG Reduction Plan shall include, at a minimum, (a) a detailed GHG emissions inventory for the project under a "business-as-usual" scenario with no consideration of project design features, or other energy efficiencies, (b) an "adjusted" baseline GHG emissions inventory for the project, taking into consideration energy efficiencies included as part of the project (including the City's Standard Conditions of Approval, proposed mitigation measures, project design features, and other City requirements)	a. Prior to approval of construction-related permit b. During construction c. Ongoing	a. City of Oakland Bureau of Planning b. City of Oakland Bureau of Planning and Bureau of Building c. City of Oakland Bureau of Planning

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Greenhouse Gases and Climate Change (cont.)		
and additional GHG reduction measures available to further reduce GHG emissions, and (c) requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented. If the project is to be constructed in phases, the GHG Reduction Plan shall provide GHG emission scenarios by phase. Potential GHG reduction measures to be considered include, but are not be limited to, measures recommended in BAAQMD's latest CEQA Air Quality Guidelines, the California Air Resources Board Scoping Plan (December 2008, as may be revised), the California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures (August 2010, as may be revised), the California Attorney General's website, and Reference Guides on Leadership in Energy and Environmental Design (LEED) published by the U.S. Green Building Council. The types of allowable GHG reduction measures include the following (listed in order of City preference): (1) physical design features; (2) operational features; and (3) the payment of fees to fund GHG-reducing programs (i.e., the purchase of "carbon credits") as explained below. The allowable locations of the GHG reduction measures include the following (listed in order of City preference): (1) the project site; (2) off-site within the City of Oakland; (3) off-site within the San Francisco Bay Area Air Basin; (4) off-site within the State of California; then (5) elsewhere in the United States. As with preferred locations for the implementation of all GHG reductions measures, the preference for carbon credit purchases include those that can be achieved as follows (listed in order of City preference): (1) within the City of Oakland; (2) within the San Francisco Bay Area Air Basin; (3) within the State of California; then (4) elsewhere in the United States. The cost of carbon credit purchases shall be based on current market value at the time purchased and shall be based on the project's operational emissions estimated in the GHG Reduction Plan or subsequent approved emissions inventory, which may result in emissions that are higher or lower than those estimated in the GHG Reduction Plan. For physical GHG reduction measures to be incorporated into the design of the project, the measures shall be included on the drawings submitted for construction-related permits. ***b. GHG Reduction Plan Implementation During Construction*** Requirement: The project applicant shall implement the GHG Reduction Plan during construction of the project. For physical GHG reduction measures to be incorporated into the design of the project, the measures shall be implemented during construction. For physical GHG reduction measures to be incorporated into off-site projects, the project applicant shall obtain all necessary permits/approvals and the measures shall be included on drawings and submitted to the City Planning Director or his/her designee for review and approval. These off-site improvements shall be installed prior to completion of the subject project (or prior to completion of the project phase for phased projects). For GHG reduction measures involving the purchase of carbon credits, evidence of the payment/purchase shall be submitted to the City for review and approval prior to completion of the project (or prior to completion of the project phase, for phased projects). ***c. GHG Reduction Plan Implementation After Construction*** Requirement: The project applicant shall implement the GHG Reduction Plan after construction of the project (or at the completion of the project phase for phased projects). For operational GHG reduction measures to be incorporated into the project or off-site projects, the measures shall be implemented on an indefinite and ongoing basis.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Greenhouse Gases and Climate Change (cont.)		
The project applicant shall satisfy the following requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented. The GHG Reduction Plan requires regular periodic evaluation over the life of the project (generally estimated to be at least 40 years) to determine how the Plan is achieving required GHG emissions reductions over time, as well as the efficacy of the specific additional GHG reduction measures identified in the Plan. **Annual Report.** Implementation of the GHG reduction measures and related requirements shall be ensured through compliance with Conditions of Approval adopted for the project. Generally, starting two years after the City issues the first Certificate of Occupancy for the project, the project applicant shall prepare each year of the useful life of the project an Annual GHG Emissions Reduction Report ("Annual Report"), for review and approval by the City Planning Director or his/her designee. The Annual Report shall be submitted to an independent reviewer of the City's choosing, to be paid for by the project applicant. The Annual Report shall summarize the project's implementation of GHG reduction measures over the preceding year, intended upcoming changes, compliance with the conditions of the Plan, and include a brief summary of the previous year's Annual Report results (starting the second year). The Annual Report shall include a comparison of annual project emissions to the baseline emissions reported in the GHG Plan. The GHG Reduction Plan shall be considered fully attained when project emissions are less than either applicable numeric BAAQMD CEQA Thresholds AND GHG emissions are 36 percent below the project's "adjusted" baseline GHG emissions, as confirmed by the City through an established monitoring program. Monitoring and reporting activities will continue at the City's discretion, as discussed below. **Corrective Procedure.** If the third Annual Report, or any report thereafter, indicates that, in spite of the implementation of the GHG Reduction Plan, the project is not achieving the GHG reduction goal, the project applicant shall prepare a report for City review and approval, which proposes additional or revised GHG measures to better achieve the GHG emissions reduction goals, including without limitation, a discussion on the feasibility and effectiveness of the menu of other additional measures ("Corrective GHG Action Plan"). The project applicant shall then implement the approved Corrective GHG Action Plan. If, one year after the Corrective GHG Action Plan is implemented, the required GHG emissions reduction target is still not being achieved, or if the project applicant fails to submit a report at the times described above, or if the reports do not meet City requirements outlined above, the City may, in addition to its other remedies, (a) assess the project applicant a financial penalty based upon actual percentage reduction in GHG emissions as compared to the percent reduction in GHG emissions established in the GHG Reduction Plan; or (b) refer the matter to the City Planning Commission for scheduling of a compliance hearing to determine whether the project's approvals should be revoked, altered or additional conditions of approval imposed. The penalty as described in (a) above shall be determined by the City Planning Director or his/her designee and be commensurate with the percentage GHG emissions reduction not achieved (compared to the applicable numeric significance thresholds) or required percentage reduction from the "adjusted" baseline.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Greenhouse Gases and Climate Change (cont.)		
In determining whether a financial penalty or other remedy is appropriate, the City shall not impose a penalty if the project applicant has made a good faith effort to comply with the GHG Reduction Plan. The City would only have the ability to impose a monetary penalty after a reasonable cure period and in accordance with the enforcement process outlined in Planning Code Chapter 17.152. If a financial penalty is imposed, such penalty sums shall be used by the City solely toward the implementation of the GHG Reduction Plan. **Timeline Discretion and Summary.** The City shall have the discretion to reasonably modify the timing of reporting, with reasonable notice and opportunity to comment by the applicant, to coincide with other related monitoring and reporting required for the project.		
See **SCA AES-2, Landscape Plan**. See *Aesthetics, Wind, and Shadow*, above.		
See **SCA AIR-1, Construction-Related Air Pollution Controls (Dust and Equipment Emissions)**. See *Air Quality,* above.		
See **SCA UTIL-1, Construction and Demolition Waste Reduction and Recycling**. See *Utilities and Service Systems*, below.		
See **SCA UTIL-4, Green Building Requirements**. See *Utilities and Service Systems*, below.		
Hazards and Hazardous Materials		
SCA HAZ-1 (Standard Condition of Approval 39): *Hazards Materials Related to Construction* Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following: a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction; b. Avoid overtopping construction equipment fuel gas tanks; c. During routine maintenance of construction equipment, properly contain and remove grease and oils; d. Properly dispose of discarded containers of fuels and other chemicals; e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and f. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Hazards and Hazardous Materials (cont.)		
SCA HAZ-2 (Standard Condition of Approval 40): *Site Contamination* ***a. Environmental Site Assessment Required*** Requirement: 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. ***b. Health and Safety Plan Required*** Requirement: The project applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan. ***c. Best Management Practices (BMPs) Required for Contaminated Sites*** Requirement: 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 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.	a. Prior to approval of construction-related permit b. Prior to approval of construction-related permit c. During Construction	a. Oakland Fire Department b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Building Services Division, Zoning Inspections
See **SCA TRA-1, Construction Activity in the Public Right-of-Way**. See *Transportation and Traffic*, below.		
Hydrology and Water Quality		
SCA HYD-1 (Standard Condition of Approval 45): *Erosion and Sedimentation Control Plan for Construction* ***a. Erosion and Sedimentation Control Plan Required*** Requirement: 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,	a. Prior to approval of construction-related permit. b. During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Hydrology and Water Quality (cont.)		
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*** Requirement: 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.		
SCA HYD-2 (Standard Condition of Approval 46): *State Construction General Permit* a. Requirement: The project applicant shall comply with the requirements of the Construction General Permit issued by the State Water Resources Control Board (SWRCB). The project applicant shall submit a Notice of Intent (NOI), Stormwater Pollution Prevention Plan (SWPPP), and other required Permit Registration Documents to SWRCB. The project applicant shall submit evidence of compliance with Permit requirements to the City.	Prior to approval of construction-related permit.	State Water Resources Control Board
SCA HYD-3 (Standard Condition of Approval 50): *NPDES C.3 Stormwater Requirements for Regulated Projects* ***a. Post-Construction Stormwater Management Plan Required*** Requirement: The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following: i. Location and size of new and replaced impervious surface; ii. Directional surface flow of stormwater runoff; iii. Location of proposed on-site storm drain lines; iv. Site design measures to reduce the amount of impervious surface area; v. Source control measures to limit stormwater pollution; vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff. ***b. Maintenance Agreement Required*** Requirement: The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following:	a. Prior to approval of construction-related permit. b. Prior to building permit final.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections; City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Hydrology and Water Quality (cont.)		
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.		
Also **SCA GEO-1, Construction-Related Permit(s).** See *Geology, Soils, and Geohazards*, above.		
Also **SCA GEO-2, Soils Report.** See *Geology, Soils, and Geohazards*, above.		
Also **SCA UTIL-6, Storm Drain System**. See *Utilities and Service Systems*, below.		
Noise		
SCA NOI-1 (Standard Condition of Approval 58) *Construction Days/Hours* Requirement: The project applicant shall comply with the following restrictions concerning construction days and hours: a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday. c. No construction is allowed on Sunday or federal holidays. Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non- enclosed area. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Noise (cont.)		
SCA NOI-2: (Standard Condition of Approval 59) *Construction Noise* Requirement: The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following**:** a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. c. Applicant shall use temporary power poles instead of generators where feasible. d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction. e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-3 (Standard Condition of Approval 60) *Extreme Construction Noise* ***a. Construction Noise Management Plan Required*** Requirement: Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following: i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; ii. Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions; iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site; iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.	a. Prior to approval of construction-related permit. b. During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Noise (cont.)		
b. Public Notification Required Requirement: The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.		
SCA NOI-4 (Standard Condition of Approval 62) *Construction Noise Complaints* Requirement: 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-5 (Standard Condition of Approval 63) *Exposure to Community Noise* Requirement: 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.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA NOI-6 (Standard Condition of Approval 64) *Operational Noise* Requirement: Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City.	Ongoing.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Transportation and Circulation		
SCA TRA-1 (Standard Condition of Approval 68) *Construction Activity in the Public Right-of-Way* ***a. Obstruction Permit Required*** Requirement: The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets and sidewalks. ***b. Traffic Control Plan Required*** Requirement: In the event of obstructions to sidewalks or 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. ***c. Repair of City Streets*** Requirement: The project applicant shall repair any damage to the public right-of way, including streets and sidewalks caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.	a. Prior to approval of construction-related permit. b. Prior to approval of construction-related permit. c. Prior to building permit final.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. Public Works Department, Transportation Services Division c. City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA TRA-2 (Standard Condition of Approval 69) *Bicycle Parking* Requirement: The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA TRA-3 (Standard Condition of Approval 70): *Transportation Improvements.* 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)	Prior to building permit final or as otherwise specified	Bureau of Building; Public Works Department, Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Transportation and Circulation (cont.)		
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 (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		
SCA TRA-4 (Standard Condition of Approval 71) *Transportation and Parking Demand Management* ***a. Transportation and Parking Demand Management (TDM) Plan Required*** Requirement: 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): – Projects generating 50-99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR – Projects generating 100 or more net new a.m. or p.m. 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.	a. Prior to building permit final. b. Prior to building permit final c. Ongoing	a. City of Oakland Bureau of Planning and Building b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	Responsibility
Transportation and Circulation (cont.)		
• 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. • 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/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Transportation and Circulation (cont.)		
b. TDM Implementation – Physical Improvements Requirement: 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. ***c. TDM Implementation – Operational Strategies*** Requirement: For projects that generate 100 or more net new a.m. or p.m. 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.		
LMSAP TRA Mitigation Measures All the mitigation measures identified in the LMSAP EIR are included in the citywide Transportation Impact Fee (TIF). Therefore, the project applicant shall mitigate the project impacts by paying the required TIF.		
Utilities and Service Systems		
SCA UTIL-1 (Standard Condition of Approval 74) *Construction and Demolition Waste Reduction and Recycling* Requirement: The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.	Prior to approval of construction-related permit	City of Oakland Public Works Department, Environmental Services Division
SCA UTIL-2 (Standard Condition of Approval 75) *Underground Utilities* Requirement: The project applicant shall place underground all new utilities serving the project and under the control of the project applicant and the City, including all new gas, electric, cable, and telephone facilities, fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities. The new facilities shall be placed underground along the project's street frontage and from the project structures to the point of service. Utilities under the control of other agencies, such as PG&E, shall be placed underground if feasible. All utilities shall be installed in accordance with standard specifications of the serving utilities.	During construction.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Utilities and Service Systems (cont.)		
SCA UTIL-3 (Standard Condition of Approval 76) *Recycling Collection and Storage Space* Requirement: The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections
SCA UTIL-4 (Standard Condition of Approval 77) *Green Building Requirements* ***a. Compliance with Green Building Requirements During Plan-Check*** Requirement: The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code). i. The following information shall be submitted to the City for review and approval with the application for a building permit: • Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards. • Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit. • Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit. • Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below. • Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance. • Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. • Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. ii. The set of plans in subsection (i) shall demonstrate compliance with the following: • CALGreen mandatory measures. • All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable Hardship Exemption granted during the review of the Planning and Zoning permit. • [INSERT: Green building point level/certification requirement: (See Green Building Summary Table; for New Construction of Residential or Non- residential projects that remove a Historic Resource (as defined by the Green Building Ordinance) the point level certification requirement is 53 points for residential and LEED Gold for non-residential)] per the appropriate checklist approved during the Planning entitlement process.	a. Prior to approval of construction-related permit. b. During construction. c. After project completion as specified.	a. City of Oakland Bureau of Building Services Division, Zoning Inspections b. City of Oakland Bureau of Building Services Division, Zoning Inspections c. City of Oakland Bureau of Planning and Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Utilities and Service Systems (cont.)		
• 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*** Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project. The following information shall be submitted to the City for review and approval: i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit. ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance. iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. ***c. Compliance with Green Building Requirements After Construction*** Requirement: Within sixty (60) days of the final inspection of the building permit for the project, the Green Building Certifier shall submit the appropriate documentation to Build It Green or Green Building Certification Institute and attain the minimum required certification/point level. Within one year of the final inspection of the building permit for the project, the applicant shall submit to the Bureau of Planning the Certificate from the organization listed above demonstrating certification and compliance with the minimum point/certification level noted above.		
SCA UTIL-5 (Standard Condition of Approval 79) *Sanitary Sewer System* Requirement: The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system.	Prior to approval of construction-related permit.	City of Oakland Public Works Department, Department of Engineering and Construction
SCA UTIL-6 (Standard Condition of Approval 80) *Storm Drain System* Requirement: The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.	Prior to approval of construction-related permit.	City of Oakland Bureau of Building Services Division, Zoning Inspections

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Utilities and Service Systems (cont.)		
SCA UTIL-7 (Standard Condition of Approval 81) *Recycled Water* Requirement: Pursuant to section 16.08.030 of the Oakland Municipal Code, the project applicant shall provide for the use of recycled water in the project for landscape irrigation purposes unless the City determines that there is a higher and better use for the recycled water, the use of recycled water is not economically justified for the project, or the use of recycled water is not financially or technically feasible for the project. The project applicant shall contact the New Business Office of the East Bay Municipal Utility District (EBMUD) for a recycled water feasibility assessment by the Office of Water Recycling. If recycled water is to be provided in the project, the project drawings submitted for construction-related permits shall include the proposed recycled water system and the project applicant shall install the recycled water system during construction.	Prior to approval of construction-related permit.	City of Oakland Bureau of Planning and Building ; City of Oakland Bureau of Building Services Division, Zoning Inspections
Also **SCA HYD-1, Erosion and Sedimentation Control Plan for Construction**. See *Hydrology and Water Quality*, above.		
Also **SCA HYD-2, Site Design Measures to Reduce Stormwater Runoff**. See *Hydrology and Water Quality*, above.		

ATTACHMENT B

Criteria for Use of Addendum, per CEQA Guidelines Sections 15162, 15164 and 15168

Section 15164(a) of the California Environmental Quality Act (CEQA) Guidelines states that "a lead agency or responsible agency shall prepare an addendum to a previously certified EIR [Environmental Impact Report] if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." Section 15164(e) states that "a brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR."

As discussed in detail in Section III of this document, the analysis in the 2014 LMSAP EIR is considered for this assessment under Sections 15162 and 15164. The 1998 LUTE EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and its 2014 Addendum are Prior EIRs considered for this assessment of an Addendum, pursuant to Section 15162 and 15164. The 2011 Redevelopment Plan Amendments EIR analysis is a Prior EIR specifically considered for this assessment, pursuant to CEQA Guidelines Section 15168 and Section 15180.

Project Modifications

In November 2014, the Oakland Planning Commission certified the LMSAP EIR. The LMSAP EIR analyzed the LMSAP "Development Program," which was the assumed future development for the Plan with up to 4,900 new housing units, 4,100 new jobs, 404,000 square feet of retail use, and l.3 million square feet of office uses. Although the Development Program was analyzed, project specific details for each potential development project in the LMSAP Area were not known, and could not have been known, at the time the LMSAP EIR was certified. Therefore, an Addendum is required to evaluate the 1314 Franklin Street project details and determine that it would not result in new or more severe significant environmental effects than those analyzed in the LMSAP EIR.

Conditions for Addendum

As demonstrated in the CEQA checklist, none of the following conditions for preparation of a subsequent EIR per Sections 15162(a) and 15168 apply to the proposed project:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Project Consistency with Sections 15162 and 15168 of the CEQA Guidelines

Since certification of the 2014 LMSAP EIR, no changes have occurred in the circumstances under which the proposed project would be implemented that would change the severity of the proposed project's physical impacts, as explained in the CEQA Checklist in Section VI of this document. No new information has emerged that would substantially change the analyses or conclusions set forth in the LMSAP EIR.

Furthermore, as demonstrated in the CEQA Checklist, the proposed project would not result in any new significant environmental impacts, result in any substantial increases in the significance of previously identified effects, or necessitate implementation of additional or considerably different mitigation measures than those identified in the 2014 LMSAP EIR, nor render any mitigation measures or alternatives found not to be feasible, feasible. The effects of the proposed project would be substantially the same as those reported in the 2014 LMSAP EIR.

The analysis presented in this CEQA Checklist, combined with the prior 2014 LMSAP EIR analysis and other previous CEQA documents, demonstrates that the proposed project would not result in significant impacts that were not previously identified in the LMSAP EIR. The proposed project would not result in a substantial increase in the significance of impacts, nor would the proposed project contribute considerably to cumulative effects that were not already accounted for in the certified 2014 LMSAP EIR or other previous CEQA documents. Overall, the proposed project's impacts are similar to those identified and discussed in the 2014 LMSAP EIR and other previous CEQA documents, as described in the CEQA Checklist, and the findings reached in the LMSAP EIR and other previous CEQA documents are applicable.

ATTACHMENT C

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."

As discussed in detail in Section III of this document, the analysis in the 2011 Redevelopment Plan Amendments EIR, the 1998 LUTE EIR and, for only the residential components of the proposed project, the 2010 Housing Element Update EIR and its 2014 Addendum, are considered the qualified planning level CEQA documents for this assessment, pursuant to CEQA Guidelines Section 15183.

Proposed Project

The proposed project would be located in developed, urbanized Downtown Oakland. The proposed project would develop a 40-story, 400-foot-high residential tower and an eight story, 85-foot-high residential building with a total of up to 635 residential units and up to 18,000 square feet of ground-floor commercial space. Up to 631 vehicle parking spaces would be provided onsite in a five-story parking garage. The project site is currently occupied by a three-story public parking garage. A total of 21 existing street trees along all four frontages of the project site would be removed and replaced according to the requirements of the City's SCAs.

Project Consistency

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

- The General Plan land use designation for the site is Central Business District (CBD). This designation applies to areas suitable for high density mixed-use urban center with a mix of large-scale offices, commercial, urban (high-rise) residential, and infill hotel uses, among many others, in the central Downtown core of the city. The proposed residential mixed-use project would be consistent with this designation.

- The site has three zoning designations within the Lake Merritt Station Area District: Pedestrian Commercial (D-LM-2), General Commercial (D-LM-3), and Mixed Commercial (D-LM-4). The proposed project would be consistent with the purposes of these three zoning districts, which are generally intended to support the development residential and ground-floor retail land uses. The proposed project would develop ground-floor commercial space with upper level residential use.

- The site is located within the Lake Merritt Station Area Height District LM-175, which allows a maximum height of 175 feet, or 275 feet with a Conditional Use Permit.

- Pursuant to City of Oakland Municipal Code (OMC) Chapter 17.107 and the State Density Bonus Law (Government Code §§ 65915 et seq.), the project applicant is applying for a density bonus and a related concession/incentive. The proposed project would qualify for a density bonus by the inclusion of on-site affordable housing units equal to either ten percent of the base allowable density restricted for lower income households, or five percent of the base allowable density restricted for very low income households.[32]

  Consistent with City of Oakland and State density bonus provisions, either of these approaches qualifies the project for a 20-percent density bonus as well as one concession/ incentive (Government Code §§ 65915(f)(1),(2), 65915(d)(1-2); OMC §§ 17.107.040, 17.107.090A.1).[33] A 20-percent density bonus to the proposed project's base allowable density of 547 units would result in a potential 110 additional density bonus units. However, the project applicant proposes to include 88 out of the possible 110 density bonus units for a project total of up to 635 units. The concession/incentive requested by the project applicant is a waiver of the LMSAP height limit for the proposed tower in order to accommodate the additional units and to offset the cost impacts of the below market rate units.

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.

[32] The terms "lower income households" and "very low income households" are defined at Health and Safety Code sections 50079.5 and 50105, respectively.

[33] A "concession or incentive" is defined as a reduction in site development standards or a modification of zoning code requirements including, but not limited to, a height limitation, that results in identifiable and actual cost reductions to provide for affordable housing costs or rents. (Government Code §§ 65915(k)(1) and 65915(o)(1).)

ATTACHMENT D

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 D-1, below, shows how the proposed project satisfies each of the applicable requirements.

As discussed in detail in Section III of this document, the analysis in the 2011 Redevelopment Plan Amendments EIR, the 1998 LUTE EIR and, for only the residential components of the proposed project, the 2010 Housing Element Update EIR and its 2014 Addendum, are considered the Prior EIRs for this assessment, pursuant to CEQA Guidelines Section 15183.3.

TABLE D-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 seventy-five 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 as a parking garage, surface parking, institutional uses, commercial businesses, and a railroad depot, with various surrounding uses including office and retail, and residential uses. The project site adjoins existing urban uses, including commercial buildings, as described in the Project Description, (Section IV).
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 onsite 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.	Yes. The project sponsor intends to meet GreenPoint Rated standards and comply with the Green Building ordinance and requirements. The proposed project would optimize the efficiency of its building envelope, and through the use of efficient lighting and HVAC systems it would reduce domestic energy use. The proposed project would meet the newly implemented Building Energy Efficiency Standards and would exceed these standards as prerequisite and additional points for LEED.

