

# Appendix A

## **Notice of Preparation, Scoping Meeting Materials, and Scoping Comments**



# CITY OF OAKLAND

Bureau of Planning

250 Frank H. Ogawa Plaza, Suite 3315, Oakland, California, 94612-2032

## **NOTICE OF PREPARATION (NOP) OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE 460 24TH STREET PROJECT**

The City of Oakland's Bureau of Planning is preparing an Environmental Impact Report ("EIR") for the 460 24th Street Project ("Project"). The City is requesting comments on the scope and content of the EIR. A description of the Project and its location, together with a summary of the probable environmental effects that will be addressed in the EIR are included herein.

The EIR for the Project is being prepared in compliance with the California Environmental Quality Act (CEQA) (California Public Resources Code §§21000 et. seq.) and the State CEQA Guidelines (Guidelines) (California Code of Regulations, Title 14, Division 6, Chapter 3, §§15000 et. seq.). The City of Oakland is the Lead Agency for the project and is the public agency with the greatest responsibility for considering approval of the Project and/or carrying it out. Pursuant to Guidelines §15082(a), upon deciding to prepare an EIR, the City as lead agency must issue a Notice of Preparation (NOP) to inform the Governor's Office of Planning and Research, trustee and responsible agencies, and the public of that decision.

The purpose of the NOP is to provide information describing the Project and its potential environmental effects to those who may wish to comment regarding the scope and content of the information to be included in the EIR. This notice is being sent to responsible or trustee agencies and other interested parties. Responsible and trustee agencies are those public agencies, besides the City of Oakland, that may also have a role in considering approval and/or carrying out the Project. The City encourages responsible and trustee agencies and the Office of Planning and Research to provide this information to the City, so that the City can ensure that the Draft EIR meets the needs of those agencies. Once the Draft EIR is published, it will be sent to all responsible or trustee agencies and to others who respond to this NOP or who otherwise indicate that they would like to receive a copy. The Draft EIR will also be available for review at the City of Oakland at the address identified below.

**SUBMITTING COMMENTS IN RESPONSE TO THIS NOP:** Comments that address the scope of the Draft EIR may be directed in writing to:

Rebecca Lind, Planner III  
City of Oakland Bureau of Planning  
250 Frank H. Ogawa Plaza, Suite 2114  
Oakland, CA 94612  
Phone: (510)238-3472  
Fax: (510) 238-4730  
E-mail: RLind@oaklandca.gov

Written comments on the NOP must be received via the above mailing or e-mail address or fax by 5:00 p.m. on **February 20, 2020**. Please reference Case File Number **PLN19096-ER01** in all correspondence. Comments and suggestions as to the appropriate scope of analysis in the EIR are invited from all interested parties and will be

received at the EIR Scoping Meetings to be held before the City Planning Commission and City Landmarks Preservation Advisory Board, as noticed below.

Commenters should focus comments on potential impacts of the Project on the physical environment. Commenters are encouraged to identify ways that potential adverse effects resulting from the Project might be minimized and to identify reasonable alternatives and mitigation measures to the Project.

**EIR SCOPING MEETINGS:**

The **City of Oakland Landmarks Preservation Advisory Board** will conduct a public scoping meeting on the historic and cultural resource aspects of the Project on **Monday, February 10, 2020 at 6:00 p.m.** in the Council Chambers, **Oakland City Hall, 1 Frank H. Ogawa Plaza, Oakland, CA.**

The **City of Oakland Planning Commission** will conduct a public scoping meeting on the EIR for the 460 24th Street Project on **Wednesday, February 19, 2020 at 6:00 p.m.** in the Council Chambers in **Oakland City Hall, 1 Frank H. Ogawa Plaza, Oakland, CA.**

**PROJECT TITLE:** 460 24th Street Project (Case File No. **PLN19096 -ER01**)

**PROJECT LOCATION:** The project, for the purpose of environmental analysis, is comprised of 2 non-contiguous sites.

**Site 1 (24th and 25th Street Site):** is approximately 0.92-acres located at 460 24th Street and 465 25th Street, northeast of Uptown Oakland and northwest of Lake Merritt (See **Figure 2, Site Boundary**). The L-shaped project site consists of three contiguous parcels (Assessor's Parcel Numbers [APNs] 008-0674-033-1, 008-0674-006 and -007). Site 1 is generally bound by 25th Street to the north, retail and light industrial buildings to the east, 24th Street to the south, and a construction site for a future hotel/residential mixed-use development to the west.

**Site 2 (Valley Street Site):** is an approximately 1,324 square foot portion of a 4,520 square foot parcel near the corner of 24th and Valley Streets (APN 008-073-900-008). The site fronts Valley Street, south of 24th Street, and is bound by residential lofts to the north, (created on the affected parcel), residential uses and a parking tower to the east, and residential uses to the south and west (see **Figure 2, Site Boundary**).

**PROJECT SPONSOR:** Signature Development Group

**EXISTING CONDITIONS:**

**Site 1 (24th and 25th Street Site)** is predominantly flat and currently occupied by a surface parking lot, four former garage buildings, and an auto service and parts center. Site 1 is paved, with no existing vegetation. Site 1 has frontages on 24th and 25th Streets, and a total of seven existing curb cuts: four along 24th Street, and three along 25th Street. Approximately 64 percent (25,624 square feet) of the site is located within the 25th Street Garage District, which is identified as a historic district (Areas of Primary Importance [API]). The project site is located in

the Community Commercial (CC-3) zone and is also included in the yet-to-be-adopted Downtown Oakland Specific Plan (DOSP).

**Site 2 (Valley Street Site)** is currently a surface parking lot with three parking stalls and landscaping serving the 8 unit live/work residential facility located on the remainder of the parcel. Site 2 has one curb cut located on Valley Street. Site 2 has a General Plan land use designation of Central Business District (CBD) and is located in the Broadway Valdez District Specific Plan (BVDSP) Area, and specifically Sub-district 1 of the Valdez Triangle Subarea, within the Broadway Valdez District Mixed Use - 4 Commercial Zone (D-BV-4) zone. One-hundred percent of Site 2 is located in an Area of Secondary Importance (ASI).

### **PROJECT DESCRIPTION:**

**Site 1:** The Project would demolish one existing building and portions of four other existing buildings on the site. The Project would construct a mixed-use office and retail building, integrating portions of existing building frontages of the two buildings fronting 24th Street and the building fronting 25th Street both of which are within the 25th Street Garage District API. An approximately 11.5-foot section of the western portion of the building fronting along 25th Street would be demolished in order to create an open air public paseo connecting 24th and 25th Streets. The Project would concentrate the allowable floor area ratio (FAR) on the site above the vacant surface parking lot, which is outside of the boundary of the historic API, seeking a variance to increase height on that portion of the Project site. Approximately 11,980 square feet of retail space would be located on the first floor, and 86,100 square feet of office space would be spread between the second through sixth floors.

Parking for the office and retail uses would be located on the project site in a garage on the first floor, containing single parking stalls, puzzle parking, and tandem puzzle parking systems, for a total of 132 parking stalls. A public paseo lined with artist and craft stalls as well as public art would extend from 25th Street along the western edge of the project site, connecting to an approximately 980 square foot dining courtyard adjacent to retail space fronting 24th Street, creating a pedestrian connection between 24th and 25th Streets.

The Project would provide a range of building heights from 20 feet tall along the street frontages integrating existing facades, to 45 feet tall mostly in the interior of the site, and 85 feet within the southwest corner of the project site.

**Site 2:** The Project would add 640 square feet of proposed artist and craft stalls, including restroom, located mostly in refurbished shipping containers on the lot. A raised wood/Trex platform would be built around the containers.

The three existing parking stalls would be re-located offsite on the commercial parking area for the HIVE. Site 2 provides additional community serving artist and craft retail space intended to activate the pedestrian corridor along Valley Street through the public paseo on Site 1.

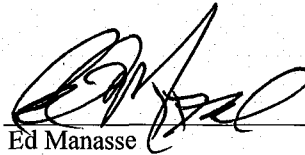
**PROBABLE ENVIRONMENTAL EFFECTS AND PROPOSED SCOPE OF THE EIR:** Probable environmental effects to be addressed and evaluated in the EIR include: aesthetics, hazards and hazardous materials, historic resources, air quality, greenhouse gas emissions, land use, noise, and transportation.

Environmental factors that are expected to have no impact or a less-than-significant impact will be discussed in the EIR, and are expected to include: agricultural and forestry resources, biological resources, archeological and tribal

cultural resources, paleontological resources, geology and soils, hydrology and water quality, mineral resources, population and housing, recreation, public services, utilities and service systems, and energy.

The Draft EIR will also examine a reasonable range of alternatives to the Project, including the CEQA-mandated No Project Alternative, and other potential alternatives capable of reducing or avoiding potential significant environmental effects.

January 17, 2020  
Case File Number: **PLN19096-ER01**



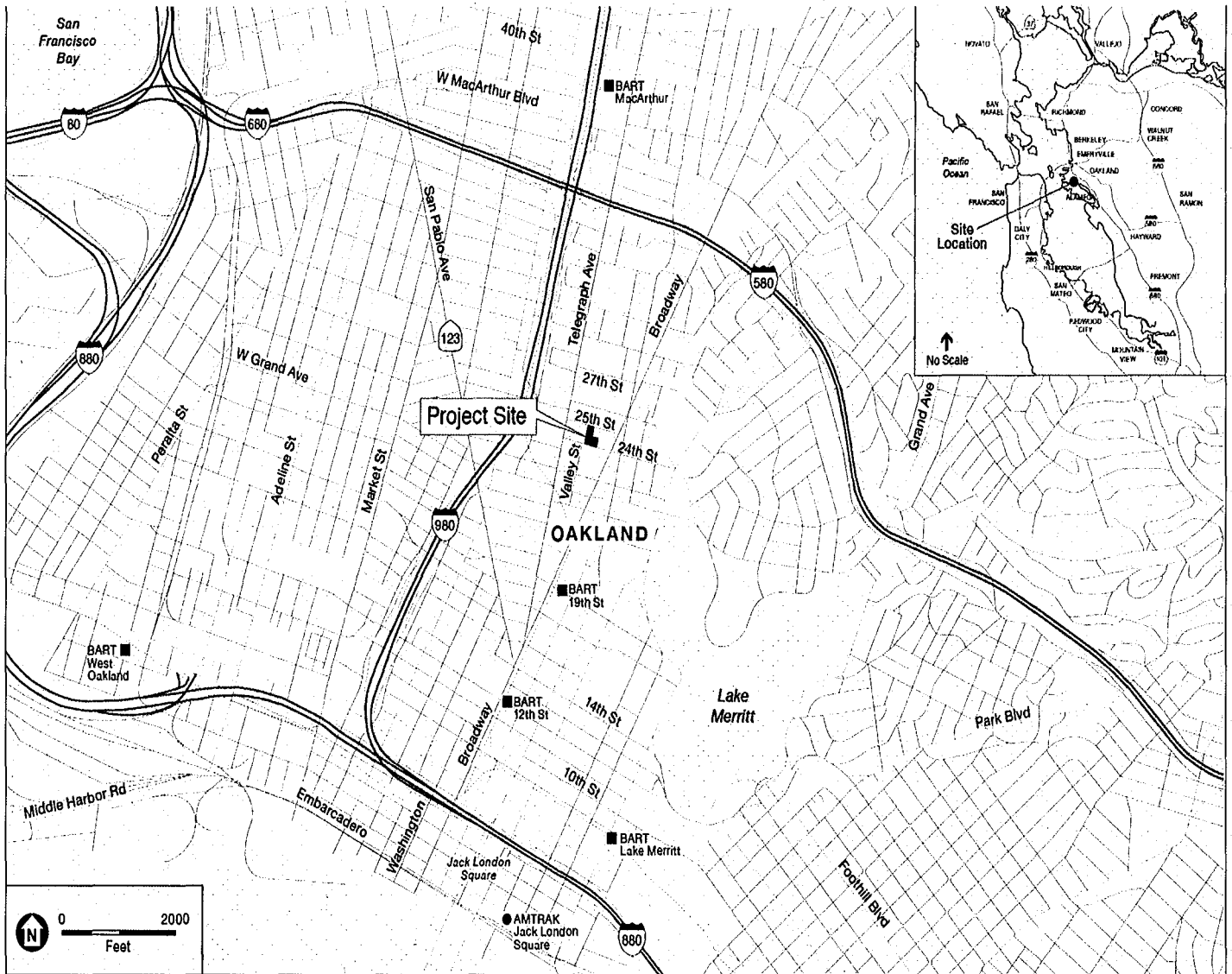
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Ed Manasse  
Deputy Director and Environmental Review Officer  
Planning and Building Department