TABLE D-1
PROJECT INFILL ELIGIBILITY

	CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project
2. (cont.)	**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.	Phase I and Phase II Environmental Site Assessments were prepared for the project site by Langan Treadwell Rollo in May and June, 2016. The reconnaissance and records research did not identify documentation or physical evidence of soil and groundwater impairments associated with the current or past use of the project site. Soil samples were collected and revealed that detected concentrations of target analytes are below their respective screening levels for residential land use and/or typical background concentrations. However, one sample contained a chromium concentration greater than or equal to 50 mg/kg, which is 10 times the soluble threshold limit concentration (STLC) for chromium. Analysis of soluble concentrations of chromium may be requested by the contractor, prior to the transport and disposal of the characterized soil.
	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. As discussed in Section 2. Air Quality of the CEQA Checklist, an air quality screening was prepared for the proposed project. According to BAAQMD's conservative screening-level tool for Alameda County, there are 20 stationary TAC sources within 1,000 feet of the project site, two of which are dry cleaning businesses that no longer use perchloroethylene (as verified in the latest BAAQMD air toxic inventory) and hence no longer represent source of localized TAC contributions. Factoring in allowable refinements to these the screening values to account for distance between the 1314 Franklin Street project site and the nearby stationary TAC sources, and considering risks posed by roadway traffic on Broadway and Harrison Street and the proposed project's backup diesel generator, the cumulative cancer risks at the project site would be below the City's significance criteria. Therefore, a health risk was neither required nor conducted. No air pollution standards are required to be implemented for the proposed project. The nearest "high-volume roadway" with 100,000 vehicles per day, as defined by Section II of CEQA Appendix M, is Interstate 980 (I-980). I-980 is approximately 8 blocks west of, and more than 500 feet beyond, the project site.
	2b. *Additional Performance Standards by Project Type.* In addition to implementing all the features described in 2a above, the project must meet eligibility requirements provided below by project type.	
	Residential. A residential project must meet **<u>one</u>** of the following: A. *Projects achieving below average regional per capita vehicle miles traveled (VMT).* 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; **<u>or</u>**	Yes. The proposed project is eligible under Section (A). As stated in the Checklist, the average daily VMT per capita and VMT per worker in the project TAZ is more than 15 percent below the regional averages. It is presumed that the proposed project would not result in substantial additional VMT. The proposed project is eligible under Section (B). The proposed project site is well-served by multiple transit providers. Transit service providers in the project vicinity include Bay Area Rapid Transit (BART) and AC Transit. The nearest BART station to project site is the 12th Street BART

TABLE D-1
PROJECT INFILL ELIGIBILITY

	CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project
2. (cont.)	C. *Low - Income Housing.* A residential or mixed-use project consisting of 300 or fewer 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.	Station, about one block west of the project site. AC Transit operates multiple major bus routes on 11th, 12th, and 14th Street adjacent to the project site and along Broadway within one block of the project site. Broadway also qualifies as a "High Quality Transit Corridor," as defined by Section II of 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 in the project vicinity, and has service intervals no longer than 15 minutes during peak commute hours. Other bus routes in the project vicinity further satisfy this criterion.
	Commercial/Retail. A commercial/retail project must meet **one** 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"; **or** 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. The proposed project is not a commercial/retail building.
	Office Building. An office building project must meeting **one** of the following: A. *Regional Location.* Office buildings, both commercial and public, are eligible if they locate in a low vehicle travel area; **or** 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. The proposed project is not an office building.
	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
	Small Walkable Community Projects. Small walkable community projects, as defined in Section 15183.3, subdivision (f)(5), that implement the project features in 2a above are eligible.	Not Applicable

TABLE D-1
PROJECT INFILL ELIGIBILITY

CEQA Eligibility Criteria		Eligible?/Notes for Proposed Project
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, **except** 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; **or** (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)

NOTE:

[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 Criterion 3 (from Table D-1 above)

The adopted Plan Bay Area (2014) serves as the sustainable communities strategy for the Bay Area, per Senate Bill 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 located within the "Oakland Downtown & Jack London Square" PDA – the area bounded generally by 28th Street on the north, I-980 on the west, the Oakland Estuary on the south, and Lake Merritt on the east, excepting the Chinatown area between 6th and 11th Streets east of Franklin Street. The proposed project is consistent with the Oakland General Plan and the Planning Code, as discussed in Attachment C and noted below.

- The General Plan land use designation for the site is Central Business District (CBD). This designation applies to areas suitable for high density mixed use urban center with a mix of large-scale offices, commercial, urban (high-rise) residential, and infill hotel uses, among many others, in the central Downtown core of the city. The proposed residential-commercial mixed-use project would be consistent with this designation.
- The site has three zoning designations within the Lake Merritt Station Area District: Pedestrian Commercial (D-LM-2), General Commercial (D-LM-3), and Mixed Commercial (D-LM-4). The proposed project would be consistent with the purposes of these three zoning districts, which are generally intended to support a wide range of upper story and

ground level residential, commercial, and compatible light industrial uses. The proposed project would develop ground-floor commercial space with upper level residential use.

- The site is located within the Lake Merritt Station Area Height District LM-175, which allows a maximum height of 175 feet, or 275 feet with a Conditional Use Permit.
- Pursuant to City of Oakland Municipal Code (OMC) Chapter 17.107 and the State Density Bonus Law (Government Code §§ 65915 et seq.), the project applicant is applying for a density bonus and a related concession/incentive. The project would qualify for a density bonus by the inclusion of on-site affordable housing units equal to either ten percent of the base allowable density restricted for lower income households, or five percent of the base allowable density restricted for very low income households.[34]

  Consistent with City of Oakland and State density bonus provisions, either of these approaches qualifies the project for a 20-percent density bonus as well as one concession/ incentive (Government Code §§ 65915(f)(1),(2), 65915(d)(1-2); OMC §§ 17.107.040, 17.107.090A.1).[35] A 20-percent density bonus to the project's base allowable density of 547 units would result in a potential 110 additional density bonus units. However, the project applicant proposes to include 88 out of the possible 110 density bonus units for a project total of up to 635 units. The concession/incentive requested by the project applicant is a waiver of the LMSAP height limit for the proposed tower in order to accommodate the additional units and to offset the cost impacts of the below market rate units.

[34] The terms "lower income households" and "very low income households" are defined at Health and Safety Code sections 50079.5 and 50105, respectively.

[35] A "concession or incentive" is defined as a reduction in site development standards or a modification of zoning code requirements including, but not limited to, a height limitation, that results in identifiable and actual cost reductions to provide for affordable housing costs or rents. (Government Code §§ 65915(k)(1) and 65915(o)(1).)

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APPENDIX A
Shadow Diagrams

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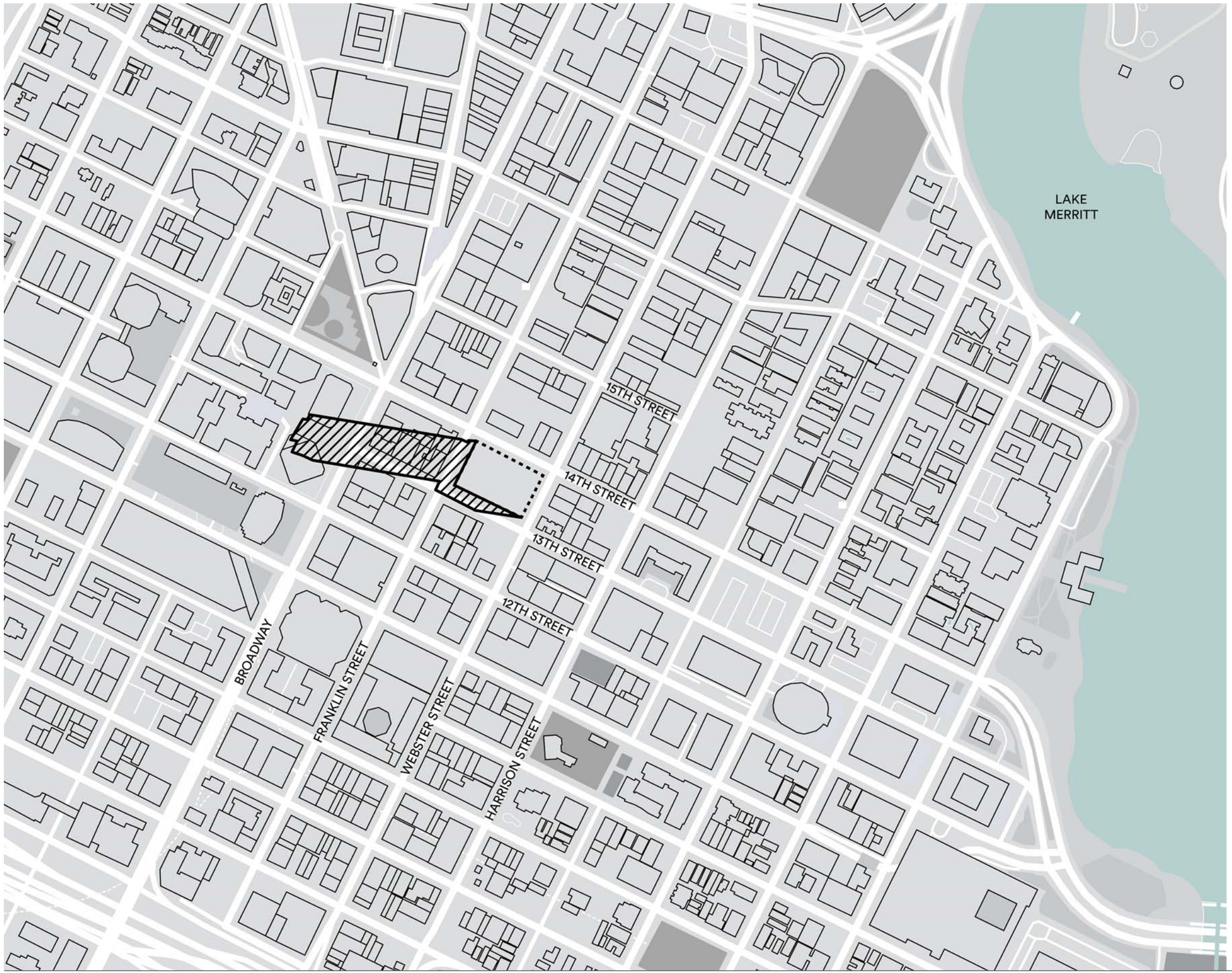


SPRING EQUINOX
MARCH 21

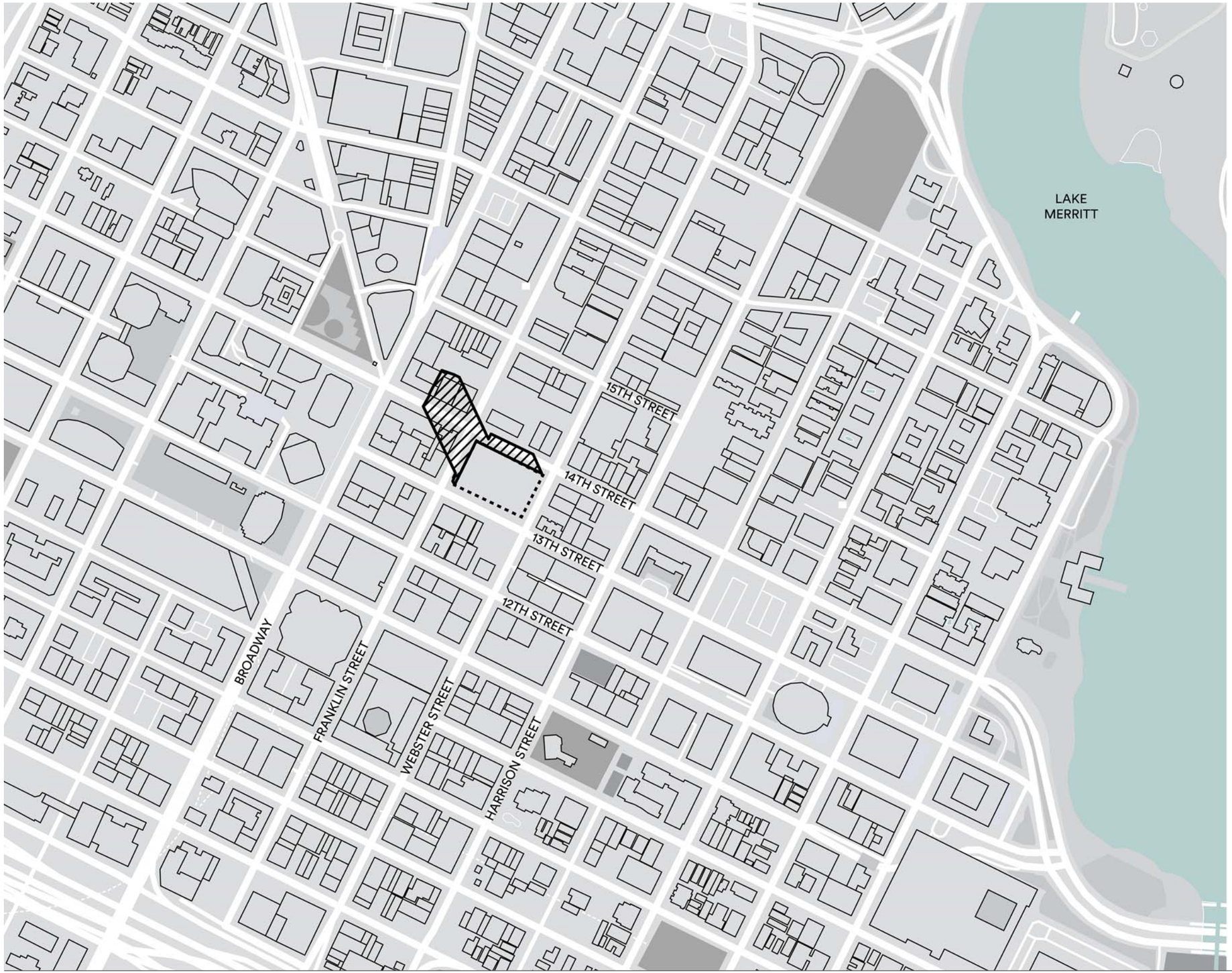
9 AM

1314 Franklin Shadow Line

CP VI Franklin, LLC

SPRING EQUINOX - 9AM
PRELIMINARY DESIGN CONCEPT FOR STAFF INPUT
1314 Franklin Street, Oakland, California
Solomon Cordwell Buenz / Carmel Partners / Oakland, CA

09 — 15 — 2016
2016024



SPRING EQUINOX
MARCH 21

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1314 Franklin Shadow Line

CP VI Franklin, LLC

SPRING EQUINOX - 12PM

PRELIMINARY DESIGN CONCEPT FOR STAFF INPUT 09 — 15 — 2016

1314 Franklin Street, Oakland, California

Solomon Cordwell Buenz / Carmel Partners / Oakland, CA 2016024

SPRING EQUINOX
MARCH 21

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1314 Franklin Shadow Line

CP VI Franklin, LLC

SPRING EQUINOX - 3PM

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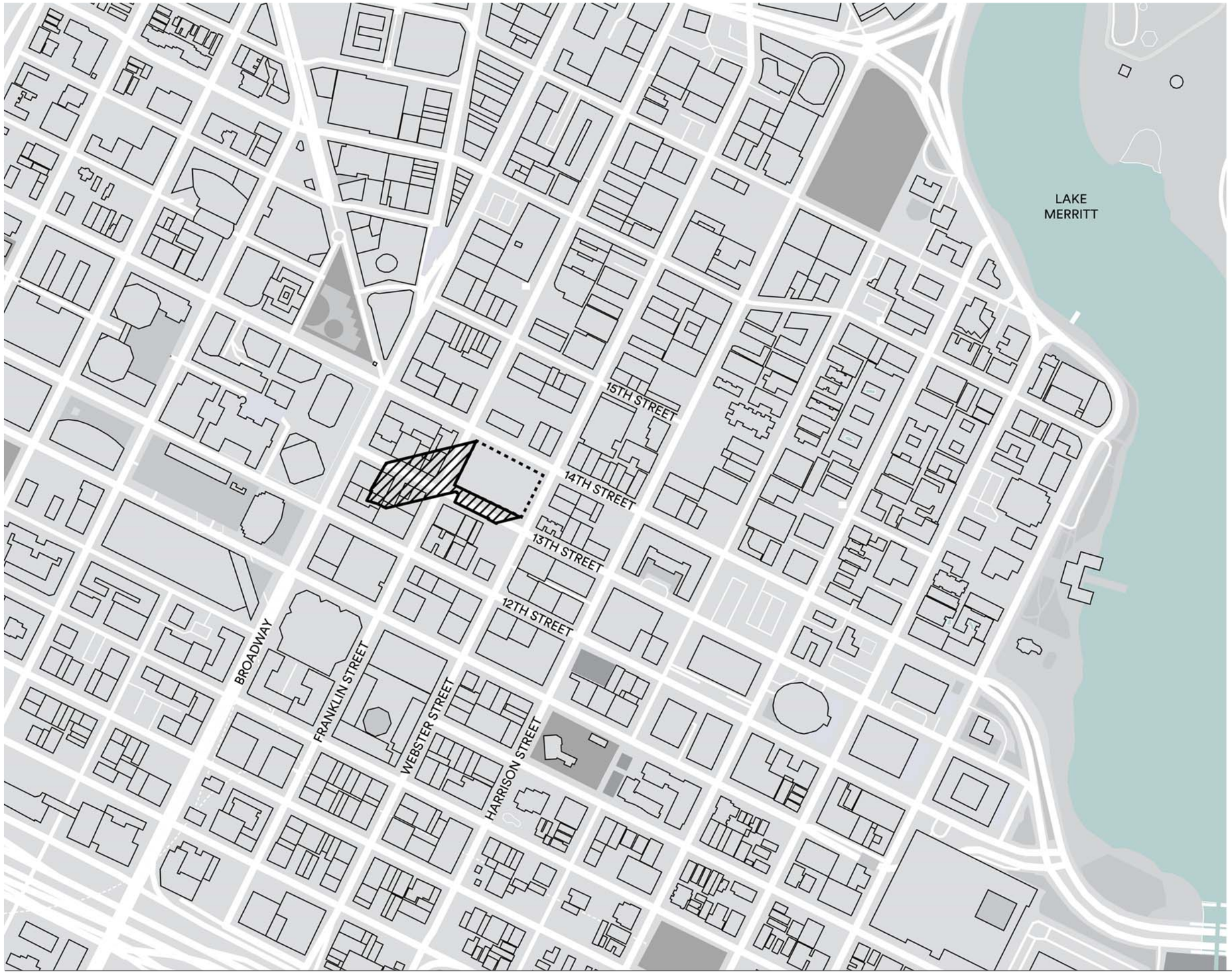


SUMMER SOLSTICE

JUNE 21

9 AM

1314 Franklin Shadow Line

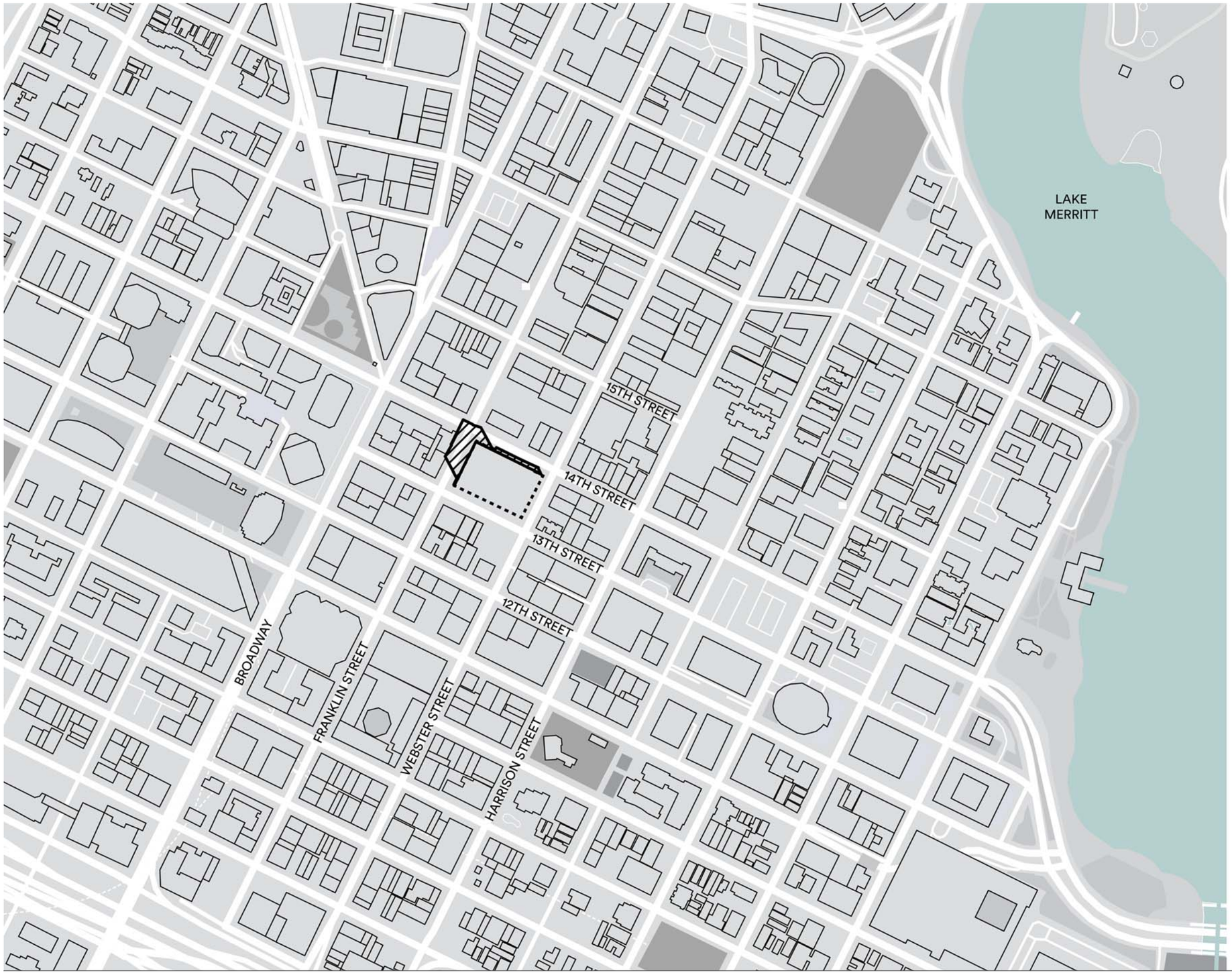
CP VI Franklin, LLC

SUMMER SOLSTICE - 9AM

PRELIMINARY DESIGN CONCEPT FOR STAFF INPUT 09 — 15 — 2016

1314 Franklin Street, Oakland, California

Solomon Cordwell Buenz / Carmel Partners / Oakland, CA 2016024



SUMMER SOLSTICE

JUNE 21

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CP VI Franklin, LLC

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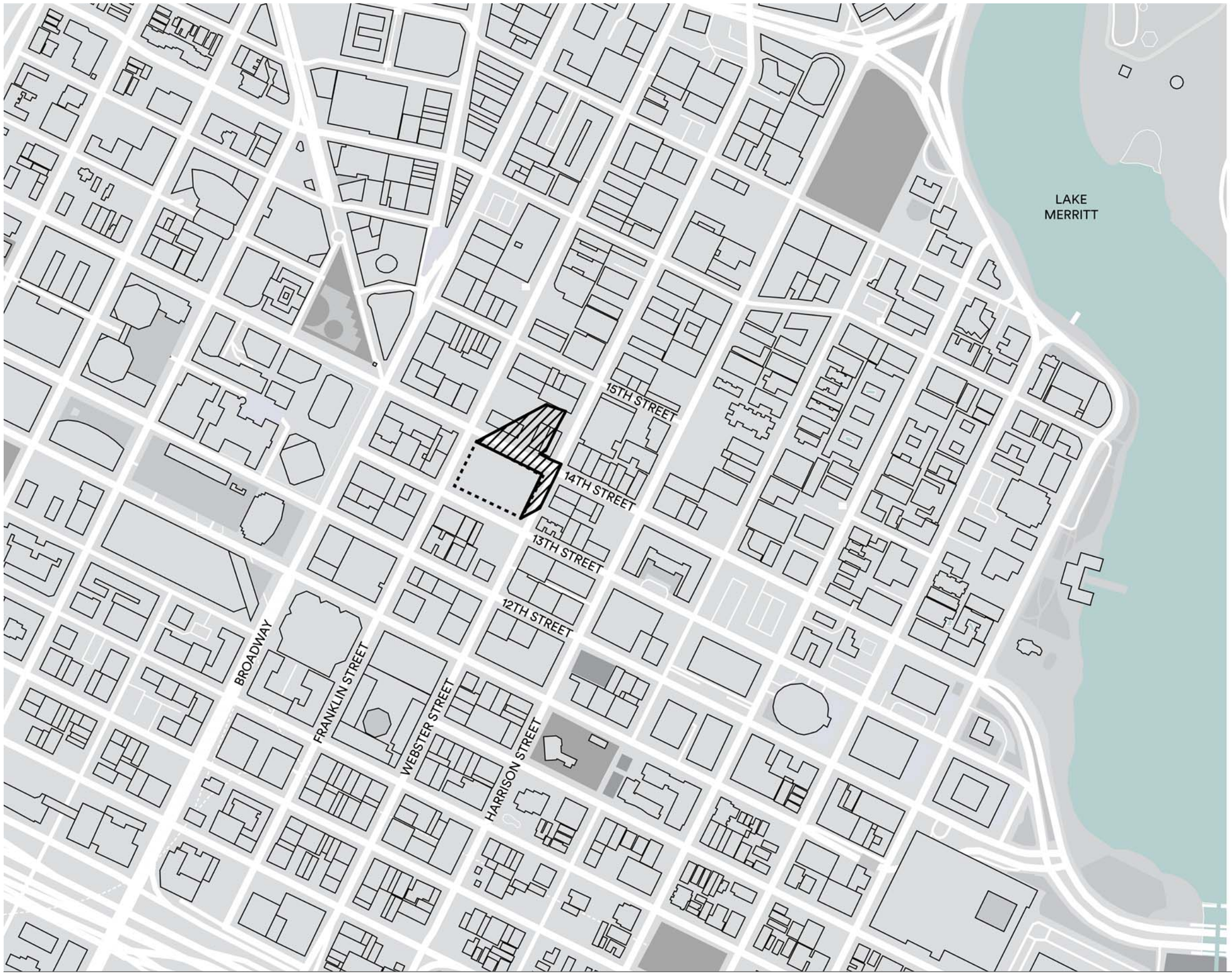