**Attachments:**

- Figure 1, Project Location Map
- Figure 2, Site Boundary

**Figure 1, Site Location Map**

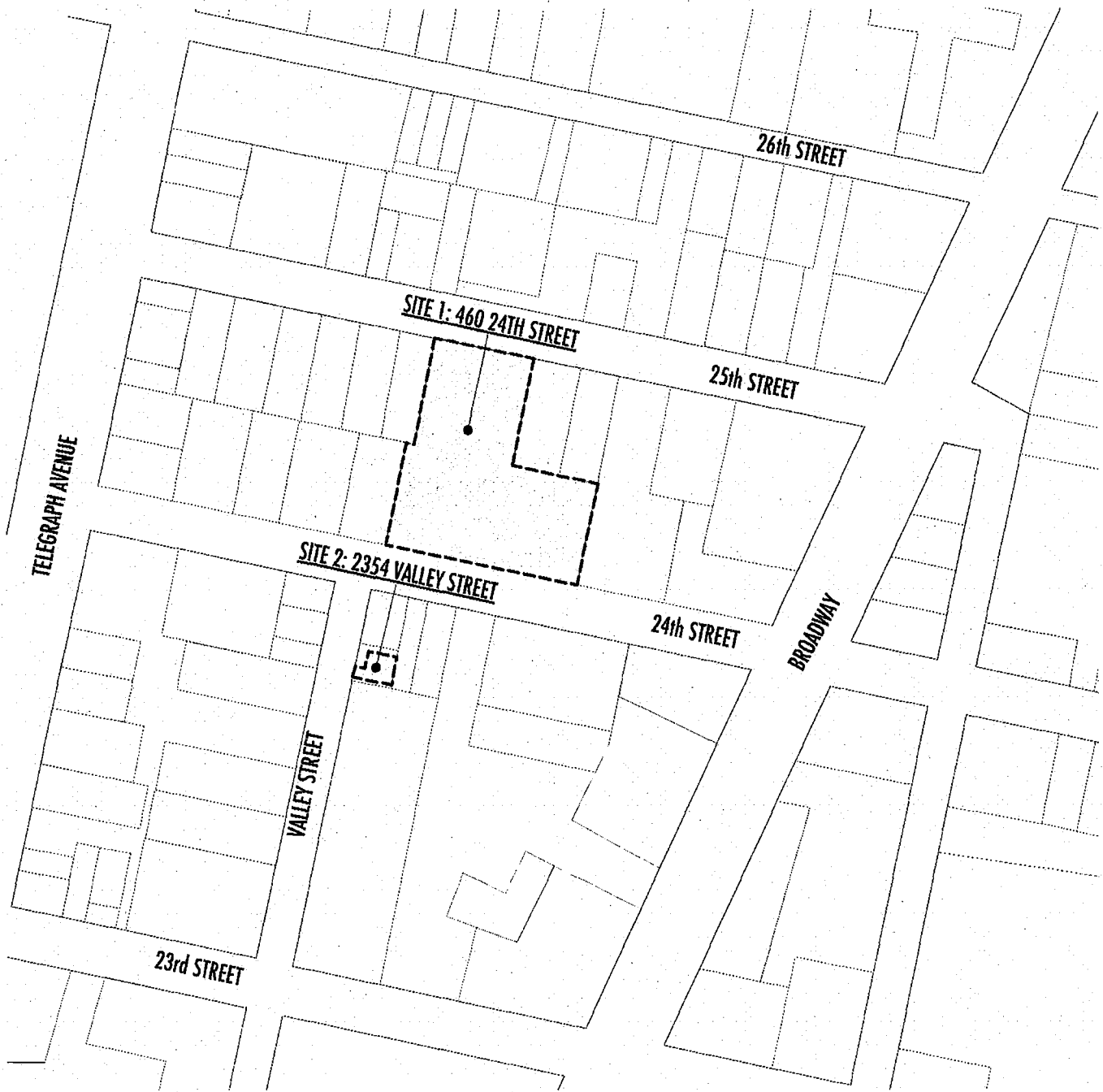


SOURCE: ESA, 2018

460 24th Street Project  
**Figure 1**  
 Project Location Map



**Figure 2, Site Boundary**



<b>Location:</b>	460 24 <sup>th</sup> St-465 25 <sup>th</sup> St. and 2354 Valley St.
<b>Assessor's Parcel Number(s):</b>	008-0674-033-1, 008-0674-006,008-0674-007, 008-0739-008
<b>Proposal:</b>	Scoping session for environmental review of an office and retail proposal on two sites. Site 1: Developing a 99,788-square foot mixed-use office and retail building on a site partially in the 25 <sup>th</sup> Street District API. The project would provide an interior midblock retail paseo connecting 24 <sup>th</sup> and 25 <sup>th</sup> Streets. Site 2: Developing a 640-square foot portion of the lot at 2354 Valley St. with artist and craft stalls.
<b>Applicant:</b>	Signature Development Group
<b>Contact Person/Phone Number:</b>	Elisse Douglass 510-251-9269
<b>Case File Number:</b>	PLN19096, PLN19096-ER01
<b>Planning Permits Required</b>	Site 1: Design Review, Demolition Permit, Variance, Tentative Parcel Map Site 2: Design Review
<b>General Plan:</b>	Community Commercial
<b>Zoning:</b>	Site 1:CC-3. Site 2: D-BV-4
<b>Environmental Determination:</b>	Staff has determined that an Environmental Impact Report (EIR) will be prepared for this project. A NOP to prepare the EIR was published on January 17, 2020. The comment period for the NOP ends on February 20, 2020.
<b>Historic Status:</b>	Site 1: Garage District API, PDHP OCHS rating Cb1+, C1+ Site 2: 2356-98 Valley St. ASI PDHP D2+
<b>City Council District:</b>	3
<b>Action to be Taken:</b>	Receive public and Landmarks Board comments about what information and analysis should be included in the EIR.
<b>For Further Information:</b>	Contact Case Planner <b>Rebecca Lind</b> at (510) 238-3472 or by email at <a href="mailto:rlind@oaklandca.gov">rlind@oaklandca.gov</a> .

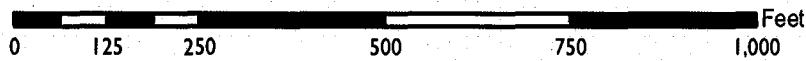
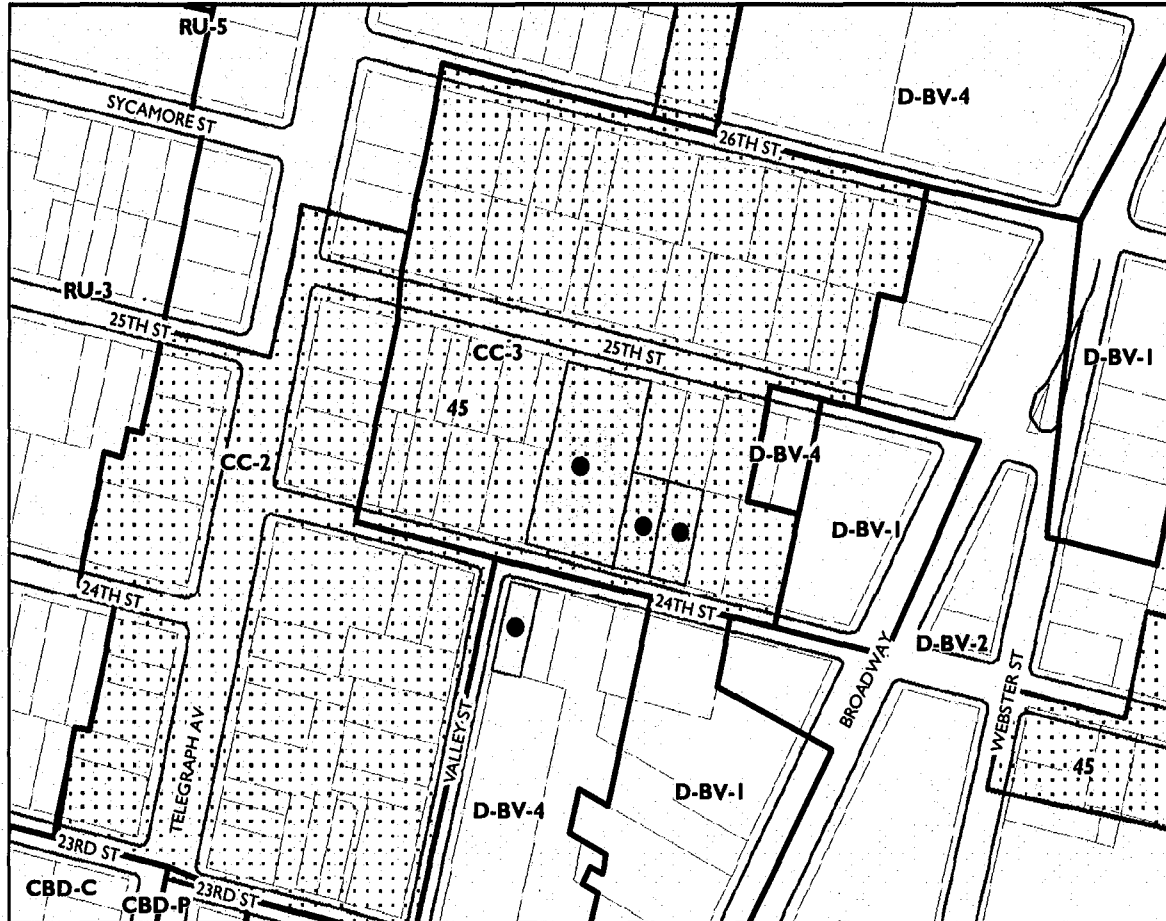
**SUMMARY**

Signature Development Group has filed a request for environmental review of 99,080 sq. ft. of development on two sites near 24<sup>th</sup>, 25<sup>th</sup> and Valley Streets. Site 1 is proposed as 1) a modification/partial demolition of five existing buildings within the API, three of which are rated C1+ and 2) construction of a new six story office building outside of the API. Site 2 is proposed as development of a 1,324-sq. ft. portion of a 4,520-sq. ft. parcel with 640 sq. ft. of artist and craft stalls and amenities. This portion of the lot is now used for parking.

In compliance with the California Environmental Quality Act (CEQA), staff has determined that project impacts may be significant and an Environmental Impact Report (EIR) will be prepared. The City will be the lead agency pursuant to CEQA. As such, the City has the responsibility to prepare an EIR for the project. The EIR Notice of Preparation (NOP) was published on January 17, 2020. This scoping session is being held to solicit public and Landmarks Board comments on what information and analysis should be included in the EIR. Specifically, comments should focus on discussing possible impacts on the physical environment, ways in which potential adverse effects might be minimized, and alternatives to the project considering the EIR's purpose to provide useful and accurate information about such factors. In addition to the oral and written comments received at the scoping meeting, written comments will be accepted until February 20, 2020 at 4 PM. Written comments may be submitted by mail to Rebecca Lind, Planner III, City of Oakland Bureau of Planning, 250 Frank H Ogawa Plaza, Suite 2114, Oakland, CA 94612 or by e-mail to [rlind@oaklandca.gov](mailto:rlind@oaklandca.gov).



# LANDMARKS PRESERVATION ADVISORY BOARD



Case File: PLN19096-ER01  
Applicant: Signature Development Group  
Address: 460 24th St - 465 25th St  
Zone: CC-3, D-BV-4  
Height Area: 45 ft

## PROJECT DESCRIPTION

**Site 1:** The Project would demolish one existing building and portions of four other existing buildings on the site. The Project would construct a mixed-use office and retail building, integrating portions of existing building frontages of the two buildings fronting 24th Street and the building fronting 25th Street both of which are within the 25th Street Garage District API. An approximately 11.5-foot section of the western portion of the building fronting along 25th Street would be demolished to create an open air public paseo connecting 24th and 25th Streets. Approximately 980 square feet of dining area/ courtyard would be in the paseo.

The Project would concentrate the allowable floor area ratio (FAR) on the site above the vacant surface parking lot, which is outside of the boundary of the historic API, seeking a variance to increase height on that portion of the Project site. Approximately 11,980 square feet of retail space would be located on the first floor, and 86,100 square feet of office space would be spread between the second through sixth floors. 132 parking spaces are proposed within the building.

**Site 2:** The Project would add 640 square feet of proposed artist and craft stalls, including restroom, located mostly in refurbished shipping containers on the lot. A raised wood/Trex platform would be built around the containers.

## SITE DESCRIPTION

**Site 1 (24th and 25th Street Site):** is approximately 0.92-acres located at 460 24th Street and 465 25th Street, northeast of Uptown Oakland and northwest of Lake Merritt. It is flat, and currently used for a parking lot, and 4 existing garage buildings. The L-shaped project site consists of three contiguous parcels (Assessor's Parcel Numbers [APNs] 008-0674-033-1, 008-0674-006 and -007). Site 1 is generally bound by 25th Street to the north, retail and light industrial buildings to the east, 24th Street to the south, and a construction site for a future hotel/residential mixed-use development to the west.

**Site 2 (Valley Street Site):** is an approximately 1,324 square foot portion of a 4,520-square foot parcel near the corner of 24th and Valley Streets (APN 008-073-900-008). The portion of the site proposed for development is currently a parking lot serving the multi-family building on the lot. The site fronts Valley Street, south of 24th Street, and is bound by residential lofts to the north (on the same lot), residential uses and a parking tower to the east, and residential uses to the south and west

## GENERAL PLAN

Site 1 is **Community Commercial Land Use Designation** and is in the **Downtown Specific Plan**  
Site 2 is **Community Commercial Land Use Designation** and is in **Broadway Valdez Specific Plan**

## ZONING

**Site 1: Commercial Corridor 3 (CC-3)**  
**Site 2: Broadway-Valdez -4 (D-BV-4)**

## ENVIRONMENTAL REVIEW PROCESS

The EIR Notice of Preparation (NOP) was published on February 17, 2020. This scoping session is being held to solicit public and Landmarks Board member's comments on what information and analysis should be included in the EIR. Specifically, comments should focus on discussing possible impacts on the physical environment, ways in which potential adverse effects might be minimized, and alternatives to the project considering the EIR's purpose to provide useful and accurate information about such factors. Comments related to policy considerations and the merits of the project will be the subject of future, duly noticed public meetings.

The public comment period closes February 29, 2020. The schedule for the Draft EIR(DEIR) will be determined after completion of scoping. Once the DEIR is published, staff will continue to work with the project sponsor to refine their project, respond to the information and analysis contained in the DEIR, and move ahead toward the final consideration of the project once the Final EIR (FEIR) is completed. As with previous projects, and as permitted by CEQA (Section 15004), the EIR process and project review, to the maximum extent feasible, should be coordinated and run concurrently. The environmental impact report will address potential environmental impacts associated with construction and operation of the project including construction of the proposed project and obtainment of all necessary zoning, grading and building permits, and any other discretionary actions required by the City of Oakland and other governmental agencies.

It is anticipated that the project may have significant environmental impacts related to the following environmental topic areas, which will be evaluated in the DEIR: aesthetics, hazards and hazardous materials, historic resources, air quality, greenhouse gas emissions, land use, noise, and transportation.

The project is not anticipated to have significant environmental impacts related to agricultural and forestry resources, biological resources, archeological and tribal cultural resources, paleontological resources, geology and soils, hydrology and water quality, mineral resources, population and housing, recreation, public services, utilities and service systems, and energy.

A brief discussion of these topics and documentation as to why impacts related to these topics will not be significant will be provided in the DEIR. The level and analysis and discussion for these topics is anticipated to be like what would typically be included in an Initial Study. The City's Standard Conditions of Approval will be referenced where applicable. The DEIR will also examine a reasonable range of alternatives to the project, including the CEQA-mandated No Project alternative, and other potential alternatives that may can reduce or avoiding potential environmental effects.

### **PROPOSED HISTORIC RESOURCE ANALYSIS**

As a local designated API, the 25<sup>th</sup> Street Garage District is a CEQA resource. Consequently, the scope of work will include peer review of an Historic Resource Evaluation prepared by the applicant, and evaluation of any historic-age buildings that could be impacted by the project. Character defining features of the 25<sup>th</sup> St Street Garage District API will also be identified.

### **CONCLUSION**

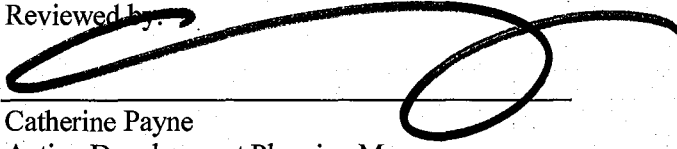
Staff requests the public and the Landmarks Board to provide comments on what types of information and analysis, including alternatives, should be considered in the EIR.

Prepared by:



Rebecca Lind  
Planner III

Reviewed by:



Catherine Payne  
Acting Development Planning Manager  
Bureau of Planning

**ATTACHMENTS:**

- A. Notice of Preparation
- B. Preliminary Plans

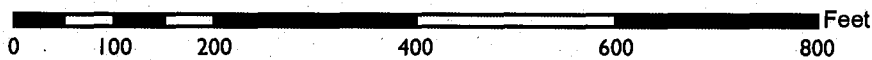
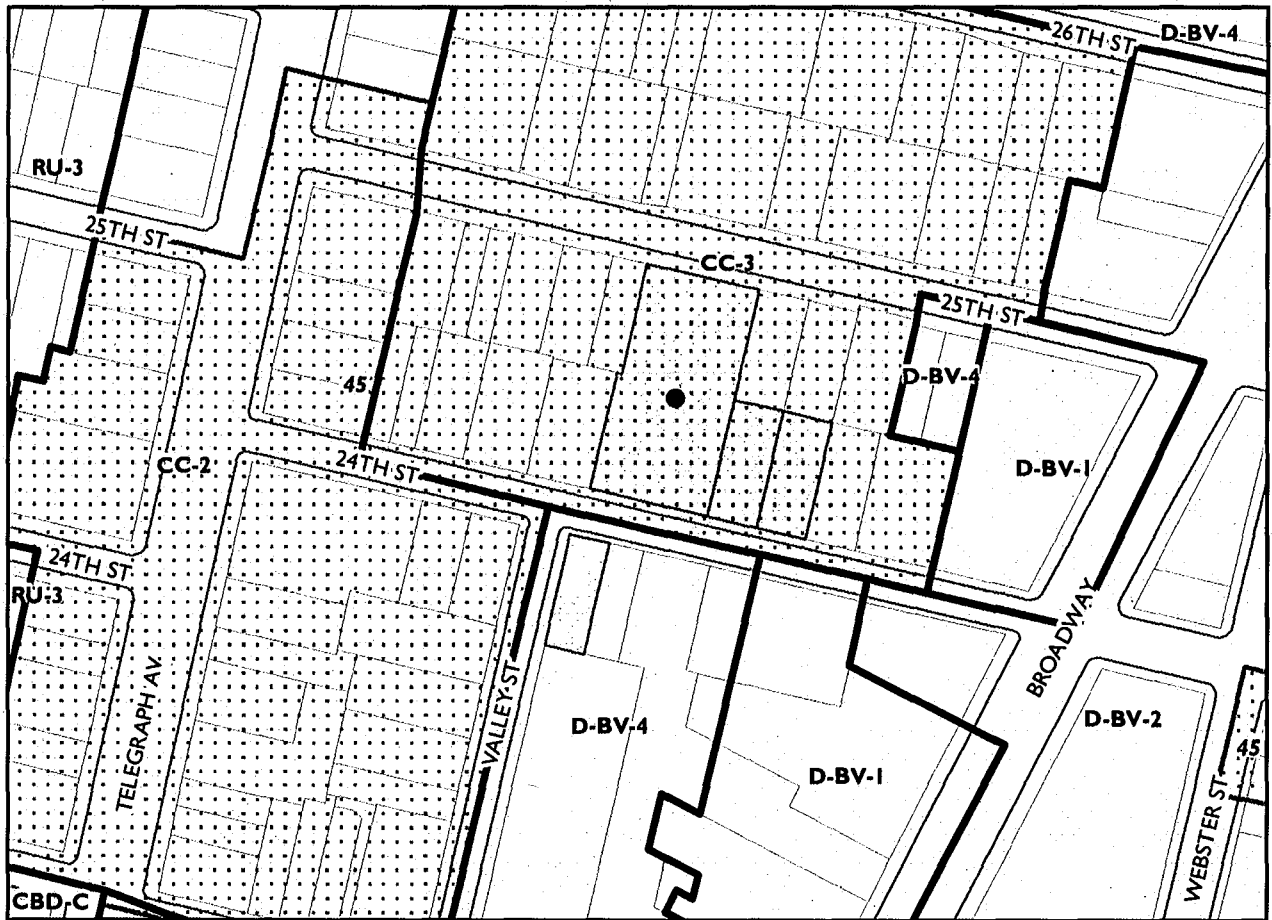
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# CITY OF OAKLAND PLANNING COMMISSION