SUMMER SOLSTICE

JUNE 21

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CP VI Franklin, LLC

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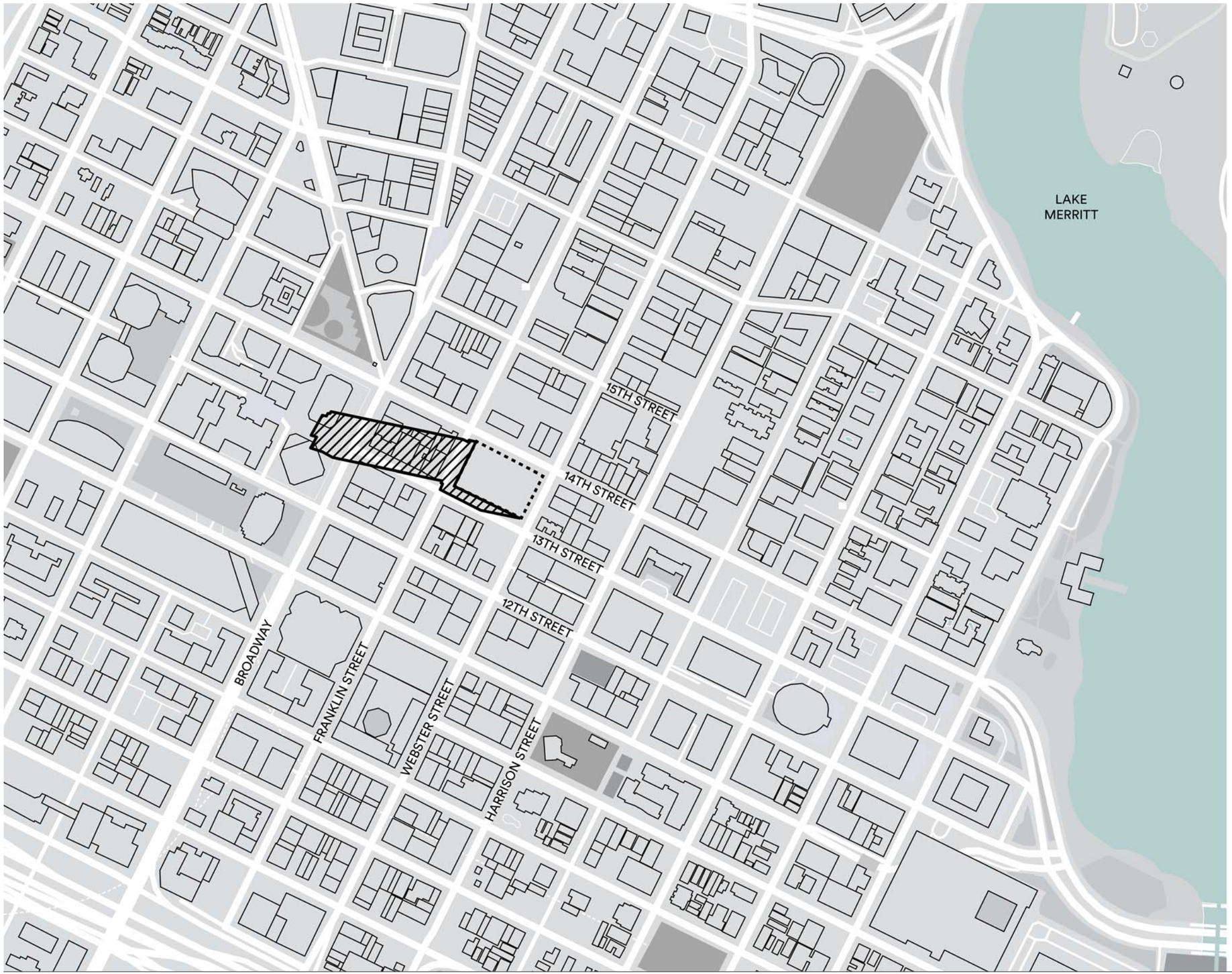
Solomon Cordwell Buenz / Carmel Partners / Oakland, CA 2016024



FALL EQUINOX
SEPTEMBER 21

9 AM

1314 Franklin Shadow Line

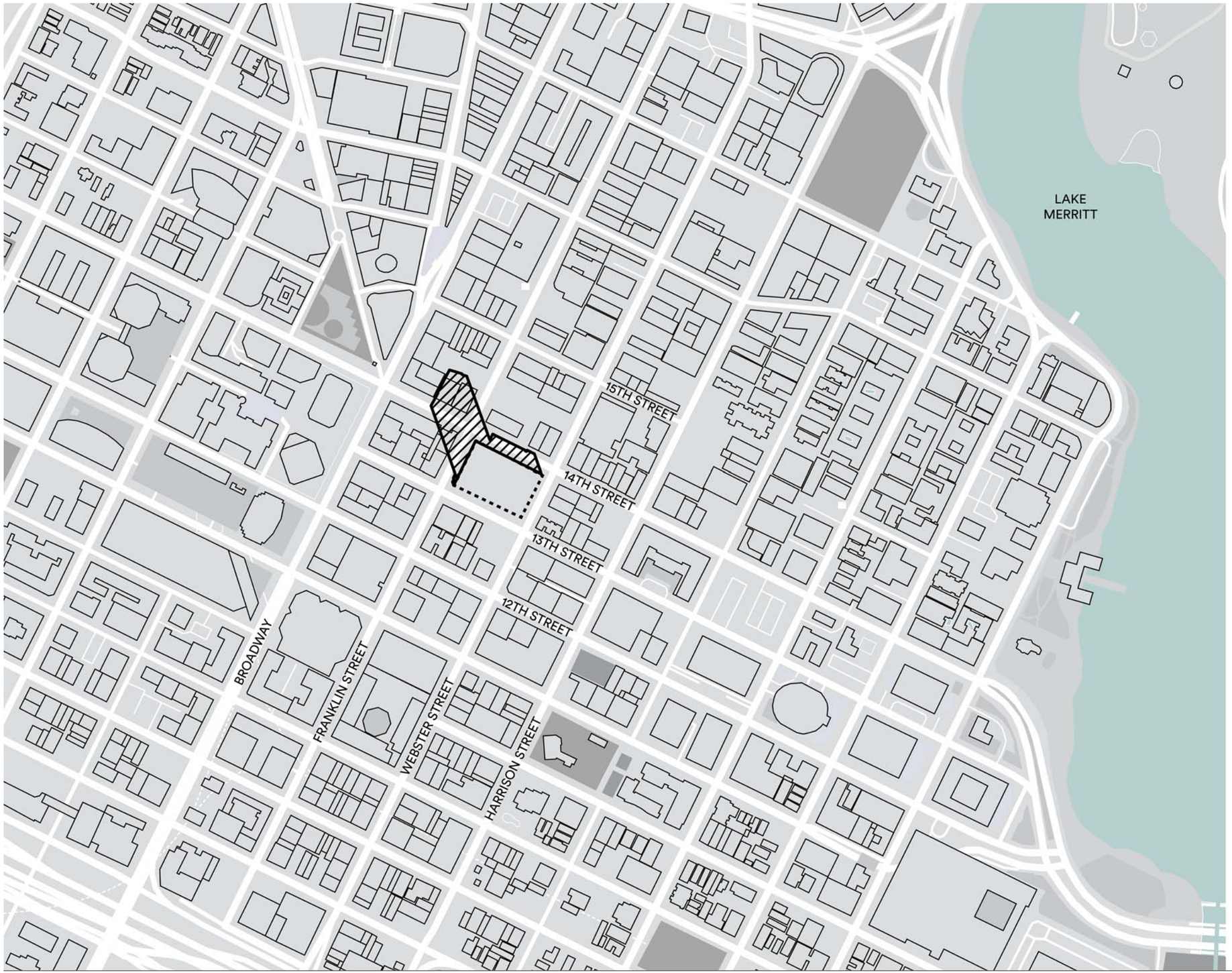
CP VI Franklin, LLC

FALL EQUINOX - 9AM

PRELIMINARY DESIGN CONCEPT FOR STAFF INPUT 09 — 15 — 2016

1314 Franklin Street, Oakland, California

Solomon Cordwell Buenz / Carmel Partners / Oakland, CA 2016024



FALL EQUINOX
SEPTEMBER 21

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1314 Franklin Shadow Line

CP VI Franklin, LLC

FALL EQUINOX - 12PM
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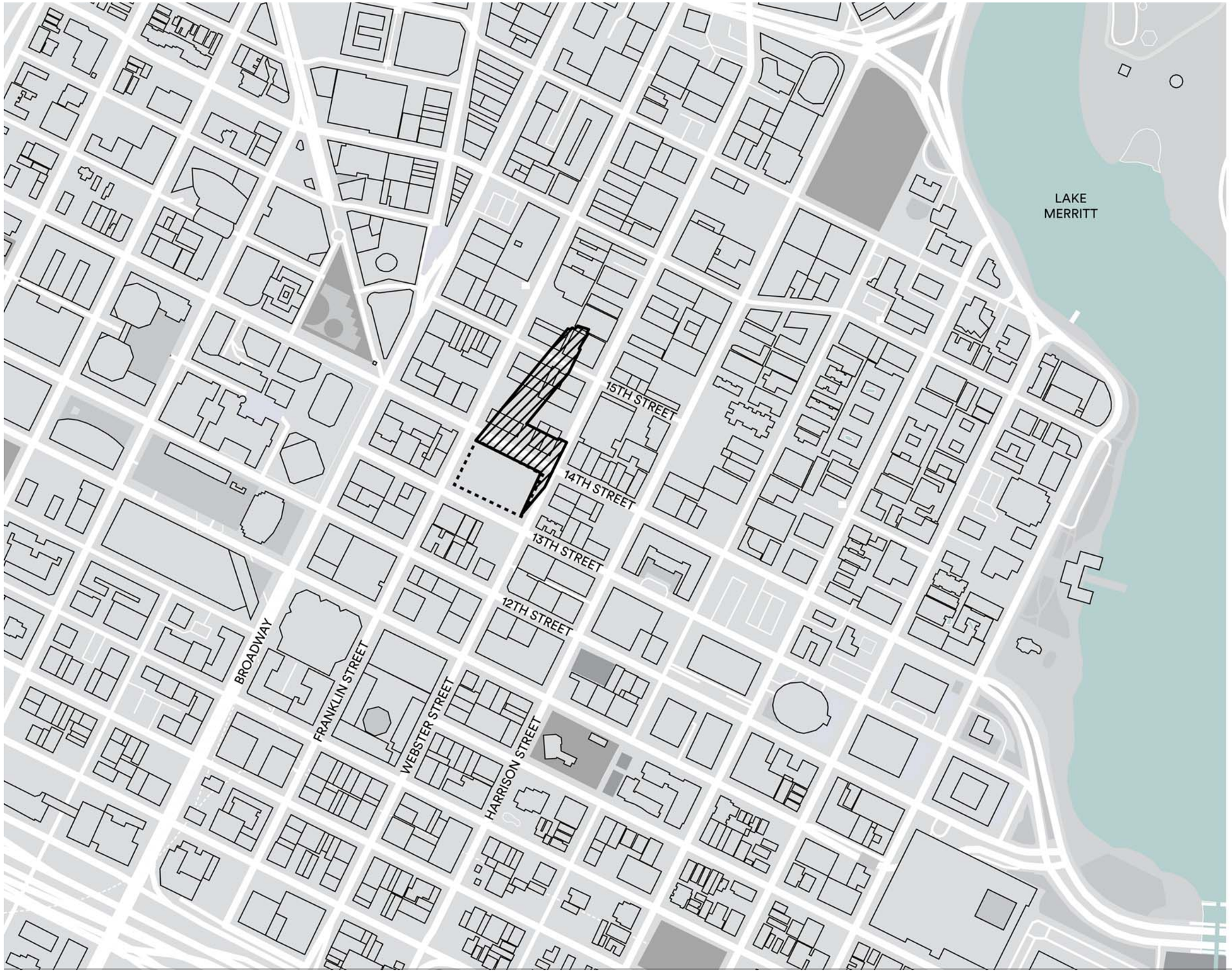
Solomon Cordwell Buenz / Carmel Partners / Oakland, CA 2016024



FALL EQUINOX
SEPTEMBER 21

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1314 Franklin Shadow Line

CP VI Franklin, LLC

FALL EQUINOX - 3PM
PRELIMINARY DESIGN CONCEPT FOR STAFF INPUT
1314 Franklin Street, Oakland, California
Solomon Cordwell Buenz / Carmel Partners / Oakland, CA

09 — 15 — 2016
2016024

WINTER SOLSTICE
DECEMBER 21

9 AM

1314 Franklin Shadow Line

CP VI Franklin, LLC

WINTER SOLSTICE - 9AM
PRELIMINARY DESIGN CONCEPT FOR STAFF INPUT 09 — 15 — 2016
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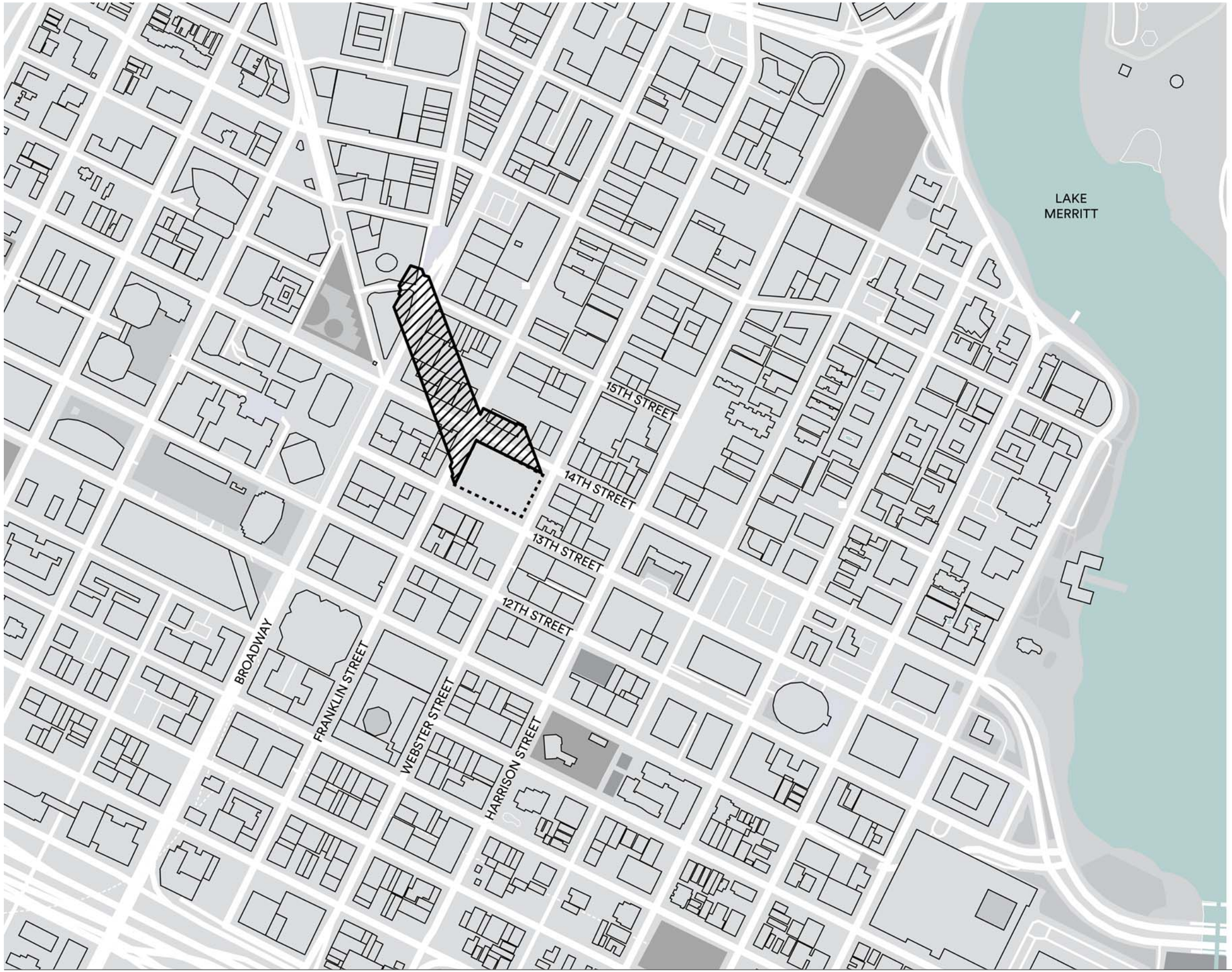
Solomon Cordwell Buenz / Carmel Partners / Oakland, CA 2016024



WINTER SOLSTICE
DECEMBER 21

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1314 Franklin Shadow Line

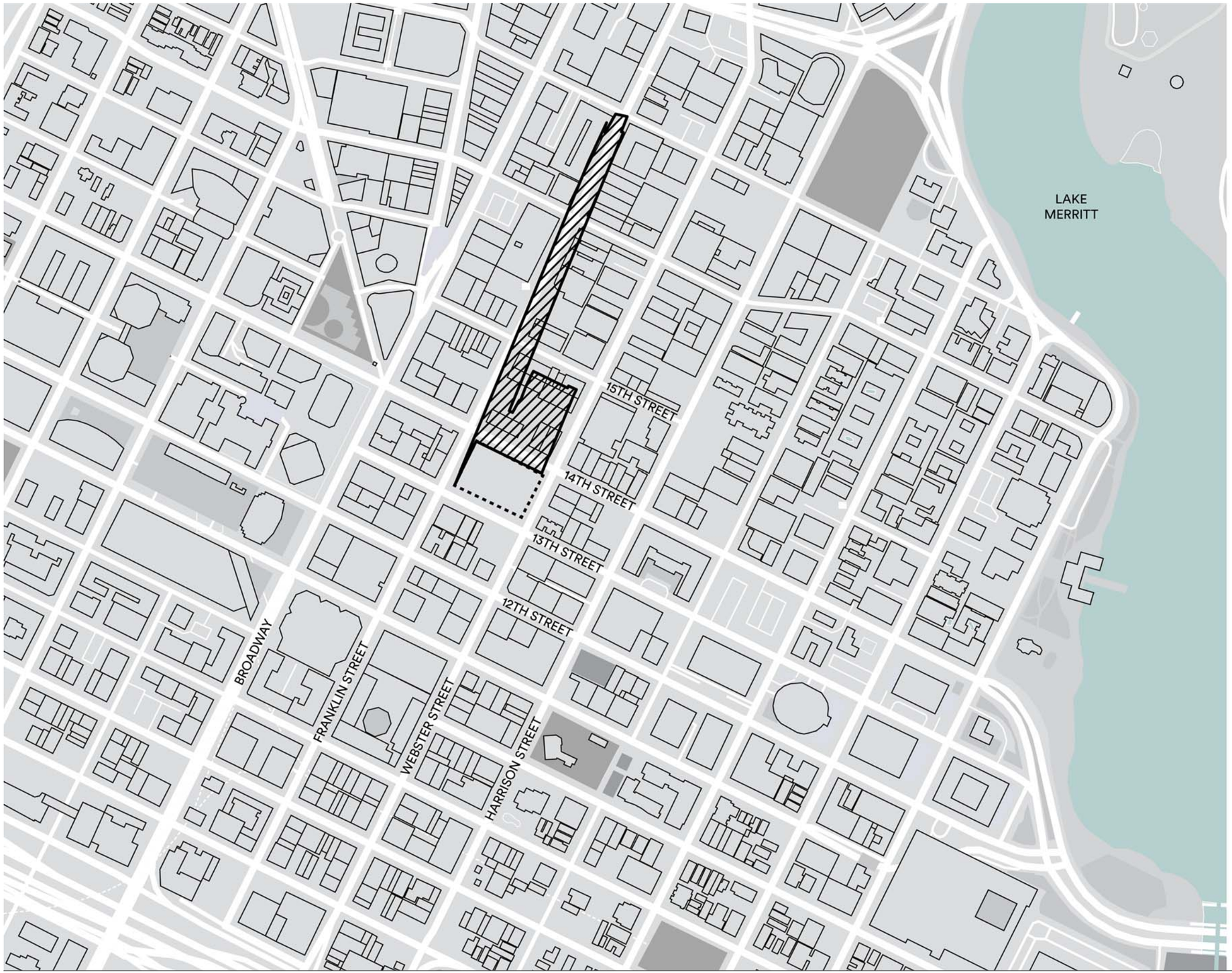
CP VI Franklin, LLC

WINTER SOLSTICE - 12PM

PRELIMINARY DESIGN CONCEPT FOR STAFF INPUT 09 — 15 — 2016

1314 Franklin Street, Oakland, California

Solomon Cordwell Buenz / Carmel Partners / Oakland, CA 2016024



WINTER SOLSTICE
DECEMBER 21

3 PM

1314 Franklin Shadow Line

CP VI Franklin, LLC

WINTER SOLSTICE - 3PM

PRELIMINARY DESIGN CONCEPT FOR STAFF INPUT 09 — 15 — 2016

1314 Franklin Street, Oakland, California

Solomon Cordwell Buenz / Carmel Partners / Oakland, CA 2016024

APPENDIX B
Wind Analysis

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CONSULTING ENGINEERS
& SCIENTISTS

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600 Southgate Drive
Guelph, Ontario, Canada
N1G 4P6

1314 Franklin

Oakland, CA

Report

Pedestrian Wind Consultation

RWDI # 1700045
October 18, 2016

SUBMITTED TO

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CONSULTING ENGINEERS & SCIENTISTS

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1. INTRODUCTION

Rowan Williams Davies & Irwin Inc. (RWDI) was retained by Environmental Science Associates (ESA) to consult on the pedestrian wind conditions for the proposed 1314 Franklin in Oakland, California. The purpose of the study was to assess the wind environment around the development in terms of pedestrian comfort and hazard relative to wind metrics specified in the City of Oakland Significant Wind Impact Criterion. The study objective was achieved through wind tunnel testing of a 1:400 scale model for the following three development configurations:

A – Existing: all existing buildings on-site and in the surroundings;

B – Existing plus Project: proposed 1314 Franklin project with existing surrounding buildings; and,

C – Project plus Cumulative: proposed 1314 Franklin project with cumulative surrounding buildings.

The proposed tower would be approximately 275 feet tall. The test model was constructed using the design information and drawings listed in Appendix A.

This report summarizes the methodology of the 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 test results and recommendations of conceptual wind control measures, where necessary.

The placement for wind measurement locations was based on our experience and understanding of pedestrian usage for this site and it was reviewed and approved by ESA.

2. PRINCIPAL RESULTS

The results of the tests are discussed in detail in Section 4 of this report and may be summarized as follows:

- Wind speeds on the Existing project site are currently low and met the 11 mph criterion at all locations. The hazard criterion was also met at all locations in the Existing Configuration.

- For the Existing plus Project Configuration, wind speeds at 6 locations exceed the comfort criterion while the hazard criterion was met at all locations.

- For the Project plus Cumulative Configuration, wind speeds at 8 locations exceed the comfort criterion while the hazard criterion was met at all locations. Therefore, no significant wind impact is expected to be created by the proposed project.

3. METHODOLOGY

3.1 Wind Tunnel Testing

As shown in Figures 1a through 1c, the wind tunnel model included the project site and all relevant surrounding buildings and topography within a 1500 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 54 wind speed sensors to measure mean and gust wind speeds at a full-scale height of approximately 5 ft. All of these measurement locations were at grade level. 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 20 mph measured at the airport (at an anemometer height of 33ft) occur 3.5% 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 for pedestrian comfort and safety.

3.3 Planning Code Requirements

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”. A 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 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. Since the proposed project would exceed 100 feet in height and would be located in Downtown, it is subject to the thresholds of significance.

The 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:

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

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

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 of the report simply refers to the data as wind speeds.

Table 1, located in the tables section of this report, presents the wind comfort results for the three configurations tested. For each measurement point, the measured 10% exceeded (90th percentile) equivalent wind speed and the percentage of time that the wind speed exceeds 11 mph are shown for areas considered to be used primarily for walking. 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

A total of 54 sensors were installed at grade level to measure the wind conditions around the project site and its vicinity.

The wind conditions for the Existing Configuration were generally low with 90th percentile wind speeds averaging 7 mph for all 54 measurement locations. The 11 mph comfort threshold was met all locations (Figure 3a). On average, wind speeds in the Existing Configuration exceed the 11 mph criterion 2% of the time (see page 2 of Table 1).

For the Existing plus Project Configuration, the average 90th percentile wind speed for all measurement locations increased slightly from 7 mph in the Existing Configuration to 8 mph. Wind speeds exceeding the 11 mph comfort threshold are expected at 6 out of 54 locations. These areas are: (1) the intersection of 14th Street and Franklin Street (Locations 17, 18, 21 & 24 in Figure 3b); and (2) the intersection of 13th Street and Franklin Street (Locations 13 & 53 in Figure 3b). The frequency that the 11 mph criterion was exceeded increased from 2% in the Existing Configuration to 5% in the Existing plus Project Configuration (see Table 1).

For the Project plus Cumulative Configuration, the average 90th percentile wind speed for all measurement locations marginally increased from 8 mph in the Existing plus Project Configuration to 9 mph. Wind speeds exceeding the 11 mph comfort threshold are expected at 8 out of 54 locations. These areas are (1) the same 6 exceedance locations found in the Existing plus Project Configuration; and (2) along Webster Street just north of 14th Street (Locations 27 & 29 in Figure 3c). The frequency that the 11 mph criterion was exceeded increased from 2% in the Existing Configuration to 5% in the Project plus Cumulative Configuration (see Table 1).

Overall, as indicated in Table 1, wind conditions were slightly increased in the Existing plus Project Configuration and Project plus Cumulative Configuration when compared with the conditions in the Existing Configuration.

4.2 Wind Hazard Conditions

All 54 grade level locations tested for all three configurations satisfy the hazard criterion (presented in Table 2). Therefore, no significant wind impact is expected to be created by the proposed project.

5. APPLICABILITY OF RESULTS

The wind conditions presented in this report pertain to the proposed 1314 Franklin development as detailed in the architectural design drawings listed in Appendix A. Information regarding the addition of two cumulative buildings along the northeast edge of the wind tunnel disk (see Appendix B) was received after the wind tunnel tests were conducted. Given the relative long distance from these two buildings to the study site as well as their location with respect to the dominant winds, it was concluded that the presence of these two buildings would not affect the results presented in this report. 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.

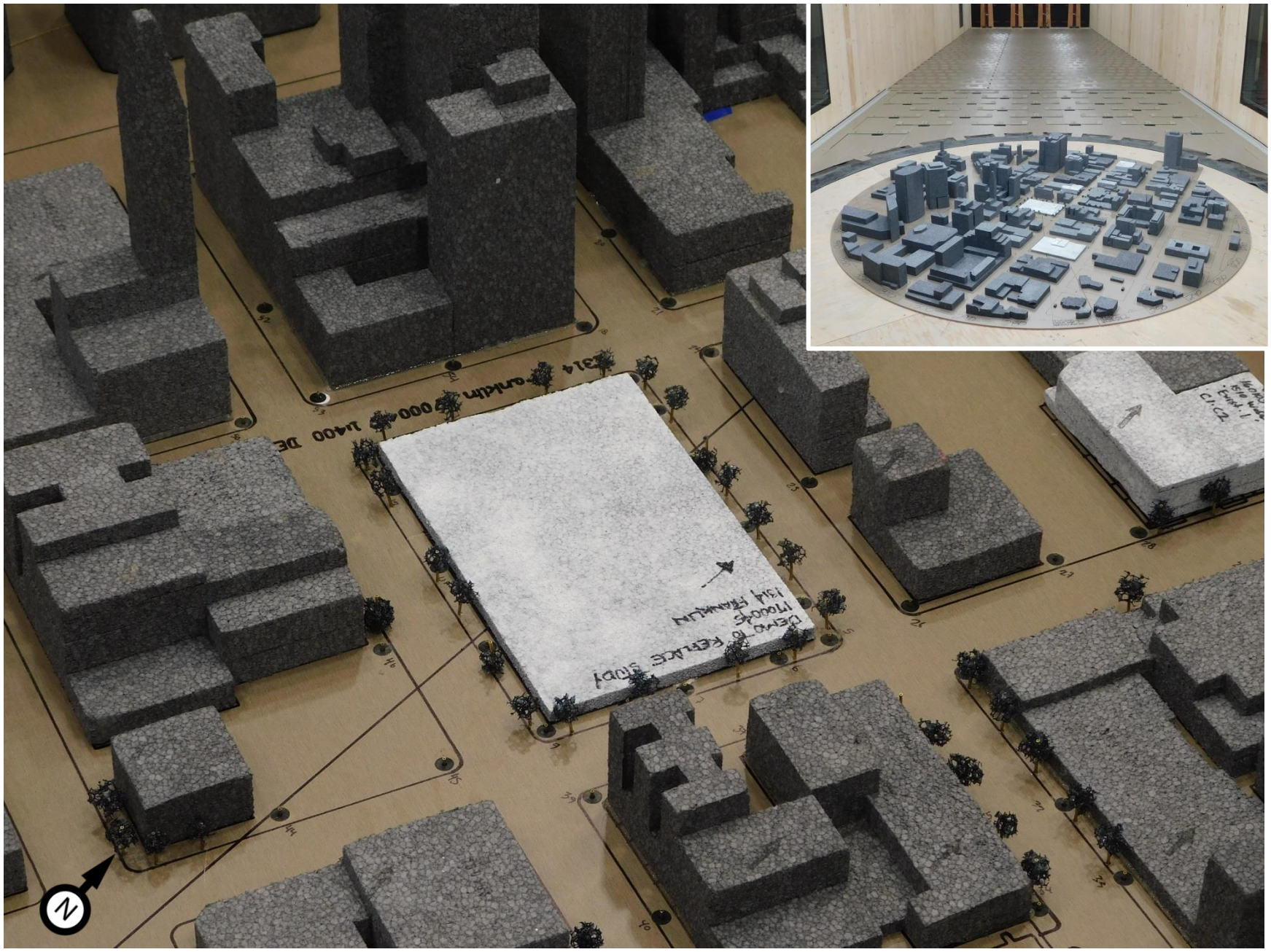
5) Soligo, M.J., Irwin, P.A., Williams, C.J. and Schuyler, G.D. (1998). "A Comprehensive Assessment of Pedestrian Comfort Including Thermal Effects," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol.77&78, pp.753-766.

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.

FIGURES



Wind Tunnel Study Model
Existing

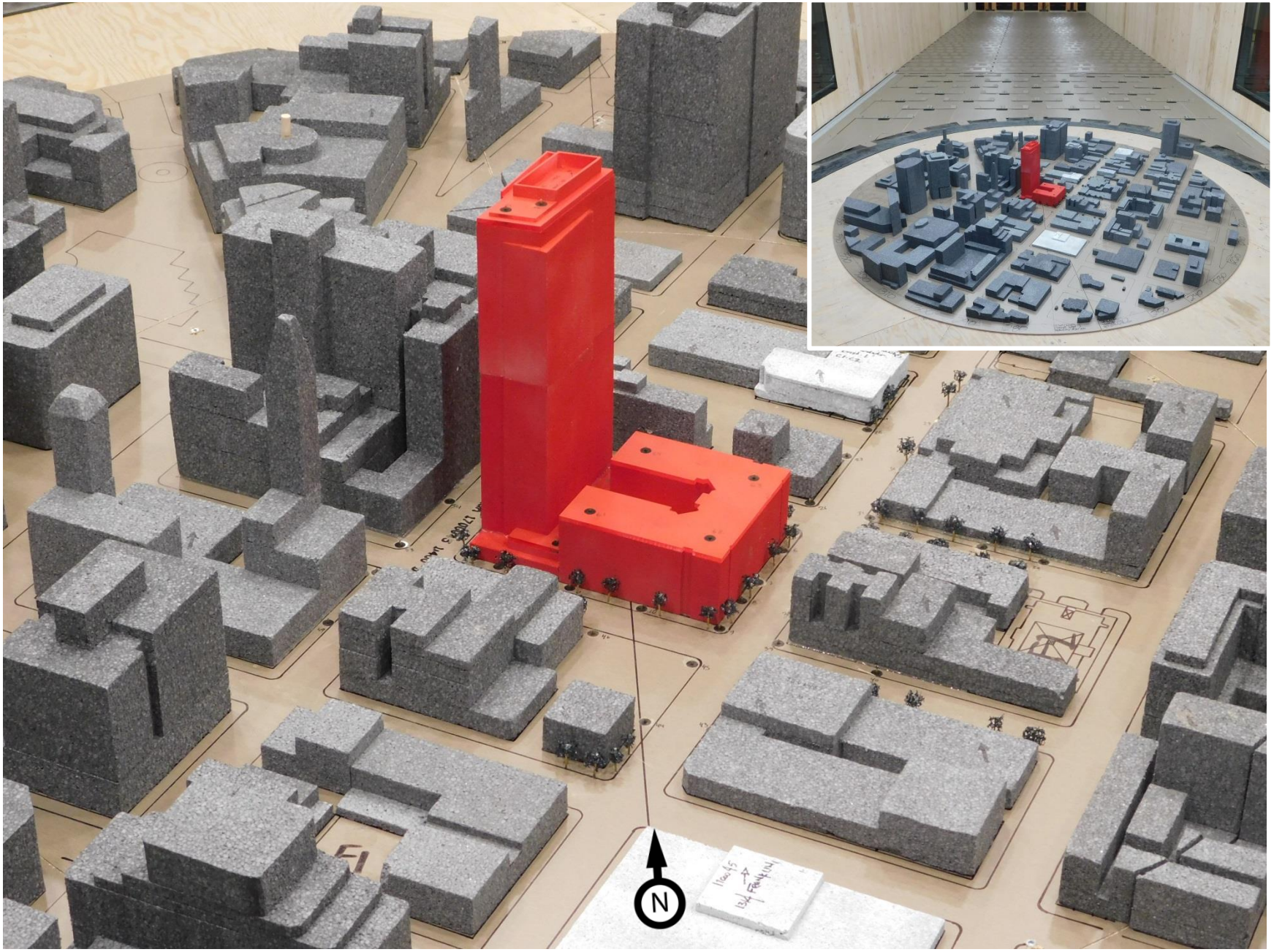
1314 Franklin – Oakland, CA

Project #1700045

Figure No. 1a

Date: October 6, 2016

RWDI



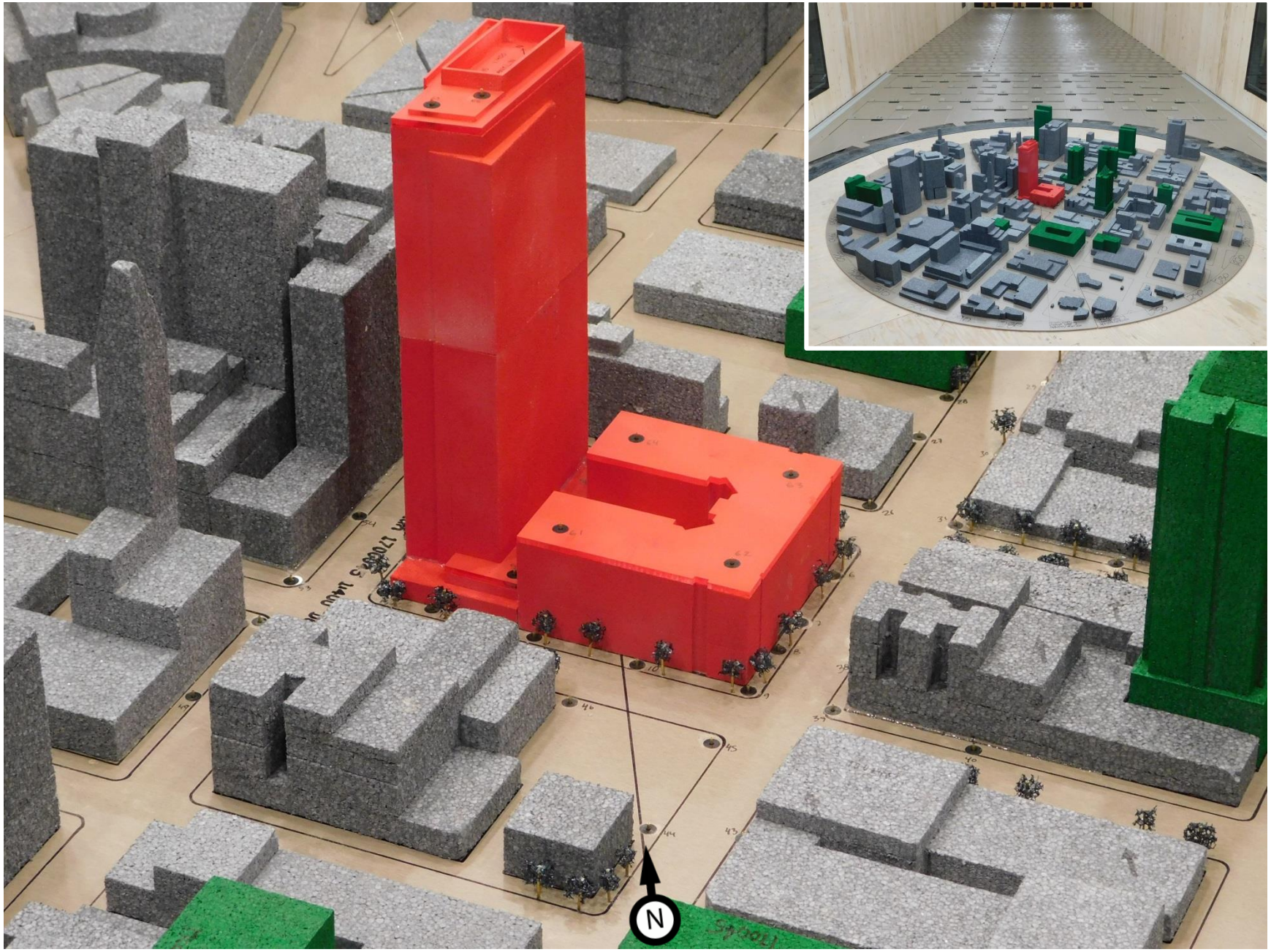
Wind Tunnel Study Model
Existing + Project

1314 Franklin – Oakland, CA

Project #1700045

Figure No. 1b

Date: October 6, 2016



Wind Tunnel Study Model
Project + Cumulative

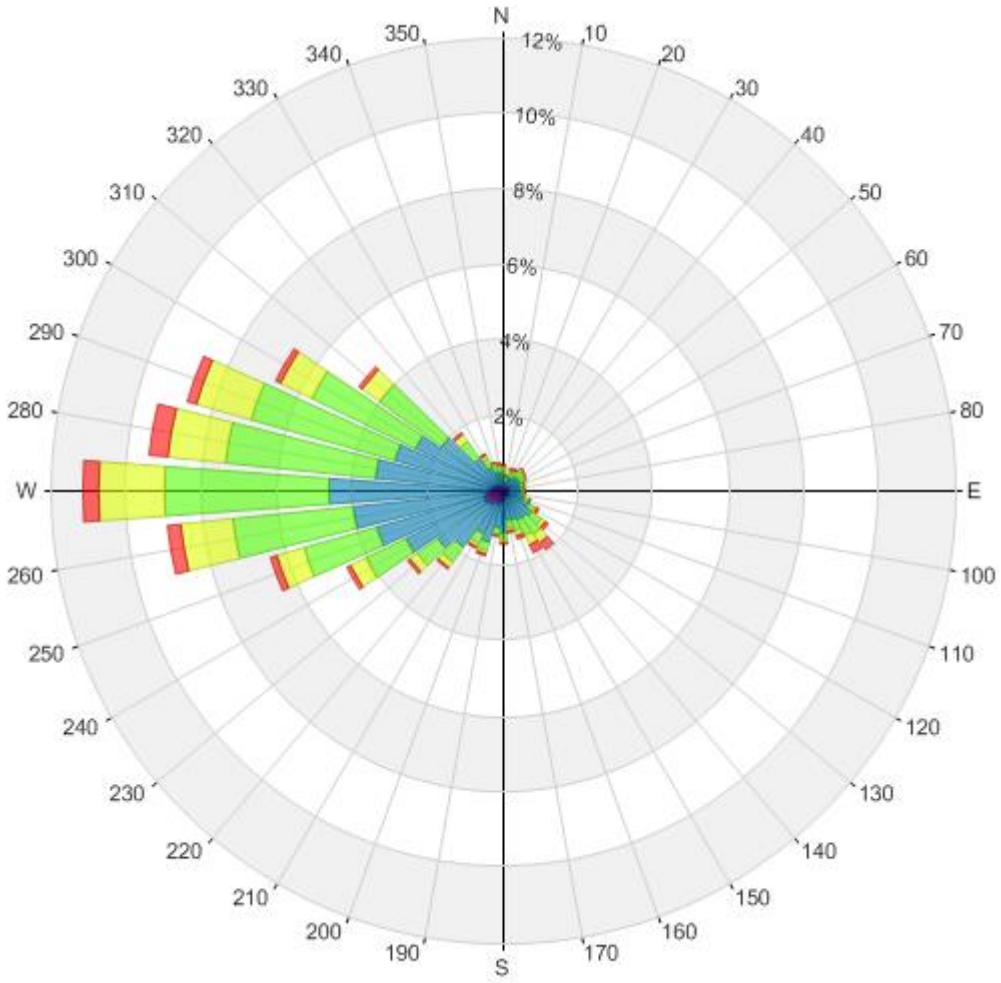
1314 Franklin – Oakland, CA

Project #1700045

Figure No. 1c

Date: October 6, 2016

RWDI



Wind Speed (mph)	Probability (%)
Calm	6.6
1-5	9.2
6-10	38.9
11-15	30.4
16-20	11.4
>20	3.5

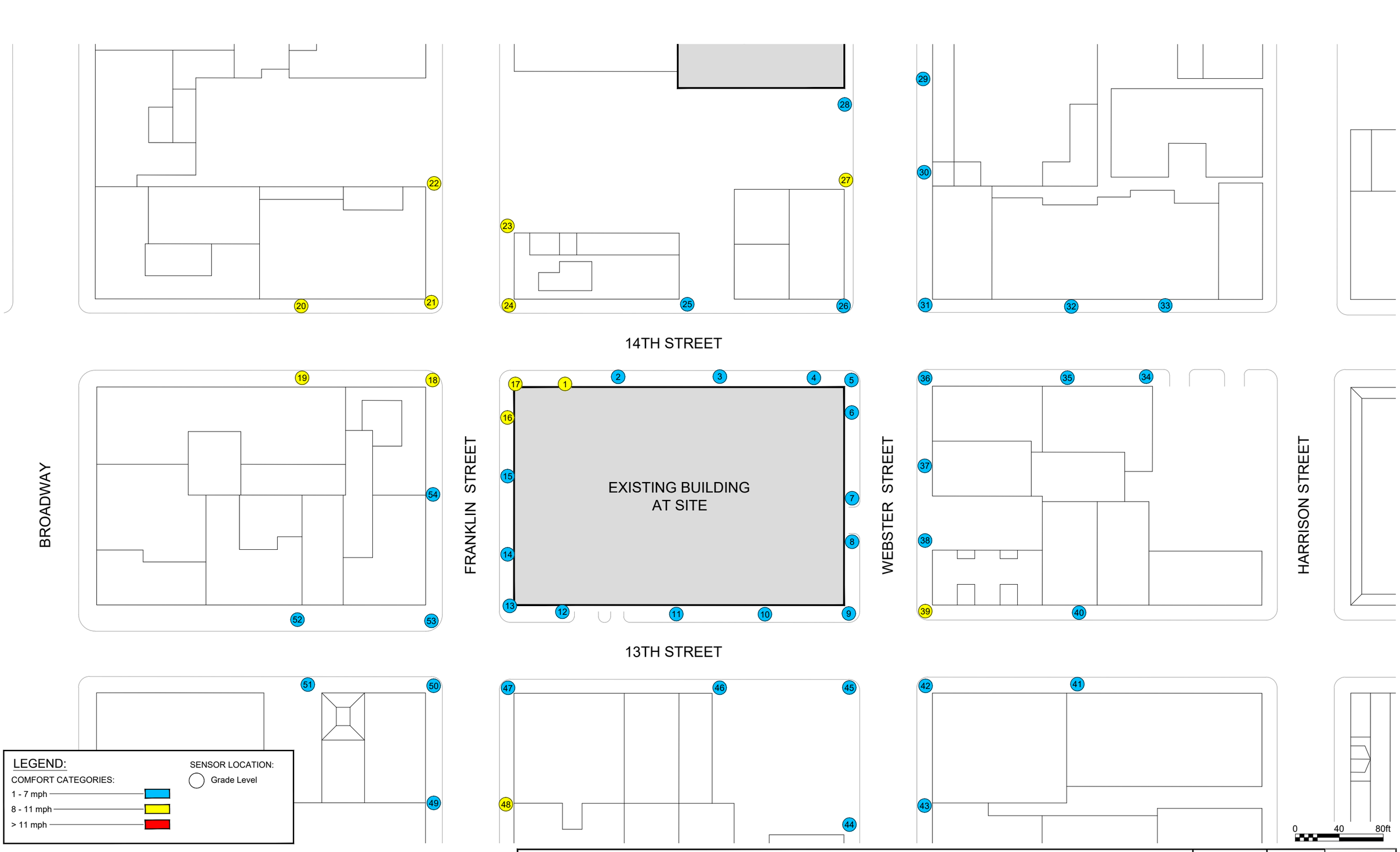
Annual Winds

Directional Distribution (%) of Winds (Blowing From)
Metropolitan Oakland International Airport (1984 - 2014)
7:00 AM - 6:00 PM
1314 Franklin – Oakland, CA

Project #1700045

Figure No. 2

Date: October 06, 2016



Pedestrian Wind Comfort Conditions - Existing
Annual (January to December)