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Site 2 is **Community Commercial Land Use Designation** and is in **Broadway Valdez Specific Plan**

### **ZONING**

**Site 1: Commercial Corridor 3 (CC-3)**

**Site 2: Broadway-Valdez -4 (D-BV-4)**

### **LANDMARKS PRESERVATION BOARD RECOMMENDATIONS**

The Landmarks Preservation Board met February 10<sup>th</sup> and made the following recommendations.

- Closely study cumulative impacts on the 25<sup>th</sup> Street Garage District API taking into account past, present and future development proposals
- Consider that the depth of the garage buildings in the district is a character defining element of the API, and this should be considered in analysis of impacts
- Look at potential impacts with regard to compatibility of proposed exterior materials of the proposal to that of the existing building in the API
- Alternatives should include looking at preserving more of the existing API buildings through looking at reducing parking to allow for the retention of more of the buildings by reducing the

square footage of the parking garage – also look into the issue raised about the viability of retaining interior tile walls.

## **ENVIRONMENTAL REVIEW PROCESS**

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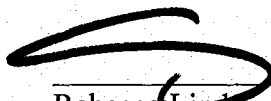
As a local designated API, the 25<sup>th</sup> Street Garage District is a CEQA resource. Consequently, the scope of work will include peer review of an Historic Resource Evaluation prepared by the applicant, and evaluation of any historic-age buildings that could be impacted by the project. Character defining features of the 25<sup>th</sup> St Street Garage District API will also be identified.

## **RECOMMENDATIONS:**



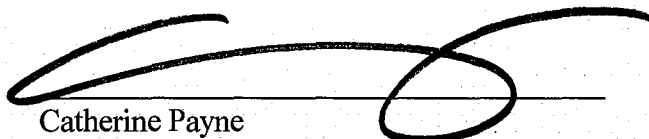
Staff requests the public and the Planning Commission to provide comments on what types of information and analysis, including alternatives, should be considered in the EIR.

Prepared by:

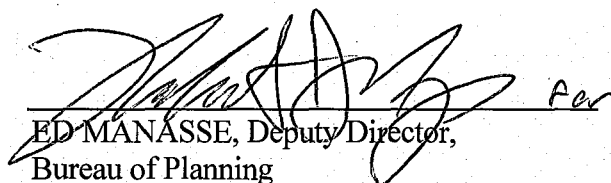
  
Rebecca Lind  
Planner III

For

Reviewed by:

  
Catherine Payne  
Acting Development Planning Manager

Approved for forwarding to the  
City Planning Commission:

  
ED MANASSE, Deputy Director,  
Bureau of Planning

# NATIVE AMERICAN HERITAGE COMMISSION

January 23, 2020

Governor's Office of Planning & Research

**JAN 24 2020**

**STATE CLEARINGHOUSE**

Rebecca Lind  
Oakland, City of  
250 Frank H. Ogawa Plaza, Suite 3315  
Oakland, CA 94612-2032

**Re: 2020010246, 460 24th Street Project, Alameda County**

Dear Ms. Lind:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b))). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1))). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

**Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**



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**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
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Chumash

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Chumash

COMMISSIONER  
**[Vacant]**

EXECUTIVE SECRETARY  
**Christina Snider**  
Pomo

**NAHC HEADQUARTERS**  
1550 Harbor Boulevard  
Suite 100  
West Sacramento,  
California 95691  
(916) 373-3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
[NAHC.ca.gov](http://NAHC.ca.gov)

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
  - a.** A brief description of the project.
  - b.** The lead agency contact information.
  - c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
  - d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
  
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subs. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1 (b)).
  - a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
  
- 3. Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
  - a.** Alternatives to the project.
  - b.** Recommended mitigation measures.
  - c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).
  
- 4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:
  - a.** Type of environmental review necessary.
  - b.** Significance of the tribal cultural resources.
  - c.** Significance of the project's impacts on tribal cultural resources.
  - d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
  
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
  
- 6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
  - a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a.** Avoidance and preservation of the resources in place, including, but not limited to:
    - i.** Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i.** Protecting the cultural character and integrity of the resource.
    - ii.** Protecting the traditional use of the resource.
    - iii.** Protecting the confidentiality of the resource.
  - c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).
  - e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
  - f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
  - b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)

## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf).

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

### NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([http://ohp.parks.ca.gov/?page\\_id=1068](http://ohp.parks.ca.gov/?page_id=1068)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
  - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
  - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
  
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
  - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, § 15064.5(f) (CEQA Guidelines § 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: [Nancy.Gonzalez-Lopez@nahc.ca.gov](mailto:Nancy.Gonzalez-Lopez@nahc.ca.gov).

Sincerely,



Nancy Gonzalez-Lopez  
Staff Services Analyst

cc: State Clearinghouse

ART + GARAGE DISTRICT Group

DATE: February 10, 2020

TO: Members of the Landmark Preservation Board

FROM: Art+Garage District (AGD)

RE: Notice of Preparation for EIR for 460 24<sup>th</sup> Street to 465 25<sup>th</sup> Street and 2354 Valley Street  
PLN19096, PLN19096-ER01

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**PROCEDURE:**

- The staff report may have misidentified the month that the NOP was posted as we believe it to have been January 17, 2020 and not February 17, 2020.
- A quick note on procedure. When we were made aware of the NOP we were unable to locate it online.
- Staff was timely in responding, upon discovery, but we believe that an extension is warranted.
- ***Can we extend the time for comment beyond February 29, 2020?***

**ARCHITECTURE and CULTURE:**

- The AGD is bounded by 27<sup>th</sup> St, Grand Ave and Broadway and Telegraph
- The AGD is extremely concerned with this proposal from an architectural perspective. This area, known as ***the Art and Garage District holds TRULY UNIQUE ARCHITECTURE. Can we not preserve the historic buildings and utilize them as light industrial?***
- ***Low-rise vintage brick warehouses are rapidly being removed***, along with light industrial zoning that supports artists and makers, throughout Oakland, but especially in this area.
- ***If there is anywhere DESIGN MAKES A DIFFERENCE, it would be in an Arts District.*** The continued attempt at retaining facades with stucco and metal boxes above them is NOT the high level of design this neighborhood warrants. Just because it has been allowed in the recent past, ***why do we need to allow it to continue?***
- ***Should we not impose a higher level of design achievement in Cultural and Historic Districts, particularly when unique buildings define the character of the area?***
- Higher density development was designated along Telegraph Ave and Broadway. ***The height of 85'-0" in the middle of the area is COMPLETELY INAPPROPRIATE.***

**ART+GARAGE District History:**

- ***In October 2015, more than 35 business owners, cultural and community activists, and neighbors attended a planning commission hearing because one of the 42 zoning changes being proposed was an illegal "spot-zoning" attempt to increase the height limit from 45'-0" to 85'-0" for the middle of the Art+Garage District. Because of the outcry, Staff recommended to Planning Commissioners that this item (#38 see reference to attached memo from Ed Manasse) be designated for "Further Study".***
- After this misstep in October 2015, ***a movement started that resulted in 100 people attending the New Parkway Theater with elected officials and Planning staff to outline the vision for the Uptown Arts' Creative Economy and Cultural District.***

## ART + GARAGE DISTRICT Group

- ***In early 2016, the AGD kept meeting to develop anti-displacement policies, keeping an eye to the impending gentrification where, unfortunately, artists as initiators of gentrification are then ultimately displaced to be replaced by “new” cultural activity***
- ***By 2017 after 14 versions of a City Council Resolution with D3 Staff that would have formally named the district with very specific anti-displacement policies the agenda item was removed because of “developer pushback” that was not interested in interim measures or working with a community advisory group. Our goal was to streamline development and place community benefits upfront. (please see attached)***
- The AGD policy group participated in the Mayor’s Affordable Housing and Work Spaces for Artists and remain active, 5 years later, in the Downtown Oakland Specific Plan Community Advisory Group.