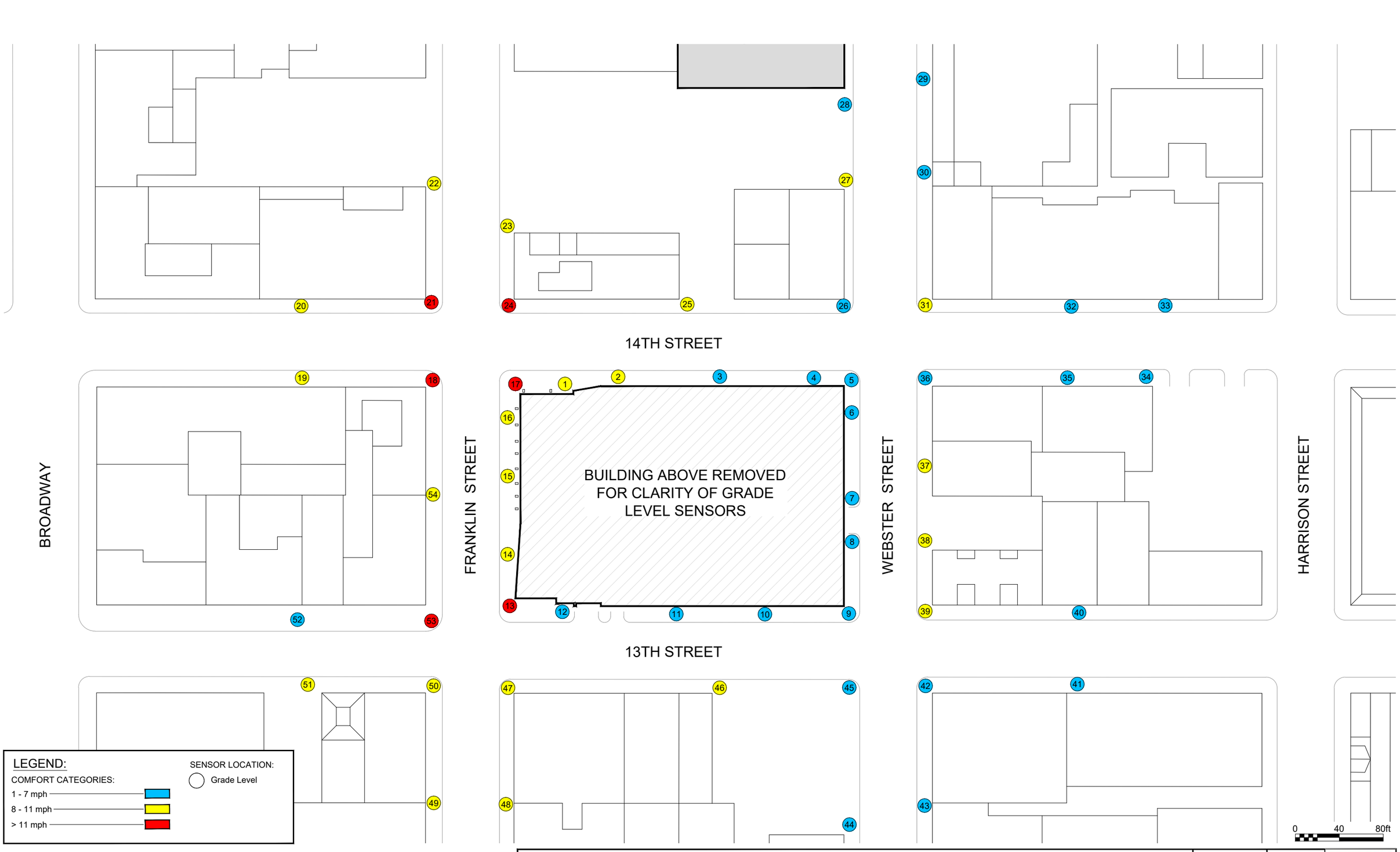
1314 Franklin - Oakland, CA

True North

Project #1700045

Drawn by:	ARM	Figure:	3a
Approx. Scale:			1"=120'
Date Revised:			Oct. 3, 2016

RWDI



Pedestrian Wind Comfort Conditions - Existing + Project
Annual (January to December)

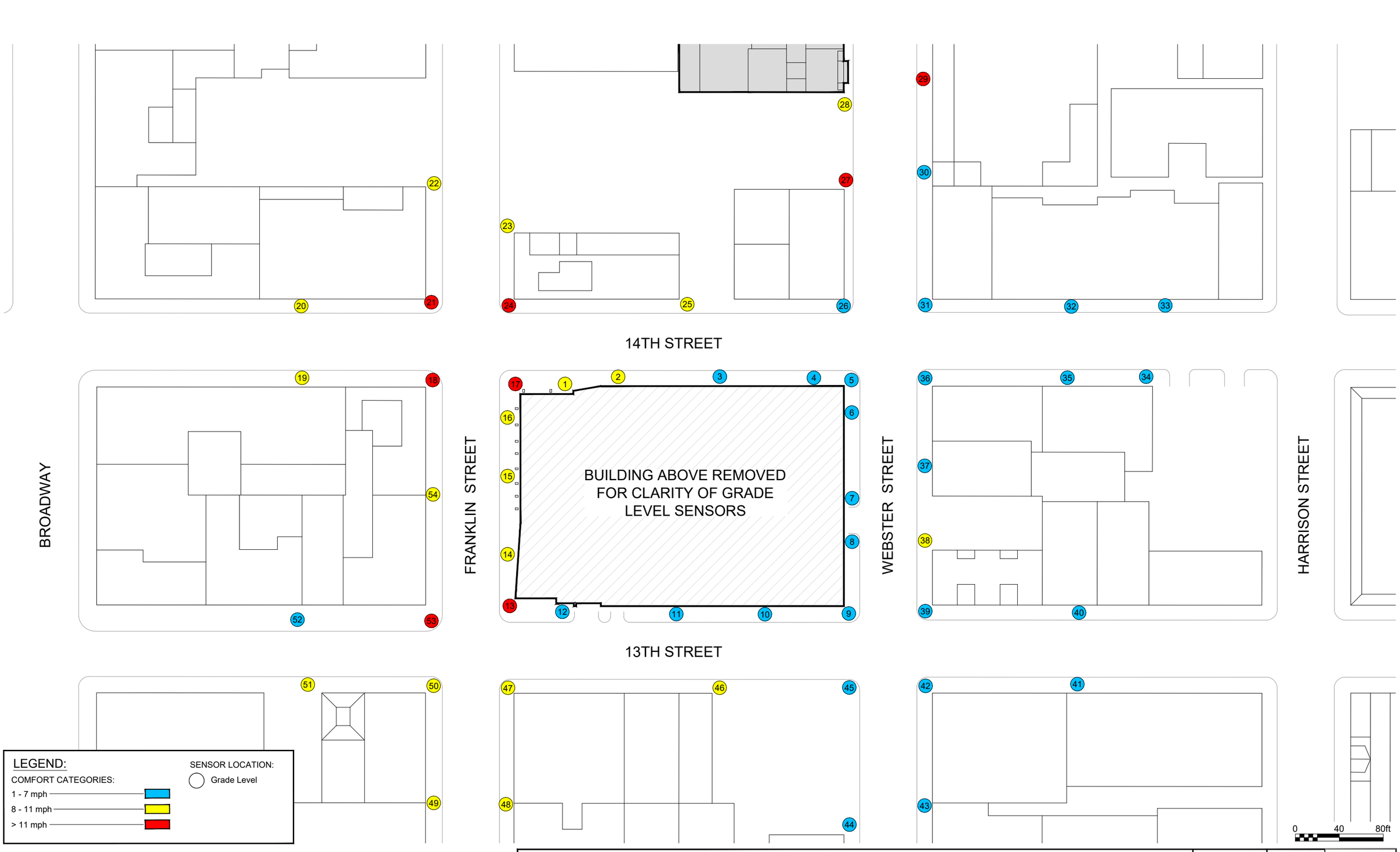
1314 Franklin - Oakland, CA

True North

Project #1700045

Drawn by:	ARM	Figure:	3b
Approx. Scale:			1"=120'
Date Revised:			Oct. 3, 2016

RWDI



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

1314 Franklin - Oakland, CA

True North

Project #1700045

Drawn by:	ARM	Figure:	3c
Approx. Scale:			1"=120'
Date Revised:			Oct. 3, 2016

RWDI

TABLES

CONSULTING ENGINEERS & SCIENTISTS

Table 1: Wind Comfort Results

Redacted	Existing			Existing + Project				Project + Cumulative			
Location Number	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds
1	8	1		8	4	0		8	3	0	
2	5	0		8	3	3		8	2	3	
3	5	0		7	1	2		7	1	2	
4	5	0		6	1	1		7	1	2	
5	5	0		7	2	2		7	1	2	
6	5	0		5	0	0		5	0	0	
7	5	0		5	1	0		5	1	0	
8	6	2		6	1	0		6	1	0	
9	7	2		7	2	0		7	1	0	
10	5	0		6	1	1		6	1	1	
11	5	1		7	1	2		7	2	2	
12	5	0		7	2	2		7	2	2	
13	6	1		13	17	7	e	13	17	7	e
14	5	1		11	10	6		11	10	6	
15	7	2		9	4	2		8	4	1	
16	8	2		10	5	2		10	5	2	
17	8	3		13	18	5	e	13	20	5	e
18	9	6		14	26	5	e	14	24	5	e
19	10	6		8	3	-2		8	2	-2	
20	10	6		10	8	0		10	7	0	
21	8	4		13	16	5	e	12	15	4	e
22	8	3		10	8	2		10	6	2	
23	8	2		11	10	3		11	10	3	
24	8	4		14	22	6	e	14	23	6	e
25	7	2		11	10	4		10	8	3	
26	6	1		6	1	0		7	1	1	
27	8	2		8	3	0		12	12	4	e
28	6	0		7	1	1		11	10	5	
29	7	0		7	0	0		12	15	5	e
30	6	0		6	1	0		7	2	1	
31	7	1		8	2	1		7	1	0	
32	6	0		6	1	0		6	1	0	
33	7	1		7	1	0		7	2	0	
34	6	1		6	1	0		7	1	1	
35	5	0		5	0	0		6	1	1	
36	7	1		7	2	0		6	1	-1	
37	6	1		8	2	2		7	1	1	

CONSULTING ENGINEERS & SCIENTISTS

Table 1: Wind Comfort Results

Test Scenario	Existing			Existing + Project				Project + Cumulative			
Location Number	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds
38	7	2		8	3	1		8	2	1	
39	8	3		8	3	0		7	2	-1	
40	6	1		6	1	0		6	0	0	
41	6	1		6	0	0		6	0	0	
42	7	1		7	1	0		7	1	0	
43	7	1		7	1	0		7	0	0	
44	7	1		6	1	-1		6	0	-1	
45	7	1		7	1	0		7	1	0	
46	6	1		9	5	3		10	6	4	
47	7	1		11	10	4		11	10	4	
48	9	4		9	4	0		9	3	0	
49	6	2		9	5	3		10	6	4	
50	7	1		11	10	4		11	10	4	
51	7	3		10	5	3		10	5	3	
52	7	2		6	2	-1		6	2	-1	
53	7	2		14	22	7	e	14	20	7	e
54	6	1		10	6	4		10	5	4	
Average speed, Average % exceedance and Total exceedances	**7 mph**	**2%**	**0 of 54**	**8 mph**	**5%**	**1 mph**	**6 of 54**	**9 mph**	**5%**	**2 mph**	**8 of 54**

RWDI
CONSULTING ENGINEERS & SCIENTISTS

Table 2: Wind Hazard Results

References	Existing			Existing + Project				Project + Cumulative			
Location Number	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Exceeds	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Hours Change Relative to Existing	Exceeds
1	23	0		25	0	0		26	0	0	
2	15	0		23	0	0		21	0	0	
3	14	0		18	0	0		17	0	0	
4	14	0		18	0	0		17	0	0	
5	15	0		21	0	0		20	0	0	
6	16	0		16	0	0		16	0	0	
7	15	0		18	0	0		19	0	0	
8	23	0		21	0	0		19	0	0	
9	24	0		22	0	0		19	0	0	
10	14	0		17	0	0		18	0	0	
11	20	0		19	0	0		19	0	0	
12	14	0		24	0	0		21	0	0	
13	18	0		28	0	0		28	0	0	
14	18	0		32	0	0		30	0	0	
15	25	0		27	0	0		27	0	0	
16	23	0		25	0	0		23	0	0	
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23	21	0		29	0	0		27	0	0	
24	25	0		35	0	0		36	0	0	
25	22	0		28	0	0		25	0	0	
26	19	0		18	0	0		17	0	0	
27	21	0		22	0	0		25	0	0	
28	15	0		15	0	0		30	0	0	
29	16	0		16	0	0		26	0	0	
30	17	0		17	0	0		22	0	0	
31	16	0		19	0	0		18	0	0	
32	17	0		18	0	0		18	0	0	
33	18	0		18	0	0		23	0	0	
34	20	0		20	0	0		18	0	0	
35	15	0		14	0	0		17	0	0	
36	18	0		21	0	0		20	0	0	
37	17	0		20	0	0		19	0	0	

CONSULTING ENGINEERS & SCIENTISTS

Table 2: Wind Hazard Results

References	Existing			Existing + Project				Project + Cumulative			
Location Number	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Exceeds	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Hours Change Relative to Existing	Exceeds
38	24	0		23	0	0		24	0	0	
39	26	0		26	0	0		24	0	0	
40	17	0		17	0	0		15	0	0	
41	18	0		17	0	0		15	0	0	
42	20	0		18	0	0		18	0	0	
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45	21	0		17	0	0		16	0	0	
46	21	0		28	0	0		30	0	0	
47	20	0		27	0	0		27	0	0	
48	20	0		24	0	0		26	0	0	
49	21	0		22	0	0		23	0	0	
50	19	0		24	0	0		24	0	0	
51	22	0		21	0	0		21	0	0	
52	21	0		22	0	0		21	0	0	
53	24	0		31	0	0		30	0	0	
54	20	0		29	0	0		28	0	0	
Average speed, Total exceeding hours and Total exceedances	**20 mph**	**0 hrs**	**0 of 54**	**22 mph**	**0 hrs**	**0 hrs**	**0 of 54**	**22 mph**	**0 hrs**	**0 hrs**	**0 of 54**

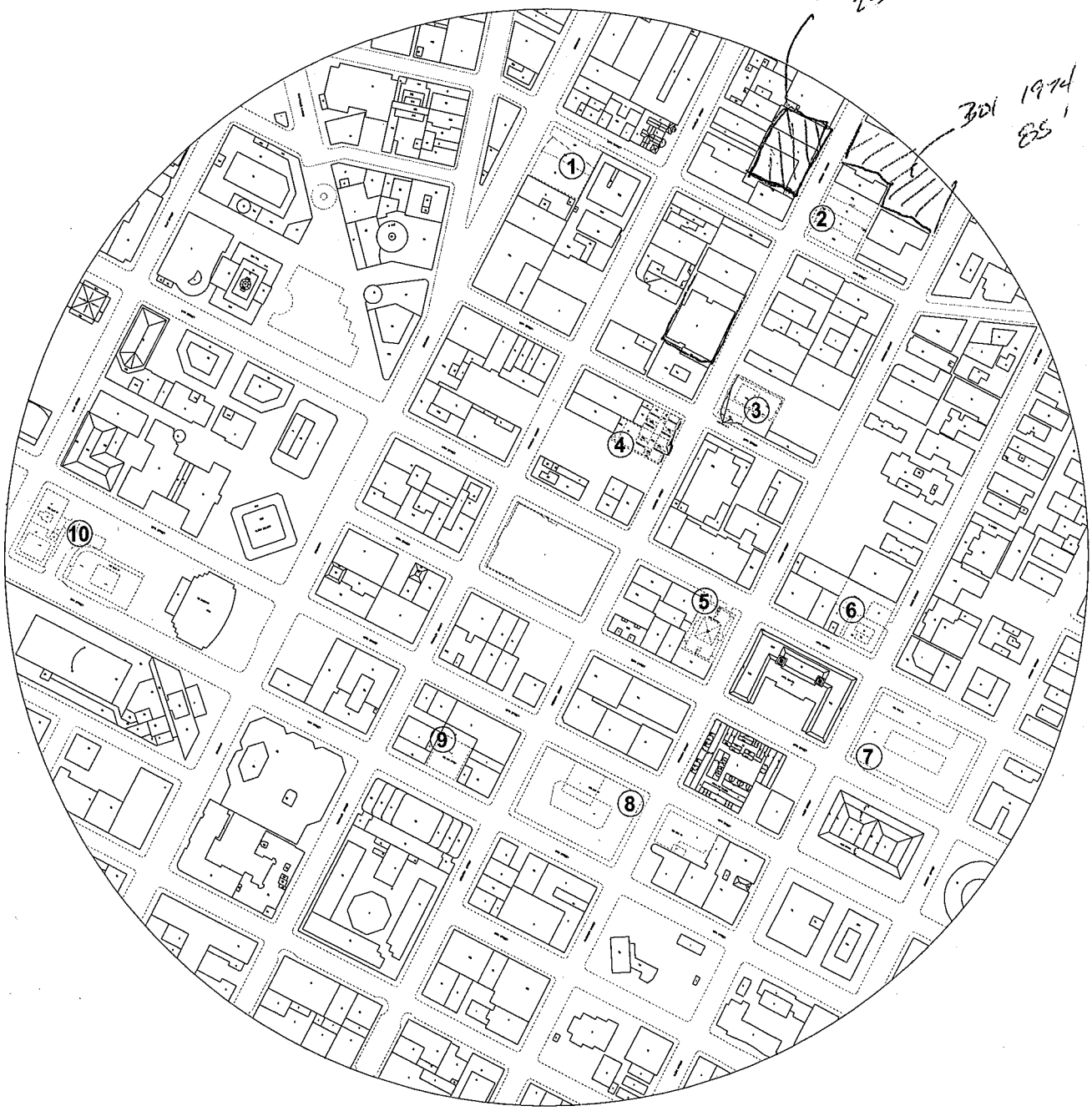
APPENDIX A

APPENDIX A: DRAWING LIST FOR MODEL CONSTRUCTION

The drawings and information listed below were received from ESA and Solomon Cordwell Buenz; and were used to construct the scale model of the proposed 1314 Franklin Street. Should there be any design changes that deviate from this list of drawings, the results 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 the pedestrian wind conditions presented in this report.

File Name	File Type	Date Received (dd/mm/yyyy)
2016_0628 1314 Franklin Street Tower Concept.pdf	PDF	3/08/2016
2016_0825_1314 Franklin_Preliminary Design Concept.pdf	PDF	29/08/2016
1314 Franklin.rvt	Revit	16/09/2016

APPENDIX B



LEGEND: POSSIBLE FUTURE BUILDINGS

1 - 1640 Broadway - 127m/416'
2 - 1700 Webster St - 81m/265'
3 - 1433 Webster St - 76m/250' → 350'
4 - 1510 Webster - 85m/278'
5 - 1331 Harrison St - 102m/335'
6 - 250 14th st Alice St - 57m/187'
7 - 226 13th St - 24.5m/80'
8 - 285 12th St - 27m/88'
9 - 378 11th St - 26m/85'
10 - 1100 Clay St - 46m/150'

DOUBLE CHECK THIS HEIGHT

LEGEND:

Study Building Footprint
Future Building

1433 WEBSTER →

REVISED TO 350'

Proximity Model

1314 Franklin - Oakland, CA

True North

Project #1700045

Drawn by: CT

Model Testing Scale: 1:400

Date Revised: Aug 22, 2016

RWDI

APPENDIX C

1314 Franklin Street Project Construction Health Risk Assessment

The Health Risk Assessment (HRA) presented below estimates the 1314 Franklin Street project's (proposed project) incremental health risks to existing sensitive receptors from project construction.

Health Risk Assessment

This construction health risk assessment consists of four principal components:

1. Quantification of TAC emissions from project construction.
2. Estimation of TAC concentrations at existing sensitive receptors from the project's construction emissions using refined air dispersion modeling.
3. Estimation of health risks from construction using the modeled concentrations at receptors and exposure parameters and comparison to significance thresholds developed by the BAAQMD and adopted by the City of Oakland.

1. Estimation of TAC Emissions from Project Construction

The primary TAC of concern emitted during project construction is Diesel Particulate Matter (DPM), a primary component of diesel exhaust from construction equipment and heavy duty trucks transporting materials to and from the project site. In August 1998, the CARB identified DPM as a TAC. DPM is a complex mixture of numerous individual gaseous and particulate compounds emitted from diesel-fueled combustion engines and contains at least 40 different TACs. DPM is formed primarily through the incomplete combustion of diesel fuel. DPM is removed from the atmosphere through physical processes including atmospheric fall-out and washout by rain. Humans can be exposed to airborne DPM by deposition on water, soil, and vegetation; although the main pathway of exposure is inhalation. Studies indicate that DPM poses the greatest health risk among airborne TACs.

For purposes of this assessment, consistent with Office of Environmental Health Hazard Assessment (OEHHA) guidelines, exhaust emissions of PM_{10} are represented as DPM. Exhaust PM_{10} emissions from project construction were derived from CalEEMod (Version 2016.3.1) using a project specific construction schedule, equipment lists and activity levels provided by the applicant shown in **Tables C-1**, **C-2** and **C-3** below.

TABLE C-1
PROJECT CONSTRUCTION SCHEDULE[a]

Construction Phase	Duration	Number of Workdays[b]
Demolition	12/15/2017 – 2/13/2018	43
Shoring/Excavation	2/14/2018 – 4/13/2018	43
Grading/Deep Foundations	4/14/2018 – 6/13/2018	43
Building Construction Tower/Podium	6/14/2018 – 1/9/2020	411
Architectural Coating – Painting/Sealing	1/10/2020 – 7/9/2020	130
Paving/Landscaping/Sidewalks	7/10/2020 – 10/8/2020	65

[a] Provided by the project applicant.
[b] Number of workdays are calculated assuming Monday – Friday construction. No construction on weekends is assumed.

TABLE C-2
CONSTRUCTION EQUIPMENT USED BY PHASE[a]

Equipment	Number	No. of days Used	No. of Hours/Day Used
Demolition			
Rubber Tired Dozer	2	43	8
Tractors/Loaders/Backhoes	3	43	8
Shoring/Excavation			
Rubber Tired Dozer	2	43	7
Tractors/Loaders/Backhoes	2	43	8
Grading/Deep Foundations			
Tractors/Loaders/Backhoes	2	43	7
Drill Rig	2	43	7
Building Construction Tower/Podium			
Cranes	2	411	6
Forklifts	2	411	6
Generator Sets	2	411	8
Cement and Mortar Mixers	1	411	8
Architectural Coating – Painting/Sealing			
Air Compressor	1	130	6
Paving/Landscaping/Sidewalks			
Cement and Mortar Mixers	1	65	6
Pavers	1	65	6
Paving Equipment	1	65	8
Rollers	1	65	7
Tractors/Loaders/Backhoes	1	65	8

[a] Provided by the project applicant.

TABLE C-3
VEHICLE TRIPS BY CONSTRUCTION PHASE[a]

Construction Phase	Worker Commute Trips/Day	Vendor Trips/Day	Total Number of Hauling Trips
Demolition	10	0	400
Shoring/Excavation	8	0	2309
Grading/Deep Foundations	8	0	90
Building Construction Tower/Podium	250	8	0
Architectural Coating – Painting/Sealing[b]	93	0	0
Paving/Landscaping/Sidewalks	30	0	4

[a] One-way vehicle trips as provided by the project applicant.
[b] CalEEMod default values used for this phase as the applicant did not provide numbers.

Estimated construction exhaust PM_{10} emissions for the unmitigated and mitigated scenarios are presented in **Table C-4** below. The mitigated scenario assumes use of Tier 4 engines as the best available control technology for all construction equipment as required by the enhanced measures included under City **SCA AIR-1, Construction-Related Air Pollution Controls (Dust and Equipment Emissions)**.

TABLE C-4
TOTAL PM_{10} EXHAUST EMISSIONS GENERATED
OVER ENTIRE DURATION OF PROJECT CONSTRUCTION

DPM Emissions (as Exhaust PM_{10})[a]	Unmitigated Scenario	Mitigated Scenario
On-Site DPM (tons)	0.3235	0.0107
Off-Site DPM (tons)	0.0065	0.0065
Total DPM emissions (tons)	0.33	0.017
Number of construction workdays	736	736
Emission Rate (grams/second)[b,c]	0.0093	0.0003

[a] Derived from CalEEMod (version 2016.3.1).
[b] Emission rate calculated assuming 12 hours of construction per day.
[c] Emission rate calculated assuming only 10 percent of off-site emissions as contributing to concentrations and health risks in the project vicinity.

2. Estimation of Ambient Concentrations at Existing Sensitive Receptors

Dispersion is the process by which atmospheric pollutants disseminate due to wind and vertical stability. The results of a dispersion analysis are used to assess pollutant concentrations at or near an emission source. The results of such an analysis allow predicted concentrations of pollutants to be compared directly to air quality standards and other criteria such as health risks based on modeled concentrations.