### ZONING TODAY:

- ***HOW and WHEN was the proposal for an 85 ft height limit increase adopted?***
- ***WHO was involved in the “further study” to designate 2354 Valley Street as DB-V4?***
- ***WHEN will we stop proposing “retail” in light industrial zones?***
- ***HOW can we grow a thriving creative economy with traditional and advanced technology manufacturing that promotes artisan producers, industrial fabricators if we don’t uphold the current CC-3 zoning?***
- ***HOW and WHEN and WHO was involved in changing the zoning? reducing the amount of CC-2 and CC-3 light industrial zoning to residential over the past 5 years?***
- ***WHAT allows a developer to provide MORE PARKING than required in the current requirement of “ZERO”? HOW does this promote positive action towards thwarting climate change? How does this take away space from potential cultural activities?***
- ***WHY can we not RETAIN light Industrial zoning throughout DT and eliminate “retail” as a requirement? Look at all the empty ground floor spaces?***

### DOWNTOWN Oakland Specific Plan:

- The most recent DOSP clearly outlines the AGD area described above and recognizes it’s significant contribution to the creative economy and its unique architectural character.
- Here are TWO KEY MEASURES under consideration for adoption:
  - “Create a new “arts & culture” land use category and expand and update categories for artisan, custom and light manufacturing, and other arts-related and culturally-significant uses to permit a more contemporary range of arts, PDR, and cultural uses by right (or through potential future incentive programs); Minimum gross floor area



## ART + GARAGE DISTRICT Group

requirements for arts, culture, and PDR uses in developments of a certain size to facilitate preservation and displacement” (p.201)”

- “Explore the development of an incentive program (such as a cultural density bonus program) for downtown that identifies affordable arts, culture, and commercial space, including space for community-serving nonprofits, as one of the priority community-benefiting uses (see Policy LU-1.3).
- **WHY wouldn't we consider piloting some of these measures in this proposal as other developers have voluntarily?**

### **CULTURAL and EQUITY PRESERVATION: COMMUNITY BENEFITS... for WHOM are we building?**

- This project proposes **99,788 SF** of mixed-use office and ‘retail’ space... nearly 100,000 SF.
- **Couldn't at least 15% or approx. 15,000 SF be designated for equitable community and cultural activities that would preserve the authentic culture of Oakland?**
- There are approx. **12,000 SF of ground floor spaces that could contribute to the original Art+Garage District culture. WHY CAN WE NOT RETAIN the CC-3 Zoning? Shouldn't we designate these spaces for Cultural and Community activities and support a more sustainable creative manufacturing economy?**
- Can the **640 SF of Valley Street artist and craft stalls** in converted shipping containers that represents .64% (or just above **ONE HALF OF ONE PERCENT**) be **DOUBLED or TRIPLED?** This **CANNOT BE COUNTED TOWARDS PUBLIC ART.** **If it is, how can these and other spaces be programmed and operated so that there is free, equitable access to these spaces?**
- There are **1,175 SF of Craft Stalls along the “paseo”.** **Can we not at least double the number if at least 30 parking spaces were removed from the plan?**
- The **“Paseo”** ranges from 8 feet in width to 18 ft in width. In order for the “paseo” to be successful, **why can we not require the full width of 18 to 20 ft width along the entire path?** Why not plan in enough space for appropriate lighting and substantial planting to help with sound for the neighboring residents?
- **Who will manage and curate this and other cultural spaces in order to ensure free and below market rate access to people of color owned businesses or cultural institutions to incorporate equitable access?**

Thank you for receiving these comments, on behalf of the Art + Garage District,  
Hiroko Kurihara



February 10, 2020

(By electronic transmission)

Members of the City of Oakland Landmarks Preservation Advisory Board  
Pete Vollmann, Betty Marvin, Rebecca Lind  
250 Frank H. Ogawa Plaza, 3rd Floor  
Oakland, California 94612

**Subject:** PLN 19096, PLN 19096-ER-01

Dear Landmarks Preservation Advisory Board members and planning staff,

Here are initial comments on the Notice of Preparation for PLN 19096, PLN 19096-ER-01. We note that there was some confusion regarding actual date of availability of this Notice, and encourage staff to extend the deadline for comment.

Oakland Heritage Alliance is concerned that the 25th Street District API is being eroded, stepwise, over a long period, mostly by this developer. Since the time of the Broadway/Grand development, each successive project has entailed considerable destruction of historic resources. Some façades and structures have remained, and these survivors have proven to attract visitors and businesses. Taken together, however, the aggregated Signature Properties projects have caused and continue to cause irreversible and permanent losses of a historic area.

In describing the integrity of the district, one of the defining characteristics is "1-story brick truss roofed garages and largely intact." The current project removes the trussed roofs, so that although some of the façades remain, defining characteristics would be compromised. If this process continues, the API will be damaged. The context and feeling of the historic district are being too drastically altered.

The Environmental Impact Report should provide information on all plans for future projects in the area, even if preliminary—not just this one—because this project is part of a pattern of development that will have major effects. We wonder if it may actually fit the concept of "piecemealing"—it proposes to remove all but a thin façade of 4 contributing buildings in the district. Another Signature project is reducing 2 more buildings to shallow façades, next door on 25th street. There are 24 buildings in the garage district. As Signature Property reduces buildings to thin façades, cumulatively this becomes a very major impact on the district. Can we be confident that this is the last project? What is the full vision? What is the entire program this developer intends to build out?

On page A3.5, there are two other façadectomies that are listed as "not part of the project," but their architecture suggest that they are indeed a part of the project. They have the same design of the upper floors. This EIR must consider Signature's larger scope and plans for the entire

market-rate space in the new building?

7. Parking

a) On the plans when looking at parking vs arts space, all the arts stalls could fit into 8 parking spaces. Do we really value parking **10 times** more than arts space?

b) Study climate impacts of having so much parking. How does this project fit into city's climate goals?

c) Ensure parking can be converted to other uses in the future.

d) Downtown no longer has a parking minimum

8. Parking Alternatives

a) Study an alternative that eliminates parking, uses extra space and money saved to retain more historic structures and provide expanded below-market-rate arts spaces.

9. Walkway ("Paseo")

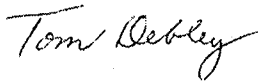
a) Study moving location of walkway into the new structure rather than removing historic materials.

b) Avoid destroying a historic building for a walkway (The Spanish/Southern California use of the word "Paseo" renames a pedestrian alley; it may be euphemistic and perhaps the city ought not use it in its own documents.)