An air dispersion model is a mathematical formulation that is used to estimate the air quality concentrations at specific locations (receptors) surrounding a source of emissions given the rate of emissions, topography and prevailing meteorological conditions. The air dispersion model used in this assessment was the United States Environmental Protection Agency (EPA) AERMOD air dispersion model that is approved by the BAAQMD for air pollutant dispersion assessments. Specifically, the AERMOD model was used to estimate concentrations of DPM emissions at sensitive receptor locations in the vicinity of the project site using the project's emission rate shown in Table C-1. As required by the BAAQMD Guidelines, fugitive emissions are not included in this assessment and are addressed separately through dust control measures implemented as part of SCA AIR-1.

Both on-site emissions from construction and off-site emissions from heavy duty trucks were modeled together as an area source extending over the entire project site. Only 10 percent of off-site emissions were considered in the modeling effort as contributing to concentrations in the project vicinity. The release height for the source was specified as 5 meters above ground to account for the top of the equipment exhaust stack where the emission is released to the atmosphere and the increase in the height of the emissions due to its heated exhaust. A variable emissions rate was used to represent project construction activity that is expected to take place only on weekdays for 8 hours per day between 8 a.m. and 4 p.m. Five years of meteorological data from the Metropolitan Oakland International Airport was used to represent wind conditions at the project site.

Sensitive receptors in the form of existing residential uses are generally located to the south and east of the project site. The closest sensitive receptors are located approximately 80 feet east and south of the project site across Webster Street and 13th Street, respectively. Eleven discrete receptors at sensitive land uses around the project site were chosen to be modeled.

The dispersion modeling results show that the maximum annual concentration of 0.327 $\mu g/m^3$ for the uncontrolled (unmitigated) scenario would occur at the receptor located at 348 13th Street, approximately 80 feet east of the project site across Webster Street. With the use of Tier 4 construction equipment to satisfy the Best Available Control Technology requirement in the "enhanced" control measures of SCA-AIR-1, this concentration would be reduced to 0.012 $\mu g/m^3$.

3. Estimation of Health Risks to Existing Sensitive Receptors and Comparison to Thresholds

The HARP2 Risk Assessment Standalone Tool (dated 16057) was used to estimate health risks. The maximum annual PM_{10} concentration estimated using AERMOD was entered into the HARP2 tool. The tool was setup to estimate cancer, chronic, and acute health risks for offsite individual receptors using a 2-year exposure (duration of construction activities) and the OEHHA derived method. Estimates were made using the mandatory minimum pathways, which for DPM is only through inhalation. Health risks and maximum $PM_{2.5}$ concentrations at the Maximum Impacted Receptor [MEI] are shown in **Table C-5** below and compared to the BAAQMD project-level thresholds that have been adopted by the City of Oakland.

TABLE C-5
MAXIMUM HEALTH RISKS FROM PROJECT CONSTRUCTION

Health Risk	Maximum Cancer Risk (in a million)	Chronic Risk (Hazard Index)	Maximum $PM_{2.5}$ concentration
Uncontrolled Scenario	112	0.065	0.327
With Tier 4 Equipment	4	0.002	0.012
Project-level Threshold	10	1.0	0.3
Significant?	**No**	**No**	**No**

As shown in the table, health risks (cancer and chronic) and $PM_{2.5}$ concentrations resulting from project construction would be less than the applicable significance thresholds with the use of Tier 4 equipment for construction. Therefore the TAC impact of project construction on existing receptors would be less than significant. These risk impacts from project construction have been incorporated into the cumulative analysis presented in Section VI.2 – Air Quality of the CEQA Analysis.

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CalEEMod Output File

1314 Franklin

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments High Rise	635.00	Dwelling Unit	1.38	650,751.00	1289
Regional Shopping Center	9.60	1000sqft	0.00	9,600.00	0
High Turnover (Sit Down Restaurant)	8.40	1000sqft	0.00	8,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	63
Climate Zone	5			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Prroject data

Construction Phase - Project specific construction schedule provided by applicant

Off-road Equipment -

Off-road Equipment - Project specific data

Off-road Equipment - Project specific data

Off-road Equipment - Project specific data

Off-road Equipment - Project specific data

Off-road Equipment -

Off-road Equipment -

Grading - Project data

Demolition -

Trips and VMT - Data provided by applicant

Vehicle Trips - Based on trip generation estimates from project traffic study

Woodstoves - No woodstoves assumed
All gas fireplaces assumed - calEEMod default number of fireplaces

Energy Use - Default 2013 Title 24 factors adjusted down by 28 percent for residential and 5 percent for non residential uses to account for 2016 update which became effective on January 1, 2017

Water And Wastewater - 20 percent reduction from default assumed to account for compliance with CalGreen code
100% aerobic treatment of wastewater assumed

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - All Tier 4 equipment assumed to satisfy best available control technology requirement of City SCA-19

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	130.00
tblConstructionPhase	NumDays	200.00	411.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	4.00	43.00
tblConstructionPhase	NumDays	10.00	65.00
tblConstructionPhase	NumDays	2.00	43.00
tblConstructionPhase	PhaseEndDate	12/14/2017	7/9/2020

tblConstructionPhase	PhaseEndDate	12/14/2017	1/9/2020
tblConstructionPhase	PhaseEndDate	12/14/2017	2/13/2018
tblConstructionPhase	PhaseEndDate	12/14/2017	6/13/2018
tblConstructionPhase	PhaseEndDate	12/14/2017	10/8/2020
tblConstructionPhase	PhaseEndDate	12/14/2017	4/13/2018
tblConstructionPhase	PhaseStartDate	12/15/2017	1/10/2020
tblConstructionPhase	PhaseStartDate	12/15/2017	6/14/2018
tblConstructionPhase	PhaseStartDate	12/15/2017	4/14/2018
tblConstructionPhase	PhaseStartDate	12/15/2017	7/10/2020
tblConstructionPhase	PhaseStartDate	12/15/2017	2/14/2018
tblEnergyUse	LightingElect	741.44	533.84
tblEnergyUse	LightingElect	5.48	5.21
tblEnergyUse	LightingElect	5.00	4.75
tblEnergyUse	T24E	502.89	362.08
tblEnergyUse	T24E	2.80	2.66
tblEnergyUse	T24E	2.35	2.23
tblEnergyUse	T24NG	8,824.58	6,353.70
tblEnergyUse	T24NG	40.10	38.10
tblEnergyUse	T24NG	3.92	3.72
tblFireplaces	NumberGas	95.25	203.00
tblFireplaces	NumberNoFireplace	25.40	432.00
tblFireplaces	NumberWood	107.95	0.00
tblGrading	AcresOfGrading	0.00	1.50
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialExported	0.00	46,179.00
tblLandUse	BuildingSpaceSquareFeet	635,000.00	650,751.00
tblLandUse	LandUseSquareFeet	635,000.00	650,751.00

tblLandUse	LotAcreage	10.24	1.38
tblLandUse	LotAcreage	0.22	0.00
tblLandUse	LotAcreage	0.19	0.00
tblLandUse	Population	1,816.00	1,289.00
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	750.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	819.00	400.00
tblTripsAndVMT	HaulingTripNumber	0.00	90.00

tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,309.00
tblTripsAndVMT	VendorTripNumber	71.00	8.00
tblTripsAndVMT	WorkerTripNumber	464.00	250.00
tblTripsAndVMT	WorkerTripNumber	13.00	10.00
tblTripsAndVMT	WorkerTripNumber	10.00	8.00
tblTripsAndVMT	WorkerTripNumber	13.00	30.00
tblTripsAndVMT	WorkerTripNumber	10.00	8.00
tblVehicleTrips	ST_TR	4.98	4.21
tblVehicleTrips	ST_TR	158.37	81.99
tblVehicleTrips	ST_TR	49.97	27.92
tblVehicleTrips	SU_TR	3.65	3.09
tblVehicleTrips	SU_TR	131.84	68.26
tblVehicleTrips	SU_TR	25.24	14.10
tblVehicleTrips	WD_TR	4.20	3.55
tblVehicleTrips	WD_TR	127.15	65.83
tblVehicleTrips	WD_TR	42.70	23.74
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	41,372,806.27	33,098,245.02
tblWater	IndoorWaterUseRate	2,549,683.18	2,039,746.54
tblWater	IndoorWaterUseRate	711,096.21	568,876.97
tblWater	SepticTankPercent	10.33	0.00

tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	12.70	0.00
tblWoodstoves	NumberNoncatalytic	12.70	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	0.0196	0.2155	0.0954	1.9000e-004	0.0259	0.0111	0.0369	4.2500e-003	0.0102	0.0144	0.0000	17.9375	17.9375	4.3700e-003	0.0000	18.0468
2018	0.3763	3.4646	2.3367	5.9000e-003	0.4690	0.1579	0.6269	0.1813	0.1484	0.3297	0.0000	536.8127	536.8127	0.0776	0.0000	538.7532
2019	0.3817	2.7173	2.6756	6.1500e-003	0.2648	0.1350	0.3998	0.0706	0.1291	0.1997	0.0000	546.2438	546.2438	0.0590	0.0000	547.7193
2020	4.7514	0.4689	0.6592	1.3400e-003	0.0626	0.0260	0.0887	0.0167	0.0247	0.0413	0.0000	118.7021	118.7021	0.0162	0.0000	119.1075
Maximum	**4.7514**	**3.4646**	**2.6756**	**6.1500e-003**	**0.4690**	**0.1579**	**0.6269**	**0.1813**	**0.1484**	**0.3297**	**0.0000**	**546.2438**	**546.2438**	**0.0776**	**0.0000**	**547.7193**

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	2.6000e-003	0.0260	0.0859	1.9000e-004	0.0259	3.4000e-004	0.0262	4.2500e-003	3.3000e-004	4.5800e-003	0.0000	17.9375	17.9375	4.3700e-003	0.0000	18.0467
2018	0.1283	0.7326	2.4077	5.9000e-003	0.4690	8.0200e-003	0.4770	0.1813	7.8500e-003	0.1891	0.0000	536.8123	536.8123	0.0776	0.0000	538.7528
2019	0.1629	0.3782	2.7759	6.1500e-003	0.2648	7.3200e-003	0.2721	0.0706	7.1400e-003	0.0778	0.0000	546.2434	546.2434	0.0590	0.0000	547.7190
2020	4.7102	0.0589	0.6948	1.3400e-003	0.0626	1.5200e-003	0.0642	0.0167	1.4900e-003	0.0182	0.0000	118.7020	118.7020	0.0162	0.0000	119.1075
Maximum	**4.7102**	**0.7326**	**2.7759**	**6.1500e-003**	**0.4690**	**8.0200e-003**	**0.4770**	**0.1813**	**7.8500e-003**	**0.1891**	**0.0000**	**546.2434**	**546.2434**	**0.0776**	**0.0000**	**547.7190**

	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	**9.49**	**82.59**	**-3.42**	**0.00**	**0.00**	**94.79**	**27.14**	**0.00**	**94.62**	**50.51**	**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	12-15-2017	3-14-2018	0.8783	0.1094
2	3-15-2018	6-14-2018	0.3084	0.0495
3	6-15-2018	9-14-2018	0.8646	0.1430
4	9-15-2018	12-14-2018	0.8618	0.1480
5	12-15-2018	3-14-2019	0.7848	0.1404
6	3-15-2019	6-14-2019	0.7801	0.1361
7	6-15-2019	9-14-2019	0.7788	0.1348
8	9-15-2019	12-14-2019	0.7760	0.1390

9	**12-15-2019**	**3-14-2020**	1.9436	1.7267
10	**3-15-2020**	**6-14-2020**	2.4448	2.3867
11	**6-15-2020**	**9-14-2020**	0.8912	0.6735
12	**9-15-2020**	**9-30-2020**	0.0542	0.0060
		Highest	2.4448	2.3867

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	3.2269	0.0768	4.7478	3.9000e-004		0.0277	0.0277		0.0277	0.0277	0.0000	33.0445	33.0445	8.0500e-003	4.6000e-004	33.3841
Energy	0.0385	0.3329	0.1709	2.1000e-003		0.0266	0.0266		0.0266	0.0266	0.0000	1,250.8602	1,250.8602	0.0466	0.0151	1,256.5320
Mobile	1.0184	6.2493	10.7504	0.0330	2.3577	0.0461	2.4038	0.6339	0.0436	0.6775	0.0000	3,038.0072	3,038.0072	0.1528	0.0000	3,041.8269
Stationary	0.0308	0.1376	0.0785	1.5000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	14.2799	14.2799	2.0000e-003	0.0000	14.3300
Waste						0.0000	0.0000		0.0000	0.0000	81.6308	0.0000	81.6308	4.8242	0.0000	202.2368
Water						0.0000	0.0000		0.0000	0.0000	12.6332	83.3737	96.0069	0.0473	0.0283	105.6076
Total	**4.3145**	**6.7966**	**15.7475**	**0.0357**	**2.3577**	**0.1050**	**2.4626**	**0.6339**	**0.1025**	**0.7364**	**94.2639**	**4,419.5656**	**4,513.8295**	**5.0810**	**0.0438**	**4,653.9173**

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	3.2269	0.0768	4.7478	3.9000e-004		0.0277	0.0277		0.0277	0.0277	0.0000	33.0445	33.0445	8.0500e-003	4.6000e-004	33.3841
Energy	0.0385	0.3329	0.1709	2.1000e-003		0.0266	0.0266		0.0266	0.0266	0.0000	1,250.8602	1,250.8602	0.0466	0.0151	1,256.5320
Mobile	1.0184	6.2493	10.7504	0.0330	2.3577	0.0461	2.4038	0.6339	0.0436	0.6775	0.0000	3,038.0072	3,038.0072	0.1528	0.0000	3,041.8269
Stationary	0.0308	0.1376	0.0785	1.5000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	14.2799	14.2799	2.0000e-003	0.0000	14.3300
Waste						0.0000	0.0000		0.0000	0.0000	81.6308	0.0000	81.6308	4.8242	0.0000	202.2368
Water						0.0000	0.0000		0.0000	0.0000	12.6332	83.3737	96.0069	0.0473	0.0283	105.6076
Total	**4.3145**	**6.7966**	**15.7475**	**0.0357**	**2.3577**	**0.1050**	**2.4626**	**0.6339**	**0.1025**	**0.7364**	**94.2639**	**4,419.5656**	**4,513.8295**	**5.0810**	**0.0438**	**4,653.9173**

	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/15/2017	2/13/2018	5	43	
2	Shoring/Excavation	Site Preparation	2/14/2018	4/13/2018	5	43	
3	Grading/Deep Foundations	Grading	4/14/2018	6/13/2018	5	43	
4	Building Construction Tower/Podium	Building Construction	6/14/2018	1/9/2020	5	411	
5	Architectural Coating - Painting/Sealing	Architectural Coating	1/10/2020	7/9/2020	5	130	
6	Paving/Landscaping/Sidewalks	Paving	7/10/2020	10/8/2020	5	65	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 1,317,771; Residential Outdoor: 439,257; Non-Residential Indoor: 27,000; Non-Residential Outdoor: 9,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating - Painting/Sealing	Air Compressors	1	6.00	78	0.48
Paving/Landscaping/Sidewalks	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction Tower/Podium	Generator Sets	2	8.00	84	0.74
Building Construction Tower/Podium	Cranes	2	6.00	231	0.29
Building Construction Tower/Podium	Forklifts	2	6.00	89	0.20
Shoring/Excavation	Graders	0	8.00	187	0.41
Paving/Landscaping/Sidewalks	Pavers	1	6.00	130	0.42
Paving/Landscaping/Sidewalks	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading/Deep Foundations	Rubber Tired Dozers	0	6.00	247	0.40
Building Construction Tower/Podium	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading/Deep Foundations	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving/Landscaping/Sidewalks	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Shoring/Excavation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading/Deep Foundations	Graders	0	6.00	187	0.41
Paving/Landscaping/Sidewalks	Paving Equipment	1	8.00	132	0.36
Shoring/Excavation	Rubber Tired Dozers	2	7.00	247	0.40
Building Construction Tower/Podium	Welders	0	8.00	46	0.45
Grading/Deep Foundations	Bore/Drill Rigs	2	7.00	221	0.50
Building Construction Tower/Podium	Cement and Mortar Mixers	1	8.00	9	0.56

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
Architectural Coating - Painting/Sealing	1	93.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Tower/Podium	7	250.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	10.00	0.00	400.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Deep Foundations	4	8.00	0.00	90.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving/Landscaping/Sidewalks	5	30.00	0.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Shoring/Excavation	4	8.00	0.00	2,309.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

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					0.0227	0.0000	0.0227	3.4300e-003	0.0000	3.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0188	0.1973	0.0904	1.5000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	13.4853	13.4853	4.1300e-003	0.0000	13.5886
Total	**0.0188**	**0.1973**	**0.0904**	**1.5000e-004**	**0.0227**	**0.0110**	**0.0336**	**3.4300e-003**	**0.0101**	**0.0135**	**0.0000**	**13.4853**	**13.4853**	**4.1300e-003**	**0.0000**	**13.5886**

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	5.6000e-004	0.0181	2.9900e-003	4.0000e-005	2.7500e-003	1.0000e-004	2.8400e-003	7.0000e-004	9.0000e-005	7.9000e-004	0.0000	4.0300	4.0300	2.2000e-004	0.0000	4.0355
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	2.6000e-004	2.1000e-004	2.0600e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4223	0.4223	1.0000e-005	0.0000	0.4227
Total	**8.2000e-004**	**0.0183**	**5.0500e-003**	**4.0000e-005**	**3.1800e-003**	**1.0000e-004**	**3.2800e-003**	**8.2000e-004**	**9.0000e-005**	**9.1000e-004**	**0.0000**	**4.4523**	**4.4523**	**2.3000e-004**	**0.0000**	**4.4582**

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					0.0227	0.0000	0.0227	3.4300e-003	0.0000	3.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7800e-003	7.7000e-003	0.0808	1.5000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	13.4853	13.4853	4.1300e-003	0.0000	13.5886
Total	**1.7800e-003**	**7.7000e-003**	**0.0808**	**1.5000e-004**	**0.0227**	**2.4000e-004**	**0.0229**	**3.4300e-003**	**2.4000e-004**	**3.6700e-003**	**0.0000**	**13.4853**	**13.4853**	**4.1300e-003**	**0.0000**	**13.5886**

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	5.6000e-004	0.0181	2.9900e-003	4.0000e-005	2.7500e-003	1.0000e-004	2.8400e-003	7.0000e-004	9.0000e-005	7.9000e-004	0.0000	4.0300	4.0300	2.2000e-004	0.0000	4.0355
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	2.6000e-004	2.1000e-004	2.0600e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4223	0.4223	1.0000e-005	0.0000	0.4227
Total	**8.2000e-004**	**0.0183**	**5.0500e-003**	**4.0000e-005**	**3.1800e-003**	**1.0000e-004**	**3.2800e-003**	**8.2000e-004**	**9.0000e-005**	**9.1000e-004**	**0.0000**	**4.4523**	**4.4523**	**2.3000e-004**	**0.0000**	**4.4582**

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					0.0659	0.0000	0.0659	9.9800e-003	0.0000	9.9800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0501	0.5282	0.2522	4.2000e-004		0.0285	0.0285		0.0262	0.0262	0.0000	38.5905	38.5905	0.0120	0.0000	38.8909
Total	**0.0501**	**0.5282**	**0.2522**	**4.2000e-004**	**0.0659**	**0.0285**	**0.0944**	**9.9800e-003**	**0.0262**	**0.0362**	**0.0000**	**38.5905**	**38.5905**	**0.0120**	**0.0000**	**38.8909**

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	1.4200e-003	0.0486	8.0600e-003	1.2000e-004	3.1700e-003	1.8000e-004	3.3500e-003	8.5000e-004	1.8000e-004	1.0300e-003	0.0000	11.6323	11.6323	6.1000e-004	0.0000	11.6477
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	6.7000e-004	5.3000e-004	5.2500e-003	1.0000e-005	1.2700e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1954	1.1954	4.0000e-005	0.0000	1.1964
Total	**2.0900e-003**	**0.0492**	**0.0133**	**1.3000e-004**	**4.4400e-003**	**1.9000e-004**	**4.6200e-003**	**1.1900e-003**	**1.9000e-004**	**1.3800e-003**	**0.0000**	**12.8278**	**12.8278**	**6.5000e-004**	**0.0000**	**12.8440**

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					0.0659	0.0000	0.0659	9.9800e-003	0.0000	9.9800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1700e-003	0.0224	0.2351	4.2000e-004		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	38.5905	38.5905	0.0120	0.0000	38.8908
Total	**5.1700e-003**	**0.0224**	**0.2351**	**4.2000e-004**	**0.0659**	**6.9000e-004**	**0.0666**	**9.9800e-003**	**6.9000e-004**	**0.0107**	**0.0000**	**38.5905**	**38.5905**	**0.0120**	**0.0000**	**38.8908**

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	1.4200e-003	0.0486	8.0600e-003	1.2000e-004	3.1700e-003	1.8000e-004	3.3500e-003	8.5000e-004	1.8000e-004	1.0300e-003	0.0000	11.6323	11.6323	6.1000e-004	0.0000	11.6477
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	6.7000e-004	5.3000e-004	5.2500e-003	1.0000e-005	1.2700e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1954	1.1954	4.0000e-005	0.0000	1.1964
Total	**2.0900e-003**	**0.0492**	**0.0133**	**1.3000e-004**	**4.4400e-003**	**1.9000e-004**	**4.6200e-003**	**1.1900e-003**	**1.9000e-004**	**1.3800e-003**	**0.0000**	**12.8278**	**12.8278**	**6.5000e-004**	**0.0000**	**12.8440**

3.3 Shoring/Excavation - 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					0.2297	0.0000	0.2297	0.1250	0.0000	0.1250	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0553	0.5857	0.2651	4.5000e-004		0.0310	0.0310		0.0285	0.0285	0.0000	41.5612	41.5612	0.0129	0.0000	41.8847
Total	**0.0553**	**0.5857**	**0.2651**	**4.5000e-004**	**0.2297**	**0.0310**	**0.2607**	**0.1250**	**0.0285**	**0.1535**	**0.0000**	**41.5612**	**41.5612**	**0.0129**	**0.0000**	**41.8847**

3.3 Shoring/Excavation - 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	0.0110	0.3773	0.0625	9.4000e-004	0.0196	1.4300e-003	0.0210	5.3800e-003	1.3600e-003	6.7400e-003	0.0000	90.2297	90.2297	4.7600e-003	0.0000	90.3486
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	7.2000e-004	5.7000e-004	5.6500e-003	1.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2851	1.2851	4.0000e-005	0.0000	1.2861
Total	**0.0117**	**0.3779**	**0.0681**	**9.5000e-004**	**0.0209**	**1.4400e-003**	**0.0224**	**5.7400e-003**	**1.3700e-003**	**7.1100e-003**	**0.0000**	**91.5148**	**91.5148**	**4.8000e-003**	**0.0000**	**91.6347**

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					0.2297	0.0000	0.2297	0.1250	0.0000	0.1250	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5700e-003	0.0241	0.2450	4.5000e-004		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	41.5612	41.5612	0.0129	0.0000	41.8846
Total	**5.5700e-003**	**0.0241**	**0.2450**	**4.5000e-004**	**0.2297**	**7.4000e-004**	**0.2305**	**0.1250**	**7.4000e-004**	**0.1257**	**0.0000**	**41.5612**	**41.5612**	**0.0129**	**0.0000**	**41.8846**

3.3 Shoring/Excavation - 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	0.0110	0.3773	0.0625	9.4000e-004	0.0196	1.4300e-003	0.0210	5.3800e-003	1.3600e-003	6.7400e-003	0.0000	90.2297	90.2297	4.7600e-003	0.0000	90.3486
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	7.2000e-004	5.7000e-004	5.6500e-003	1.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2851	1.2851	4.0000e-005	0.0000	1.2861
Total	**0.0117**	**0.3779**	**0.0681**	**9.5000e-004**	**0.0209**	**1.4400e-003**	**0.0224**	**5.7400e-003**	**1.3700e-003**	**7.1100e-003**	**0.0000**	**91.5148**	**91.5148**	**4.8000e-003**	**0.0000**	**91.6347**

3.4 Grading/Deep Foundations - 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					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0214	0.2576	0.1670	4.7000e-004		0.0115	0.0115		0.0106	0.0106	0.0000	43.0706	43.0706	0.0134	0.0000	43.4058
Total	**0.0214**	**0.2576**	**0.1670**	**4.7000e-004**	**8.0000e-004**	**0.0115**	**0.0123**	**9.0000e-005**	**0.0106**	**0.0107**	**0.0000**	**43.0706**	**43.0706**	**0.0134**	**0.0000**	**43.4058**

3.4 Grading/Deep Foundations - 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	4.3000e-004	0.0147	2.4400e-003	4.0000e-005	7.6000e-004	6.0000e-005	8.2000e-004	2.1000e-004	5.0000e-005	2.6000e-004	0.0000	3.5170	3.5170	1.9000e-004	0.0000	3.5216
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	7.2000e-004	5.7000e-004	5.6500e-003	1.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2851	1.2851	4.0000e-005	0.0000	1.2861
Total	**1.1500e-003**	**0.0153**	**8.0900e-003**	**5.0000e-005**	**2.1200e-003**	**7.0000e-005**	**2.1900e-003**	**5.7000e-004**	**6.0000e-005**	**6.3000e-004**	**0.0000**	**4.8020**	**4.8020**	**2.3000e-004**	**0.0000**	**4.8077**

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					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8500e-003	0.0254	0.2503	4.7000e-004		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	43.0705	43.0705	0.0134	0.0000	43.4057
Total	**5.8500e-003**	**0.0254**	**0.2503**	**4.7000e-004**	**8.0000e-004**	**7.8000e-004**	**1.5800e-003**	**9.0000e-005**	**7.8000e-004**	**8.7000e-004**	**0.0000**	**43.0705**	**43.0705**	**0.0134**	**0.0000**	**43.4057**

3.4 Grading/Deep Foundations - 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	4.3000e-004	0.0147	2.4400e-003	4.0000e-005	7.6000e-004	6.0000e-005	8.2000e-004	2.1000e-004	5.0000e-005	2.6000e-004	0.0000	3.5170	3.5170	1.9000e-004	0.0000	3.5216
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	7.2000e-004	5.7000e-004	5.6500e-003	1.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2851	1.2851	4.0000e-005	0.0000	1.2861
Total	**1.1500e-003**	**0.0153**	**8.0900e-003**	**5.0000e-005**	**2.1200e-003**	**7.0000e-005**	**2.1900e-003**	**5.7000e-004**	**6.0000e-005**	**6.3000e-004**	**0.0000**	**4.8020**	**4.8020**	**2.3000e-004**	**0.0000**	**4.8077**

3.5 Building Construction Tower/Podium - 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	0.1568	1.5149	0.9583	1.7700e-003		0.0836	0.0836		0.0800	0.0800	0.0000	155.5538	155.5538	0.0284	0.0000	156.2642
Total	**0.1568**	**1.5149**	**0.9583**	**1.7700e-003**		**0.0836**	**0.0836**		**0.0800**	**0.0800**	**0.0000**	**155.5538**	**155.5538**	**0.0284**	**0.0000**	**156.2642**

3.5 Building Construction Tower/Podium - 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	2.8400e-003	0.0771	0.0176	1.6000e-004	3.7600e-003	5.5000e-004	4.3100e-003	1.0900e-003	5.3000e-004	1.6100e-003	0.0000	15.3411	15.3411	9.8000e-004	0.0000	15.3656
Worker	0.0749	0.0588	0.5869	1.4800e-003	0.1413	1.0300e-003	0.1424	0.0376	9.5000e-004	0.0386	0.0000	133.5510	133.5510	4.1900e-003	0.0000	133.6557
Total	**0.0778**	**0.1359**	**0.6045**	**1.6400e-003**	**0.1451**	**1.5800e-003**	**0.1467**	**0.0387**	**1.4800e-003**	**0.0402**	**0.0000**	**148.8920**	**148.8920**	**5.1700e-003**	**0.0000**	**149.0213**

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	0.0190	0.0825	0.9834	1.7700e-003		2.5400e-003	2.5400e-003		2.5400e-003	2.5400e-003	0.0000	155.5536	155.5536	0.0284	0.0000	156.2640
Total	**0.0190**	**0.0825**	**0.9834**	**1.7700e-003**		**2.5400e-003**	**2.5400e-003**		**2.5400e-003**	**2.5400e-003**	**0.0000**	**155.5536**	**155.5536**	**0.0284**	**0.0000**	**156.2640**

3.5 Building Construction Tower/Podium - 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	2.8400e-003	0.0771	0.0176	1.6000e-004	3.7600e-003	5.5000e-004	4.3100e-003	1.0900e-003	5.3000e-004	1.6100e-003	0.0000	15.3411	15.3411	9.8000e-004	0.0000	15.3656
Worker	0.0749	0.0588	0.5869	1.4800e-003	0.1413	1.0300e-003	0.1424	0.0376	9.5000e-004	0.0386	0.0000	133.5510	133.5510	4.1900e-003	0.0000	133.6557
Total	**0.0778**	**0.1359**	**0.6045**	**1.6400e-003**	**0.1451**	**1.5800e-003**	**0.1467**	**0.0387**	**1.4800e-003**	**0.0402**	**0.0000**	**148.8920**	**148.8920**	**5.1700e-003**	**0.0000**	**149.0213**

3.5 Building Construction Tower/Podium - 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	0.2535	2.4895	1.6946	3.2400e-003		0.1323	0.1323		0.1266	0.1266	0.0000	281.8077	281.8077	0.0506	0.0000	283.0718
Total	**0.2535**	**2.4895**	**1.6946**	**3.2400e-003**		**0.1323**	**0.1323**		**0.1266**	**0.1266**	**0.0000**	**281.8077**	**281.8077**	**0.0506**	**0.0000**	**283.0718**

3.5 Building Construction Tower/Podium - 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	4.7000e-003	0.1335	0.0295	2.9000e-004	6.8600e-003	8.5000e-004	7.7100e-003	1.9800e-003	8.2000e-004	2.8000e-003	0.0000	27.8095	27.8095	1.7100e-003	0.0000	27.8524
Worker	0.1235	0.0942	0.9515	2.6200e-003	0.2580	1.8400e-003	0.2598	0.0686	1.6900e-003	0.0703	0.0000	236.6265	236.6265	6.7500e-003	0.0000	236.7952
Total	**0.1282**	**0.2277**	**0.9810**	**2.9100e-003**	**0.2648**	**2.6900e-003**	**0.2675**	**0.0706**	**2.5100e-003**	**0.0731**	**0.0000**	**264.4360**	**264.4360**	**8.4600e-003**	**0.0000**	**264.6476**

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	0.0347	0.1505	1.7949	3.2400e-003		4.6300e-003	4.6300e-003		4.6300e-003	4.6300e-003	0.0000	281.8074	281.8074	0.0506	0.0000	283.0714
Total	**0.0347**	**0.1505**	**1.7949**	**3.2400e-003**		**4.6300e-003**	**4.6300e-003**		**4.6300e-003**	**4.6300e-003**	**0.0000**	**281.8074**	**281.8074**	**0.0506**	**0.0000**	**283.0714**

3.5 Building Construction Tower/Podium - 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	4.7000e-003	0.1335	0.0295	2.9000e-004	6.8600e-003	8.5000e-004	7.7100e-003	1.9800e-003	8.2000e-004	2.8000e-003	0.0000	27.8095	27.8095	1.7100e-003	0.0000	27.8524
Worker	0.1235	0.0942	0.9515	2.6200e-003	0.2580	1.8400e-003	0.2598	0.0686	1.6900e-003	0.0703	0.0000	236.6265	236.6265	6.7500e-003	0.0000	236.7952
Total	**0.1282**	**0.2277**	**0.9810**	**2.9100e-003**	**0.2648**	**2.6900e-003**	**0.2675**	**0.0706**	**2.5100e-003**	**0.0731**	**0.0000**	**264.4360**	**264.4360**	**8.4600e-003**	**0.0000**	**264.6476**

3.5 Building Construction Tower/Podium - 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	6.1400e-003	0.0608	0.0443	9.0000e-005		3.1000e-003	3.1000e-003		2.9600e-003	2.9600e-003	0.0000	7.4832	7.4832	1.3300e-003	0.0000	7.5164
Total	**6.1400e-003**	**0.0608**	**0.0443**	**9.0000e-005**		**3.1000e-003**	**3.1000e-003**		**2.9600e-003**	**2.9600e-003**	**0.0000**	**7.4832**	**7.4832**	**1.3300e-003**	**0.0000**	**7.5164**

3.5 Building Construction Tower/Podium - 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	1.1000e-004	3.2900e-003	7.1000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.7406	0.7406	4.0000e-005	0.0000	0.7417
Worker	3.0300e-003	2.2300e-003	0.0229	7.0000e-005	6.9200e-003	5.0000e-005	6.9700e-003	1.8400e-003	4.0000e-005	1.8800e-003	0.0000	6.1500	6.1500	1.6000e-004	0.0000	6.1540
Total	**3.1400e-003**	**5.5200e-003**	**0.0236**	**8.0000e-005**	**7.1000e-003**	**7.0000e-005**	**7.1700e-003**	**1.8900e-003**	**5.0000e-005**	**1.9500e-003**	**0.0000**	**6.8906**	**6.8906**	**2.0000e-004**	**0.0000**	**6.8956**

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	9.3000e-004	4.0400e-003	0.0481	9.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	7.4832	7.4832	1.3300e-003	0.0000	7.5164
Total	**9.3000e-004**	**4.0400e-003**	**0.0481**	**9.0000e-005**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**7.4832**	**7.4832**	**1.3300e-003**	**0.0000**	**7.5164**

3.5 Building Construction Tower/Podium - 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	1.1000e-004	3.2900e-003	7.1000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.0000e-004	5.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.7406	0.7406	4.0000e-005	0.0000	0.7417
Worker	3.0300e-003	2.2300e-003	0.0229	7.0000e-005	6.9200e-003	5.0000e-005	6.9700e-003	1.8400e-003	4.0000e-005	1.8800e-003	0.0000	6.1500	6.1500	1.6000e-004	0.0000	6.1540
Total	**3.1400e-003**	**5.5200e-003**	**0.0236**	**8.0000e-005**	**7.1000e-003**	**7.0000e-005**	**7.1700e-003**	**1.8900e-003**	**5.0000e-005**	**1.9500e-003**	**0.0000**	**6.8906**	**6.8906**	**2.0000e-004**	**0.0000**	**6.8956**

3.6 Architectural Coating - Painting/Sealing - 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	4.6748					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0157	0.1095	0.1190	1.9000e-004		7.2100e-003	7.2100e-003		7.2100e-003	7.2100e-003	0.0000	16.5962	16.5962	1.2800e-003	0.0000	16.6283
Total	**4.6905**	**0.1095**	**0.1190**	**1.9000e-004**		**7.2100e-003**	**7.2100e-003**		**7.2100e-003**	**7.2100e-003**	**0.0000**	**16.5962**	**16.5962**	**1.2800e-003**	**0.0000**	**16.6283**

3.6 Architectural Coating - Painting/Sealing - 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	0.0209	0.0154	0.1582	4.7000e-004	0.0478	3.3000e-004	0.0481	0.0127	3.1000e-004	0.0130	0.0000	42.4876	42.4876	1.1000e-003	0.0000	42.5150
Total	**0.0209**	**0.0154**	**0.1582**	**4.7000e-004**	**0.0478**	**3.3000e-004**	**0.0481**	**0.0127**	**3.1000e-004**	**0.0130**	**0.0000**	**42.4876**	**42.4876**	**1.1000e-003**	**0.0000**	**42.5150**

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	4.6748					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9300e-003	8.3700e-003	0.1191	1.9000e-004		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	16.5961	16.5961	1.2800e-003	0.0000	16.6283
Total	**4.6767**	**8.3700e-003**	**0.1191**	**1.9000e-004**		**2.6000e-004**	**2.6000e-004**		**2.6000e-004**	**2.6000e-004**	**0.0000**	**16.5961**	**16.5961**	**1.2800e-003**	**0.0000**	**16.6283**

3.6 Architectural Coating - Painting/Sealing - 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	0.0209	0.0154	0.1582	4.7000e-004	0.0478	3.3000e-004	0.0481	0.0127	3.1000e-004	0.0130	0.0000	42.4876	42.4876	1.1000e-003	0.0000	42.5150
Total	**0.0209**	**0.0154**	**0.1582**	**4.7000e-004**	**0.0478**	**3.3000e-004**	**0.0481**	**0.0127**	**3.1000e-004**	**0.0130**	**0.0000**	**42.4876**	**42.4876**	**1.1000e-003**	**0.0000**	**42.5150**

3.7 Paving/Landscaping/Sidewalks - 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	0.0273	0.2747	0.2885	4.4000e-004		0.0153	0.0153		0.0141	0.0141	0.0000	38.2385	38.2385	0.0121	0.0000	38.5416
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0273**	**0.2747**	**0.2885**	**4.4000e-004**		**0.0153**	**0.0153**		**0.0141**	**0.0141**	**0.0000**	**38.2385**	**38.2385**	**0.0121**	**0.0000**	**38.5416**

3.7 Paving/Landscaping/Sidewalks - 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	2.0000e-005	5.8000e-004	1.0000e-004	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1531	0.1531	1.0000e-005	0.0000	0.1533
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	3.3700e-003	2.4900e-003	0.0255	8.0000e-005	7.7100e-003	5.0000e-005	7.7600e-003	2.0500e-003	5.0000e-005	2.1000e-003	0.0000	6.8528	6.8528	1.8000e-004	0.0000	6.8573
Total	**3.3900e-003**	**3.0700e-003**	**0.0256**	**8.0000e-005**	**7.7400e-003**	**5.0000e-005**	**7.8000e-003**	**2.0600e-003**	**5.0000e-005**	**2.1100e-003**	**0.0000**	**7.0060**	**7.0060**	**1.9000e-004**	**0.0000**	**7.0106**

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	5.1900e-003	0.0225	0.3202	4.4000e-004		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	38.2385	38.2385	0.0121	0.0000	38.5415
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1900e-003**	**0.0225**	**0.3202**	**4.4000e-004**		**6.9000e-004**	**6.9000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**38.2385**	**38.2385**	**0.0121**	**0.0000**	**38.5415**

3.7 Paving/Landscaping/Sidewalks - 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	2.0000e-005	5.8000e-004	1.0000e-004	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1531	0.1531	1.0000e-005	0.0000	0.1533
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	3.3700e-003	2.4900e-003	0.0255	8.0000e-005	7.7100e-003	5.0000e-005	7.7600e-003	2.0500e-003	5.0000e-005	2.1000e-003	0.0000	6.8528	6.8528	1.8000e-004	0.0000	6.8573
Total	**3.3900e-003**	**3.0700e-003**	**0.0256**	**8.0000e-005**	**7.7400e-003**	**5.0000e-005**	**7.8000e-003**	**2.0600e-003**	**5.0000e-005**	**2.1100e-003**	**0.0000**	**7.0060**	**7.0060**	**1.9000e-004**	**0.0000**	**7.0106**

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	1.0184	6.2493	10.7504	0.0330	2.3577	0.0461	2.4038	0.6339	0.0436	0.6775	0.0000	3,038.0072	3,038.0072	0.1528	0.0000	3,041.8269
Unmitigated	1.0184	6.2493	10.7504	0.0330	2.3577	0.0461	2.4038	0.6339	0.0436	0.6775	0.0000	3,038.0072	3,038.0072	0.1528	0.0000	3,041.8269

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	2,254.25	2,673.35	1962.15	5,248,335	5,248,335
High Turnover (Sit Down Restaurant)	552.97	688.72	573.38	667,477	667,477
Regional Shopping Center	227.90	268.03	135.36	386,456	386,456
Total	3,035.13	3,630.10	2,670.89	6,302,269	6,302,269

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
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.556416	0.041967	0.190895	0.111485	0.018156	0.005234	0.022193	0.041963	0.002079	0.002948	0.005586	0.000300	0.000779
Regional Shopping Center	0.556416	0.041967	0.190895	0.111485	0.018156	0.005234	0.022193	0.041963	0.002079	0.002948	0.005586	0.000300	0.000779
High Turnover (Sit Down Restaurant)	0.556416	0.041967	0.190895	0.111485	0.018156	0.005234	0.022193	0.041963	0.002079	0.002948	0.005586	0.000300	0.000779

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	870.2184	870.2184	0.0394	8.1400e-003	873.6281
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	870.2184	870.2184	0.0394	8.1400e-003	873.6281
NaturalGas Mitigated	0.0385	0.3329	0.1709	2.1000e-003		0.0266	0.0266		0.0266	0.0266	0.0000	380.6419	380.6419	7.3000e-003	6.9800e-003	382.9038
NaturalGas Unmitigated	0.0385	0.3329	0.1709	2.1000e-003		0.0266	0.0266		0.0266	0.0266	0.0000	380.6419	380.6419	7.3000e-003	6.9800e-003	382.9038

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	5.69512e+006	0.0307	0.2624	0.1117	1.6800e-003		0.0212	0.0212		0.0212	0.0212	0.0000	303.9135	303.9135	5.8300e-003	5.5700e-003	305.7195
High Turnover (Sit Down Restaurant)	1.39537e+006	7.5200e-003	0.0684	0.0575	4.1000e-004		5.2000e-003	5.2000e-003		5.2000e-003	5.2000e-003	0.0000	74.4620	74.4620	1.4300e-003	1.3700e-003	74.9045
Regional Shopping Center	42470.4	2.3000e-004	2.0800e-003	1.7500e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.2664	2.2664	4.0000e-005	4.0000e-005	2.2799
Total		**0.0385**	**0.3329**	**0.1709**	**2.1000e-003**		**0.0266**	**0.0266**		**0.0266**	**0.0266**	**0.0000**	**380.6419**	**380.6419**	**7.3000e-003**	**6.9800e-003**	**382.9038**

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	5.69512e+006	0.0307	0.2624	0.1117	1.6800e-003		0.0212	0.0212		0.0212	0.0212	0.0000	303.9135	303.9135	5.8300e-003	5.5700e-003	305.7195
High Turnover (Sit Down Restaurant)	1.39537e+006	7.5200e-003	0.0684	0.0575	4.1000e-004		5.2000e-003	5.2000e-003		5.2000e-003	5.2000e-003	0.0000	74.4620	74.4620	1.4300e-003	1.3700e-003	74.9045
Regional Shopping Center	42470.4	2.3000e-004	2.0800e-003	1.7500e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.2664	2.2664	4.0000e-005	4.0000e-005	2.2799
Total		**0.0385**	**0.3329**	**0.1709**	**2.1000e-003**		**0.0266**	**0.0266**		**0.0266**	**0.0266**	**0.0000**	**380.6419**	**380.6419**	**7.3000e-003**	**6.9800e-003**	**382.9038**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.64984e+006	770.8691	0.0349	7.2100e-003	773.8896
High Turnover (Sit Down Restaurant)	242222	70.4653	3.1900e-003	6.6000e-004	70.7414
Regional Shopping Center	99288	28.8840	1.3100e-003	2.7000e-004	28.9972
Total		**870.2184**	**0.0394**	**8.1400e-003**	**873.6281**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.64984e+006	770.8691	0.0349	7.2100e-003	773.8896
High Turnover (Sit Down Restaurant)	242222	70.4653	3.1900e-003	6.6000e-004	70.7414
Regional Shopping Center	99288	28.8840	1.3100e-003	2.7000e-004	28.9972
Total		**870.2184**	**0.0394**	**8.1400e-003**	**873.6281**

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	3.2269	0.0768	4.7478	3.9000e-004		0.0277	0.0277		0.0277	0.0277	0.0000	33.0445	33.0445	8.0500e-003	4.6000e-004	33.3841
Unmitigated	3.2269	0.0768	4.7478	3.9000e-004		0.0277	0.0277		0.0277	0.0277	0.0000	33.0445	33.0445	8.0500e-003	4.6000e-004	33.3841

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	0.4675					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.6118					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.5600e-003	0.0219	9.3100e-003	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.3424	25.3424	4.9000e-004	4.6000e-004	25.4930
Landscaping	0.1451	0.0549	4.7385	2.5000e-004		0.0260	0.0260		0.0260	0.0260	0.0000	7.7021	7.7021	7.5600e-003	0.0000	7.8911
Total	**3.2269**	**0.0768**	**4.7478**	**3.9000e-004**		**0.0277**	**0.0277**		**0.0277**	**0.0277**	**0.0000**	**33.0445**	**33.0445**	**8.0500e-003**	**4.6000e-004**	**33.3841**

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	0.4675					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.6118					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.5600e-003	0.0219	9.3100e-003	1.4000e-004		1.7700e-003	1.7700e-003		1.7700e-003	1.7700e-003	0.0000	25.3424	25.3424	4.9000e-004	4.6000e-004	25.4930
Landscaping	0.1451	0.0549	4.7385	2.5000e-004		0.0260	0.0260		0.0260	0.0260	0.0000	7.7021	7.7021	7.5600e-003	0.0000	7.8911
Total	**3.2269**	**0.0768**	**4.7478**	**3.9000e-004**		**0.0277**	**0.0277**		**0.0277**	**0.0277**	**0.0000**	**33.0445**	**33.0445**	**8.0500e-003**	**4.6000e-004**	**33.3841**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	96.0069	0.0473	0.0283	105.6076
Unmitigated	96.0069	0.0473	0.0283	105.6076

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	33.0982 / 26.0829	90.3682	0.0439	0.0262	99.2729
High Turnover (Sit Down Restaurant)	2.03975 / 0.162746	4.0982	2.6400e-003	1.6000e-003	4.6412
Regional Shopping Center	0.568877 / 0.435833	1.5405	7.5000e-004	4.5000e-004	1.6935
Total		**96.0069**	**0.0473**	**0.0283**	**105.6076**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	33.0982 / 26.0829	90.3682	0.0439	0.0262	99.2729
High Turnover (Sit Down Restaurant)	2.03975 / 0.162746	4.0982	2.6400e-003	1.6000e-003	4.6412
Regional Shopping Center	0.568877 / 0.435833	1.5405	7.5000e-004	4.5000e-004	1.6935
Total		**96.0069**	**0.0473**	**0.0283**	**105.6076**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	81.6308	4.8242	0.0000	202.2368
Unmitigated	81.6308	4.8242	0.0000	202.2368

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	292.1	59.2937	3.5042	0.0000	146.8975
High Turnover (Sit Down Restaurant)	99.96	20.2910	1.1992	0.0000	50.2700
Regional Shopping Center	10.08	2.0462	0.1209	0.0000	5.0693
Total		**81.6308**	**4.8242**	**0.0000**	**202.2368**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	292.1	59.2937	3.5042	0.0000	146.8975
High Turnover (Sit Down Restaurant)	99.96	20.2910	1.1992	0.0000	50.2700
Regional Shopping Center	10.08	2.0462	0.1209	0.0000	5.0693
Total		**81.6308**	**4.8242**	**0.0000**	**202.2368**

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	750	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)	0.0308	0.1376	0.0785	1.5000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	14.2799	14.2799	2.0000e-003	0.0000	14.3300
Total	**0.0308**	**0.1376**	**0.0785**	**1.5000e-004**		**4.5300e-003**	**4.5300e-003**		**4.5300e-003**	**4.5300e-003**	**0.0000**	**14.2799**	**14.2799**	**2.0000e-003**	**0.0000**	**14.3300**

11.0 Vegetation

AERMOD Output File – Uncontrolled Scenario

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.0.0
** Lakes Environmental Software Inc.
** Date: 1/12/2017
** File: C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.isc
   MODELOPT DFAULT CONC
   AVERTIME ANNUAL
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL "1314 Franklin.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1       AREAPOLY   564266.795  4184296.959       12.000
** Source Parameters **
   SRCPARAM PAREA1       1.734E-06     5.000         4
   AREAVERT PAREA1       564266.795 4184296.959 564362.180 4184251.100
   AREAVERT PAREA1       564329.774 4184182.619 564234.388 4184229.089

** Variable Emissions Type: "By Hour / Seven Days (HRDOW7)"
** Variable Emission Scenario: "Scenario 1"
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```

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   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "1314 Franklin.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
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   PROFFILE "C:\Users\jni\Desktop\P160602 - 1314 Franklin\December 2016 work\HRA\724930\724930.PFL"
   SURFDATA 23230 2009 OAKLAND/WSO_AP
   UAIRDATA 23230 2009 OAKLAND/WSO_AP
   PROFBASE 10.0 METERS
ME FINISHED
**
****************************************
```

```
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
** Auto-Generated Plotfiles
   PLOTFILE ANNUAL ALL "1314 Franklin.AD\AN00GALL.PLT" 31
   SUMMFILE "1314 Franklin.sum"
OU FINISHED

 *********************************
 *** SETUP Finishes Successfully ***
 *********************************
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.isc
***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        16:02:16

PAGE   1
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                                            ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.