10. Impact on arts space

a) Beyond the minimal arts stalls, how do we create a district where artists can afford to stay, thrive, and expand? These stalls don't make up for the garage and light industrial space lost with this project. The existing historic buildings should be retained for arts space, light industrial space, and commercial activity, and the new structure should be built around it

Sincerely,



Tom Debley, President

By electronic transmission:

cc: William Gilchrist, Ed Manasse, Robert Merkamp, Bureau of Planning/Zoning

3 photos attached

**LANDMARKS PRESERVATION  
ADVISORY BOARD MEMBERS:**

**Vince Sugrue, Chair  
Klara Komorous, Vice-Chair  
Chris Andrews  
Ben Fu  
Marcus Johnson  
Nenna Joiner  
Tim Mollette-Parks**

**LANDMARKS PRESERVATION  
ADVISORY BOARD MINUTES:**

**February 10, 2020**

**Regular Meeting 6 PM  
City Hall, Council Chambers  
1 Frank H. Ogawa Plaza  
Oakland, California 94612**

.....

**ROLL CALL**

**Board Members present: Andrews, Johnson, Joiner, Mollette- Parks, Sugrue**

**Board Members absent: Fu, Komorous**

**Staff present: Pete Vollmann, Betty Marvin, LaTisha Russell**

**BOARD BUSINESS**

**Agenda Discussion - No**

**Secretary Reports – No**

**Board Matters – No**

**Sub-committee Reports - No**

**OPEN FORUM** – Naomi Schiff, Oakland Heritage Alliance, (OHA) – announced the upcoming series of presentations hosted by OHA; How Transportation Corridors and Eminent Domain changed by Stu Swiedler, Thursday, 2/20/2020; African American Oakland: 1915-1965 by Dorothy Lazard, Thursday, March 19, 2020 and Hays Canyon by Kathleen DiGiovanni, Thursday, April 21, 2020. Ms. Schiff invited all to come and enjoy. All the presentation will be held at OK Stereo, (previously the American Bag Co., Landmark, Ord. 12124, 3/30/1999), 299-3<sup>rd</sup> St., 3<sup>rd</sup> Floor, Oakland.

**INFORMATIONAL PRESENTATIONS** – No informational presentations were scheduled.

**APPLICATIONS**

<b>1.</b>	<b>Location:</b>	<b>460 24<sup>th</sup> St-465 25<sup>th</sup> St. and 2354 Valley St.</b>
	<b>Assessor's Parcel Number:</b>	<b>008-0674-033-1, 008-0674-006,008-0674-007, 008-0739-008</b>
	<b>Proposal:</b>	Scoping session for environmental review of an office and retail proposal on two sites. Site 1: Developing a 99,788 square foot mixed-use office and retail building on a site partially in the 25 <sup>th</sup> Street District API. The project would provide an interior midblock retail paseo connecting 24 <sup>th</sup> and 25 <sup>th</sup> Streets. Site 2: Developing a 640 square foot portion of the lot at 2354 Valley St. with artist and craft stalls.
	<b>Applicant/ Phone No.:</b>	Signature Development Group
	<b>Contact Person/Phone Number:</b>	Elisse Douglass 510-251-9269
	<b>Case File Number:</b>	<b>PLN19096, PLN19096-ER01</b>
	<b>General Plan:</b>	Community Commercial
	<b>Zoning:</b>	Site 1:CC-3. Site 2: D-BV-4
	<b>Environmental Determination:</b>	Staff has determined that an Environmental Impact Report (EIR) will be prepared for this project. A NOP to prepare the EIR was published on January 17, 2020. The comment period for the NOP ends on February 20, 2020.
	<b>Historic Status:</b>	Site 1: Garage District API, PDHP OCHS rating Cb1+, C1+ Site 2: 2356-98 Valley St. ASI PDHP D2+
	<b>City Council District:</b>	3
	<b>Action to be Taken:</b>	Receive public and Landmarks Board comments about what information and analysis should be included in the EIR.
	<b>For Further Information:</b>	Contact Case Planner <b>Rebecca Lind</b> at (510) 238-3472 or by email at <a href="mailto:rlind@oaklandca.gov">rlind@oaklandca.gov</a> .

**Pete Vollmann, Board Secretary** – introduced the project at 460-24<sup>th</sup> Street, as a scoping session for an environmental review proposal. The point for this evening, is to take comments on information that should be included in the environmental document, with the focus on cultural resources, and not a hearing to comment on the merits of the project.

**Rebecca Lind, case planner** – the purpose for tonight is to begin the discussion of the California Environmental Quality Act (CEQA) review for the proposal in the Garage District's API, between 24<sup>th</sup> & 25<sup>th</sup> Streets. There are two separate locations being studied in the CEQA analysis that would require different sets of entitlements but CEQA does allow us to consider them together. Site 1; is the larger site that will be used for a mixed-use office/retail development and Site 2; will be presented as a 'pop-up' retail on a portion of an existing parking lot. The scope of work that has been reviewed and drafted for this proposal, is a very focused EIR at this point. We are going to be looking at the esthetics of the project; hazards, hazardous materials, historic resources, air quality, green-house gas admissions, land use, noise and transportation. The other areas of the environment have been scoped as potentially not resulting in any significant impact and since these properties are CEQA resources, we are aware that the historic resource portion of this will be a very important part of the analysis.

**Elisse Douglass, applicant, Signature Development Group** – thanked the Board for taking the time to hear the proposal and especially staff, whom they've worked with very closely these past few years on this project and are very excited about starting the process with the community outreach and CEQA. Douglass did a PowerPoint presentation that focused on the 25<sup>th</sup> Street Garage district, which is the most important part, from a Landmark perspective. She stated, the great thing about this site is, that there are a number of objectives that we've worked on with the community and staff and, we want to bring that same energy and strategy that we've developed for 'The Hive'. We want to support them in terms of space and resources

by bringing that into the new project with additional retail/commercial and art space. Other important things that we've heard about this project from the community are about the pedestrian activity and increasing that by adding the 24<sup>th</sup> Street Paseo, connecting the businesses and developing a strategy to preserve the historic buildings that are contributors to the 25<sup>th</sup> Street Garage District API.

**PUBLIC COMMENTS/QUESTIONS** – **Daniel Levy, Oakland Heritage Alliance, (OHA)** – his main conundrum with the project is, that it's not a project in a vacuum, it's a project that's another phase of a much larger project or an evolution of new projects. In regards to the scoping, it's hard to assess the impacts to the district just based on this project alone with all the other projects, the 'Hive', the West Elm hotel and another project few doors down from this project. We need to look at this holistically and in the context of the entire district to make sure we don't end up with a district full of facades of buildings. As part of this project specifically, I'm interested in seeing an alternative plan that looks at retaining more of the historic structure, study the impacts on the doorways, windows, the paseo and converting a garage into retail storefront use, which could be used for more art space or just retaining more of the historic structure.

**Hiroko Kurihara, Art & Garage District (AG&D), Oakland** – says the A&GD is extremely concerned about the proposal from an architectural/cultural perspective and provided the following comments; the height limit increase is inappropriate for the area (from 45ft to 85ft), retaining facades with stucco is not a high level of design for the neighborhood, stop proposing retail in light industrial zones, allowing more parking than required (taking away space that could be used for cultural activities), widen the 'paseo' to full width (18ft to 20ft) and develop an incentive program, such as a cultural density bonus, that identifies affordable arts, cultural/commercial space.

**Naomi Schiff, Oakland Heritage Alliance, (OHA)** – says that OHA is also concerned with new proposal, what impacts it will have on the neighborhood and the Environment Impact Report (EIR) should provide more information on all plans for future projects in that area and not just this one. She provided the following detailed questions that should be addressed; can the project be redesigned to preserve more of the historic structure, can the new construction surface materials blend in better with the existing buildings, study the impacts to the building more fully, can we work around rather than continue to demolish historic buildings and leave the historic structure intact, can consideration be given to alternatives that devote more art space rather than more 'parking' space and can the applicant avoid destroying a historic building for a walkway (paseo).

**BOARD COMMENTS/QUESTIONS** – **Sugrue** - thanked the speakers for giving a thorough overview of the project and had a question for staff as to why the amount of parking. **Lind** – this property is not in the Downtown zone where there is no parking but the corridor commercial does still require parking at a minimum, we haven't completed the detailed zoning analysis yet. **Sugrue** – had a comment in terms of aesthetics, regarding studying different materials with warmer colors is very important for this district, (when walking in this area), the more we can blend it makes a lot of sense. Also, the concept of the walkway, studying that with potential alternatives, would be helpful.