 **Model Uses Regulatory DEFAULT Options:
         1. Stack-tip Downwash.
         2. Model Accounts for ELEVated Terrain Effects.
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.

 **Other Options Specified:
         CCVR_Sub - Meteorological data includes CCVR substitutions
         TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM_10

 **Model Calculates ANNUAL Averages Only

 **This Run Includes:      1 Source(s);       1 Source Group(s); and      11 Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:      0 VOLUME source(s)
                 and:      1 AREA type source(s)
                 and:      0 LINE source(s)
```

```
                and:      0 OPENPIT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134

 **Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    10.00 ;  Decay Coef. =    0.000     ;  Rot.
Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission Rate Unit Factor =
0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.

 **Detailed Error/Message File:   1314 Franklin.err
 **File for Summary of Results:   1314 Franklin.sum
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.isc
***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        16:02:16

PAGE   2
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                                                *** AREAPOLY SOURCE DATA ***

               NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER      INIT.   URBAN
EMISSION RATE
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.     SZ     SOURCE  SCALAR
VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)            (METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - -

 PAREA1           0   0.17340E-05  564266.8 4184297.0    12.0     5.00       4         0.00     NO    HRDOW7
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.isc
***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
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PAGE   3
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL


                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------


  ALL        PAREA1      ,
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.isc
***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
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PAGE   4
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                    * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7) *

 SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - -
                                                DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7
.0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01   15
.1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23
.0000E+00   24  .0000E+00
                                                DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7
.0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01   15
.1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23
.0000E+00   24  .0000E+00
                                                DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7
.0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01   15
.1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23
.0000E+00   24  .0000E+00
                                                DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7
.0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01   15
.1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23
.0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7
.0000E+00    8  .0000E+00
```

```
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01   15
.1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23
.0000E+00   24  .0000E+00
                                                DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7
.0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15
.0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23
.0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7
.0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15
.0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23
.0000E+00   24  .0000E+00
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.isc
***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        16:02:16

PAGE   5
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                      (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                   (METERS)

     ( 564481.0, 4184265.8,      11.0,      11.0,       0.0);         ( 564483.5, 4184167.3,      11.2,
11.2,       0.0);
     ( 564217.1, 4184167.9,      13.0,      13.0,       0.0);         ( 564230.7, 4184153.8,      13.0,
13.0,       0.0);
     ( 564328.2, 4184382.9,      12.0,      12.0,       0.0);         ( 564387.4, 4184083.6,      12.0,
12.0,       0.0);
     ( 564213.3, 4184301.4,      12.7,      12.7,       0.0);         ( 564355.3, 4184187.3,      12.0,
12.0,       0.0);
     ( 564265.5, 4184180.3,      12.0,      12.0,       0.0);         ( 564166.0, 4184280.5,      13.0,
13.0,       0.0);
     ( 564395.0, 4184170.6,      12.0,      12.0,       0.0);
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.isc
***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        16:02:16

PAGE   6
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                                   *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                     (1=YES; 0=NO)

            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1
1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1
1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1
1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1
1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1
1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1
1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1
1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1

                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE
DATA FILE.


                                  *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                                           (METERS/SEC)

                                               1.54,   3.09,   5.14,   8.23,  10.80,
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.isc
***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        16:02:16

PAGE   7
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                                    *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

   Surface file:   C:\Users\jni\Desktop\P160602 - 1314 Franklin\December 2016 work\HRA\724930\72493   Met
Version:  14134
   Profile file:   C:\Users\jni\Desktop\P160602 - 1314 Franklin\December 2016 work\HRA\724930\72493
   Surface format: FREE
   Profile format: FREE
   Surface station no.:    23230                  Upper air station no.:    23230
                 Name: OAKLAND/WSO_AP                                Name: OAKLAND/WSO_AP
                 Year:   2009                                        Year:   2009

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS   WD     HT
REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 09 01 01   1 01  -17.2  0.303 -9.000 -9.000 -999.  401.    147.2  0.63   0.86   1.00    2.36   81.   10.0
282.5    2.0
 09 01 01   1 02  -21.8  0.383 -9.000 -9.000 -999.  569.    234.6  0.63   0.86   1.00    2.86   68.   10.0
282.0    2.0
 09 01 01   1 03  -26.3  0.460 -9.000 -9.000 -999.  749.    337.1  0.63   0.86   1.00    3.36   84.   10.0
280.9    2.0
 09 01 01   1 04  -15.4  0.270 -9.000 -9.000 -999.  368.    116.1  0.47   0.86   1.00    2.36   53.   10.0
280.9    2.0
 09 01 01   1 05  -26.3  0.460 -9.000 -9.000 -999.  749.    336.3  0.63   0.86   1.00    3.36   73.   10.0
280.4    2.0
 09 01 01   1 06  -21.9  0.383 -9.000 -9.000 -999.  573.    232.9  0.63   0.86   1.00    2.86   82.   10.0
280.4    2.0
 09 01 01   1 07  -22.0  0.383 -9.000 -9.000 -999.  569.    232.5  0.63   0.86   1.00    2.86   95.   10.0
279.9    2.0
 09 01 01   1 08  -11.2  0.196 -9.000 -9.000 -999.  238.     60.6  0.63   0.86   0.76    1.76   73.   10.0
279.9    2.0
 09 01 01   1 09   -2.2 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.45   0.86   0.39    0.00    0.   10.0
280.4    2.0
 09 01 01   1 10    6.8  0.266  0.264  0.016   98.  329.   -250.8  0.63   0.86   0.27    1.76   91.   10.0
280.9    2.0
 09 01 01   1 11   15.5 -9.000 -9.000 -9.000  177. -999. -99999.0  0.45   0.86   0.22    0.00    0.   10.0
282.0    2.0
```

```
 09 01 01   1 12   96.1  0.393  1.019  0.014  401.  591.    -57.4  0.22   0.86   0.21    3.36  266.   10.0
281.4    2.0
 09 01 01   1 13  102.5  0.395  1.092  0.014  462.  595.    -54.4  0.22   0.86   0.20    3.36  283.   10.0
282.0    2.0
 09 01 01   1 14   89.9  0.297  1.066  0.015  489.  394.    -26.5  0.22   0.86   0.21    2.36  249.   10.0
282.0    2.0
 09 01 01   1 15   62.1  0.383  0.954  0.014  507.  569.    -82.1  0.22   0.86   0.24    3.36  242.   10.0
282.5    2.0
 09 01 01   1 16   23.1  0.665  0.690  0.006  513. 1300.  -1150.4  0.52   0.86   0.33    4.86  304.   10.0
282.5    2.0
 09 01 01   1 17  -37.0  0.486 -9.000 -9.000 -999.  846.    280.6  0.22   0.86   0.56    4.86  291.   10.0
281.4    2.0
 09 01 01   1 18  -52.2  0.480 -9.000 -9.000 -999.  799.    191.9  0.52   0.86   1.00    3.86  307.   10.0
280.9    2.0
 09 01 01   1 19  -25.6  0.224 -9.000 -9.000 -999.  327.     39.8  0.52   0.86   1.00    2.36  334.   10.0
280.4    2.0
 09 01 01   1 20  -11.1  0.119 -9.000 -9.000 -999.  115.     13.8  0.52   0.86   1.00    1.76  317.   10.0
280.4    2.0
 09 01 01   1 21  -10.3  0.119 -9.000 -9.000 -999.   98.     14.7  0.52   0.86   1.00    1.76  320.   10.0
280.4    2.0
 09 01 01   1 22 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.45   0.86   1.00    0.00    0.   10.0
280.9    2.0
 09 01 01   1 23 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.45   0.86   1.00    0.00    0.   10.0
281.4    2.0
 09 01 01   1 24 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.45   0.86   1.00    0.00    0.   10.0
281.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 09 01 01 01   10.0 1   81.    2.36   282.6   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.isc
***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        16:02:16

PAGE   8
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                  *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5 YEARS FOR SOURCE GROUP:
ALL      ***
                                  INCLUDING SOURCE(S):     PAREA1      ,

                                           *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                        ** CONC OF PM_10    IN MICROGRAMS/M**3                          **

       X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)   Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - -
         564481.04    4184265.76        0.07601                     564483.50    4184167.33        0.06245
         564217.12    4184167.94        0.01135                     564230.65    4184153.79        0.01073
         564328.18    4184382.86        0.03007                     564387.35    4184083.56        0.01884
         564213.33    4184301.42        0.03140                     564355.33    4184187.27        0.32687
         564265.53    4184180.31        0.03738                     564166.00    4184280.54        0.01089
         564395.00    4184170.56        0.13521
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.isc
***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        16:02:16

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 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                                  *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER   5 YEARS ***

                                   ** CONC OF PM_10    IN MICROGRAMS/M**3                          **

NETWORK
GROUP ID                         AVERAGE CONC                RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE
GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - -

ALL       1ST HIGHEST VALUE IS       0.32687 AT (  564355.33,  4184187.27,    12.00,    12.00,    0.00)  DC
          2ND HIGHEST VALUE IS       0.13521 AT (  564395.00,  4184170.56,    12.00,    12.00,    0.00)  DC
          3RD HIGHEST VALUE IS       0.07601 AT (  564481.04,  4184265.76,    11.00,    11.00,    0.00)  DC
          4TH HIGHEST VALUE IS       0.06245 AT (  564483.50,  4184167.33,    11.20,    11.20,    0.00)  DC
          5TH HIGHEST VALUE IS       0.03738 AT (  564265.53,  4184180.31,    12.00,    12.00,    0.00)  DC
          6TH HIGHEST VALUE IS       0.03140 AT (  564213.33,  4184301.42,    12.67,    12.67,    0.00)  DC
          7TH HIGHEST VALUE IS       0.03007 AT (  564328.18,  4184382.86,    12.00,    12.00,    0.00)  DC
          8TH HIGHEST VALUE IS       0.01884 AT (  564387.35,  4184083.56,    12.00,    12.00,    0.00)  DC
          9TH HIGHEST VALUE IS       0.01135 AT (  564217.12,  4184167.94,    13.00,    13.00,    0.00)  DC
         10TH HIGHEST VALUE IS       0.01089 AT (  564166.00,  4184280.54,    13.00,    13.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin\1314 Franklin.isc
***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        16:02:16

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 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            1 Warning Message(s)
 A Total of         7953 Informational Message(s)

 A Total of        43872 Hours Were Processed

 A Total of         7152 Calm Hours Identified

 A Total of          801 Missing Hours Identified (  1.83 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 MX W481   43873         MAIN: Data Remaining After End of Year. Number of Hours=          48

    ***********************************
    *** AERMOD Finishes Successfully ***
    ***********************************
```

AERMOD Output File – With Tier 4 Construction Equipment

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.0.0
** Lakes Environmental Software Inc.
** Date: 1/12/2017
** File: C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin Mitigated.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin Mitigated
   MODELOPT DFAULT CONC
   AVERTIME ANNUAL
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL "1314 Franklin Mitigated.err"
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1       AREAPOLY   564266.795  4184296.959       12.000
** Source Parameters **
   SRCPARAM PAREA1       6.126E-08     5.000         4
   AREAVERT PAREA1       564266.795 4184296.959 564362.180 4184251.100
```

```
   AREAVERT PAREA1       564329.774 4184182.619 564234.388 4184229.089

** Variable Emissions Type: "By Hour / Seven Days (HRDOW7)"
** Variable Emission Scenario: "Scenario 1"
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT PAREA1       HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "1314 Franklin Mitigated.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
```

```
ME STARTING
   SURFFILE "C:\Users\jni\Desktop\P160602 - 1314 Franklin\December 2016
work\HRA\724930\724930.SFC"
   PROFFILE "C:\Users\jni\Desktop\P160602 - 1314 Franklin\December 2016
work\HRA\724930\724930.PFL"
   SURFDATA 23230 2009 OAKLAND/WSO_AP
   UAIRDATA 23230 2009 OAKLAND/WSO_AP
   PROFBASE 10.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
** Auto-Generated Plotfiles
   PLOTFILE ANNUAL ALL "1314 FRANKLIN MITIGATED.AD\AN00GALL.PLT" 31
   SUMMFILE "1314 Franklin Mitigated.sum"
OU FINISHED

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin
Mitigated ***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        17:27:30

PAGE   1
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.

 **Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.

 **Other Options Specified:
        CCVR_Sub - Meteorological data includes CCVR substitutions
        TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM_10

 **Model Calculates ANNUAL Averages Only

 **This Run Includes:      1 Source(s);       1 Source Group(s); and      11 Receptor(s)

               with:       0 POINT(s), including
```

```
                    0 POINTCAP(s) and      0 POINTHOR(s)
               and:      0 VOLUME source(s)
               and:      1 AREA type source(s)
               and:      0 LINE source(s)
               and:      0 OPENPIT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134

 **Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    10.00 ;  Decay Coef. =    0.000
;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission Rate Unit
Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.

 **Detailed Error/Message File:   1314 Franklin Mitigated.err
 **File for Summary of Results:   1314 Franklin Mitigated.sum
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin
Mitigated ***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        17:27:30

PAGE   2
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL


                                                    *** AREAPOLY SOURCE DATA ***

               NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER      INIT.
URBAN  EMISSION RATE
   SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.     SZ
SOURCE  SCALAR VARY
     ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)            (METERS)
BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - -

 PAREA1           0   0.61260E-07  564266.8 4184297.0    12.0     5.00       4         0.00     NO
HRDOW7
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin
Mitigated ***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        17:27:30

PAGE   3
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL


                                              *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                                  SOURCE IDs
 -----------                                                  ----------


  ALL        PAREA1      ,
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin
Mitigated ***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        17:27:30

PAGE   4
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                  * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW7)
*

 SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
  HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
HOUR   SCALAR   HOUR   SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
                                                    DAY OF WEEK = MONDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00
7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01
15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00
23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = TUESDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00
7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01
15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00
23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = WEDNESDY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00
7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01
15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00
23  .0000E+00   24  .0000E+00
                                                    DAY OF WEEK = THURSDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00
7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01
15  .1000E+01   16  .1000E+01
```

```
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00
23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = FRIDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00
7  .0000E+00    8  .0000E+00
    9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .1000E+01   13  .1000E+01   14  .1000E+01
15  .1000E+01   16  .1000E+01
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00
23  .0000E+00   24  .0000E+00
                                              DAY OF WEEK = SATURDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00
7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00
15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00
23  .0000E+00   24  .0000E+00
                                                DAY OF WEEK = SUNDAY
    1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00
7  .0000E+00    8  .0000E+00
    9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00
15  .0000E+00   16  .0000E+00
   17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00
23  .0000E+00   24  .0000E+00
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin
Mitigated ***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        17:27:30

PAGE   5
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                    (METERS)

     ( 564481.0, 4184265.8,      11.0,      11.0,       0.0);        ( 564483.5, 4184167.3,
11.2,      11.2,       0.0);
     ( 564217.1, 4184167.9,      13.0,      13.0,       0.0);        ( 564230.7, 4184153.8,
13.0,      13.0,       0.0);
     ( 564328.2, 4184382.9,      12.0,      12.0,       0.0);        ( 564387.4, 4184083.6,
12.0,      12.0,       0.0);
     ( 564213.3, 4184301.4,      12.7,      12.7,       0.0);        ( 564355.3, 4184187.3,
12.0,      12.0,       0.0);
     ( 564265.5, 4184180.3,      12.0,      12.0,       0.0);        ( 564166.0, 4184280.5,
13.0,      13.0,       0.0);
     ( 564395.0, 4184170.6,      12.0,      12.0,       0.0);
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin
Mitigated ***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        17:27:30

PAGE   6
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                                          *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                              (1=YES; 0=NO)

            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1

                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED
IN THE DATA FILE.


                                *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                                        (METERS/SEC)

                                                 1.54,   3.09,   5.14,   8.23,  10.80,
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin
Mitigated ***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        17:27:30

PAGE   7
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                                     *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

   Surface file:   C:\Users\jni\Desktop\P160602 - 1314 Franklin\December 2016
work\HRA\724930\72493   Met Version:  14134
   Profile file:   C:\Users\jni\Desktop\P160602 - 1314 Franklin\December 2016
work\HRA\724930\72493
   Surface format: FREE
   Profile format: FREE
   Surface station no.:    23230                  Upper air station no.:    23230
                  Name: OAKLAND/WSO_AP                              Name: OAKLAND/WSO_AP
                  Year:   2009                                      Year:   2009

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS   WD
HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - -
 09 01 01   1 01  -17.2  0.303 -9.000 -9.000 -999.  401.    147.2  0.63   0.86   1.00    2.36
81.   10.0  282.5    2.0
 09 01 01   1 02  -21.8  0.383 -9.000 -9.000 -999.  569.    234.6  0.63   0.86   1.00    2.86
68.   10.0  282.0    2.0
 09 01 01   1 03  -26.3  0.460 -9.000 -9.000 -999.  749.    337.1  0.63   0.86   1.00    3.36
84.   10.0  280.9    2.0
 09 01 01   1 04  -15.4  0.270 -9.000 -9.000 -999.  368.    116.1  0.47   0.86   1.00    2.36
53.   10.0  280.9    2.0
 09 01 01   1 05  -26.3  0.460 -9.000 -9.000 -999.  749.    336.3  0.63   0.86   1.00    3.36
73.   10.0  280.4    2.0
 09 01 01   1 06  -21.9  0.383 -9.000 -9.000 -999.  573.    232.9  0.63   0.86   1.00    2.86
82.   10.0  280.4    2.0
 09 01 01   1 07  -22.0  0.383 -9.000 -9.000 -999.  569.    232.5  0.63   0.86   1.00    2.86
95.   10.0  279.9    2.0
 09 01 01   1 08  -11.2  0.196 -9.000 -9.000 -999.  238.     60.6  0.63   0.86   0.76    1.76
73.   10.0  279.9    2.0
```

```
 09 01 01   1 09   -2.2 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.45   0.86   0.39    0.00
0.   10.0  280.4    2.0
 09 01 01   1 10    6.8  0.266  0.264  0.016   98.  329.   -250.8  0.63   0.86   0.27    1.76
91.   10.0  280.9    2.0
 09 01 01   1 11   15.5 -9.000 -9.000 -9.000  177. -999. -99999.0  0.45   0.86   0.22    0.00
0.   10.0  282.0    2.0
 09 01 01   1 12   96.1  0.393  1.019  0.014  401.  591.    -57.4  0.22   0.86   0.21    3.36
266.   10.0  281.4    2.0
 09 01 01   1 13  102.5  0.395  1.092  0.014  462.  595.    -54.4  0.22   0.86   0.20    3.36
283.   10.0  282.0    2.0
 09 01 01   1 14   89.9  0.297  1.066  0.015  489.  394.    -26.5  0.22   0.86   0.21    2.36
249.   10.0  282.0    2.0
 09 01 01   1 15   62.1  0.383  0.954  0.014  507.  569.    -82.1  0.22   0.86   0.24    3.36
242.   10.0  282.5    2.0
 09 01 01   1 16   23.1  0.665  0.690  0.006  513. 1300.  -1150.4  0.52   0.86   0.33    4.86
304.   10.0  282.5    2.0
 09 01 01   1 17  -37.0  0.486 -9.000 -9.000 -999.  846.    280.6  0.22   0.86   0.56    4.86
291.   10.0  281.4    2.0
 09 01 01   1 18  -52.2  0.480 -9.000 -9.000 -999.  799.    191.9  0.52   0.86   1.00    3.86
307.   10.0  280.9    2.0
 09 01 01   1 19  -25.6  0.224 -9.000 -9.000 -999.  327.     39.8  0.52   0.86   1.00    2.36
334.   10.0  280.4    2.0
 09 01 01   1 20  -11.1  0.119 -9.000 -9.000 -999.  115.     13.8  0.52   0.86   1.00    1.76
317.   10.0  280.4    2.0
 09 01 01   1 21  -10.3  0.119 -9.000 -9.000 -999.   98.     14.7  0.52   0.86   1.00    1.76
320.   10.0  280.4    2.0
 09 01 01   1 22 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.45   0.86   1.00    0.00
0.   10.0  280.9    2.0
 09 01 01   1 23 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.45   0.86   1.00    0.00
0.   10.0  281.4    2.0
 09 01 01   1 24 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.45   0.86   1.00    0.00
0.   10.0  281.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 09 01 01 01   10.0 1   81.    2.36   282.6   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin
Mitigated ***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        17:27:30

PAGE   8
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                  *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5 YEARS FOR
SOURCE GROUP: ALL       ***
                                INCLUDING SOURCE(S):     PAREA1      ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                       ** CONC OF PM_10    IN MICROGRAMS/M**3
**

       X-COORD (M)   Y-COORD (M)        CONC                       X-COORD (M)   Y-COORD (M)
CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -
         564481.04    4184265.76        0.00269                      564483.50    4184167.33
0.00221
         564217.12    4184167.94        0.00040                      564230.65    4184153.79
0.00038
         564328.18    4184382.86        0.00106                      564387.35    4184083.56
0.00067
         564213.33    4184301.42        0.00111                      564355.33    4184187.27
0.01155
         564265.53    4184180.31        0.00132                      564166.00    4184280.54
0.00038
         564395.00    4184170.56        0.00478
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin
Mitigated ***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        17:27:30

PAGE   9
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

                                  *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER   5
YEARS ***


                                   ** CONC OF PM_10    IN MICROGRAMS/M**3
**


NETWORK
GROUP ID                          AVERAGE CONC                RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)
OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       0.01155 AT (  564355.33,  4184187.27,    12.00,    12.00,
0.00)  DC
          2ND HIGHEST VALUE IS       0.00478 AT (  564395.00,  4184170.56,    12.00,    12.00,
0.00)  DC
          3RD HIGHEST VALUE IS       0.00269 AT (  564481.04,  4184265.76,    11.00,    11.00,
0.00)  DC
          4TH HIGHEST VALUE IS       0.00221 AT (  564483.50,  4184167.33,    11.20,    11.20,
0.00)  DC
          5TH HIGHEST VALUE IS       0.00132 AT (  564265.53,  4184180.31,    12.00,    12.00,
0.00)  DC
          6TH HIGHEST VALUE IS       0.00111 AT (  564213.33,  4184301.42,    12.67,    12.67,
0.00)  DC
          7TH HIGHEST VALUE IS       0.00106 AT (  564328.18,  4184382.86,    12.00,    12.00,
0.00)  DC
          8TH HIGHEST VALUE IS       0.00067 AT (  564387.35,  4184083.56,    12.00,    12.00,
0.00)  DC
          9TH HIGHEST VALUE IS       0.00040 AT (  564217.12,  4184167.94,    13.00,    13.00,
0.00)  DC
         10TH HIGHEST VALUE IS       0.00038 AT (  564166.00,  4184280.54,    13.00,    13.00,
0.00)  DC
```

```
*** RECEPTOR TYPES:  GC = GRIDCART
                     GP = GRIDPOLR
                     DC = DISCCART
                     DP = DISCPOLR
```

```
 *** AERMOD - VERSION  15181 ***   *** C:\Lakes\AERMOD View\1314 Franklin Mitigated\1314 Franklin
Mitigated ***        01/12/17
 *** AERMET - VERSION  14134 ***   ***
***        17:27:30

PAGE  10
 **MODELOPTs:   RegDFAULT CONC      ELEV      RURAL

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            1 Warning Message(s)
 A Total of         7953 Informational Message(s)

 A Total of        43872 Hours Were Processed

 A Total of         7152 Calm Hours Identified

 A Total of          801 Missing Hours Identified (  1.83 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 MX W481   43873         MAIN: Data Remaining After End of Year. Number of Hours=          48

    ***********************************
    *** AERMOD Finishes Successfully ***
    ***********************************
```