**Mollette-Parks** - questioned the data sheets from the applicant about parking; he asked if the parking alternatives could be included in the draft EIR because of the way it relates to both the alignment of the mid-block pedestrian crossing and to further protect parts of the historic structures. Also, the gates at the mid-block crossing, what is the intended use over time, will it be open consistently or only during business hours. Says he's not sure about the process within the draft EIR to take on the cumulative impacts questions, but feels this one (about the parking) is very important. **Andrews** – says he agrees with some of the comments made by the public speakers in regards to; looking at the overall effect of the district with these piece-meal projects. The applicant spoke about the hodge-podge nature of the design, which I think is inaccurate. If we look at the architecture that was built before WWII, I would call it eclectic and quite cohesive. The development that's been done most recently, makes it look

hodge-podge. With the lack of symmetry and materials which are not similar to the character of the existing buildings, those pieces make it look hodge-podge and to continue using that, is disappointing. I also think it's disingenuous to tear down a building to say you're preserving it, that's not preservation. We also need a better answer on the parking issue, in which I think we're progressing beyond parking. **Joiner** – says just allowing the historical portion to be upfront and then the new buildings to be behind, gives a disservice to the building and the community as well. And, we want to make sure we're (LPAB) doing our best for the residents and artists of that community, and do as much as possible for the preservation of both, because this is an 'Arts District', which has helped the revitalization of Oakland. **Johnson** – supports having parking. He stated that, if you're going to have retail and businesses, there's going to be a need to support them by having some limited parking. He would also like more data on the year the structure was built, the materials used and if all the side walls are made of the same material. **Sugrue** – asked what the timeframe for the project is moving forward, establishing the EIR and completing it. **Lind** – we're at the beginning of the process and we don't have a set schedule yet but it does take a few months.

The following is a summary of the comments presented by the Board:

- Closely study cumulative impacts on the 25<sup>th</sup> Street Garage District API, taking into account past, present and future development.
- Consider that the depth of the garage buildings in the district is a character defining element of the API, and this should be considered in analysis of impacts
- Look at potential impacts with regard to compatibility of proposed exterior materials of the proposal to that of the existing buildings in the API.
- Alternatives should include looking at preserving more of the existing API buildings through looking at reducing parking to allow for the retention of more of the buildings by reducing square footage of the parking garage – also look into the issue raised about the viability of retaining interior tile walls.

### **ANNOUNCEMENTS - No**

**UPCOMING** – the Draft EIR for the Howard Terminal proposal, will be going out this month and come before the LPAB at the March meeting.

**APPROVAL OF MINUTES** – December 9, 2019 & January 13, 2020 - Andrews motioned to approved the minutes for the December 9, 2019, seconded by Joiner, minutes approved. January 13, 2020 minutes will be read at the March LPAB meeting (due to absentee members).

**ADJOURNMENT – 6:55p**

**NEXT REGULAR MEETING: March 9, 2020**

Minutes prepared by La Tisha Russell

February 14, 2020

Rebecca Lind, Planner III  
City of Oakland Bureau of Planning  
250 Frank H. Ogawa Plaza, Suite 2114  
Oakland, CA 94612

Re: Notice of Preparation of a Draft Environmental Impact Report – 460 24<sup>th</sup> Street Project (PLN19096-ER01), Oakland

Dear Ms. Lind:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Notice of Preparation for a Draft Environmental Impact Report for the 460 24<sup>th</sup> Street Project located at 460 24<sup>th</sup> Street in the City of Oakland (City). EBMUD has the following comments.

#### **WATER SERVICE**

Effective January 1, 2018, water service for new multi-unit structures shall be individually metered or sub-metered in compliance with State Senate Bill 7 (SB-7). SB-7 encourages conservation of water in multi-family residential and mixed-use multi-family and commercial buildings through metering infrastructure for each dwelling unit, including appropriate water billing safeguards for both tenants and landlords. EBMUD water services shall be conditioned for all development projects that are subject to SB-7 requirements and will be released only after the project sponsor has satisfied all requirements and provided evidence of conformance with SB-7.

EBMUD's Central Pressure Zone, with a service elevation between 0 and 100 feet, will serve the proposed development. Individual units in a newly built multi-family or multi-occupancy commercial/industrial premises shall be individually metered. The project site is currently served by 4-inch cast iron pipelines in 24<sup>th</sup> and 25<sup>th</sup> Streets which are inadequate to serve the proposed development. Off-site pipeline improvements, at the project sponsor's expense, will be required to serve the proposed development. Off-site pipeline improvements include, but are not limited to, replacement of existing pipelines to the project site. When the development plans are finalized, the project sponsor should contact EBMUD's New Business Office and request a water service estimate to determine the costs and conditions for providing water service to the proposed project. Engineering and installation of off-site pipeline improvements (i.e., water mains) and services require substantial lead time, which should be provided for in the project sponsor's development schedule.



## **CONTAMINATED SOILS**

EBMUD's Standard Site Assessment Report indicates the potential for contaminated soils or groundwater to be present within the project site boundaries. The project sponsor should be aware that EBMUD will not install piping or services in contaminated soil or groundwater (if groundwater is present at any time during the year at the depth piping is to be installed) that must be handled as a hazardous waste or that may be hazardous to the health and safety of construction and maintenance personnel wearing Level D personal protective equipment. Nor will EBMUD install piping or services in areas where groundwater contaminant concentrations exceed specified limits for discharge to the sanitary sewer system and sewage treatment plants.

The project sponsor must submit copies to EBMUD of all known information regarding soil and groundwater quality within or adjacent to the project boundary and a legally sufficient, complete and specific written remediation plan establishing the methodology, planning and design of all necessary systems for the removal, treatment, and disposal of contaminated soil and groundwater.

EBMUD will not design piping or services until soil and groundwater quality data and remediation plans have been received and reviewed and will not start underground work until remediation has been carried out and documentation of the effectiveness of the remediation has been received and reviewed. If no soil or groundwater quality data exists, or the information supplied by the project sponsor is insufficient, EBMUD may require the project sponsor to perform sampling and analysis to characterize the soil and groundwater that may be encountered during excavation, or EBMUD may perform such sampling and analysis at the project sponsor's expense. If evidence of contamination is discovered during EBMUD work on the project site, work may be suspended until such contamination is adequately characterized and remediated to EBMUD standards.

## **WASTEWATER SERVICE**

EBMUD's Main Wastewater Treatment Plant (MWWTP) and interceptor system are anticipated to have adequate dry weather capacity to accommodate the proposed wastewater flows from this project and to treat such flows provided that the wastewater generated by the project meets the requirements of the EBMUD Wastewater Control Ordinance. However, wet weather flows are a concern. The East Bay regional wastewater collection system experiences exceptionally high peak flows during storms due to excessive infiltration and inflow (I/I) that enters the system through cracks and misconnections in both public and private sewer lines. EBMUD has historically operated three Wet Weather Facilities (WWFs) to provide primary treatment and disinfection for peak wet weather flows that exceed the treatment-capacity of the MWWTP. Due to reinterpretation of applicable law, EBMUD's National Pollutant Discharge Elimination System (NPDES) permit now prohibits discharges from EBMUD's WWFs. Additionally, the seven wastewater collection system agencies that discharge to the EBMUD wastewater interceptor system ("Satellite Agencies") hold NPDES permits that prohibit them from

causing or contributing to WWF discharges. These NPDES permits have removed the regulatory coverage the East Bay wastewater agencies once relied upon to manage peak wet weather flows.

A federal consent decree, negotiated among EBMUD, the Satellite Agencies, the Environmental Protection Agency (EPA), the State Water Resources Control Board (SWRCB), and the Regional Water Quality Control Board (RWQCB), requires EBMUD and the Satellite Agencies to eliminate WWF discharges by 2036. To meet this requirement, actions will need to be taken over time to reduce I/I in the system. The consent decree requires EBMUD to continue implementation of its Regional Private Sewer Lateral Ordinance ([www.eastbaypsl.com](http://www.eastbaypsl.com)), construct various improvements to its interceptor system, and identify key areas of inflow and rapid infiltration over a 22-year period. Over the same time period, the consent decree requires the Satellite Agencies to perform I/I reduction work including sewer main rehabilitation and elimination of inflow sources. EBMUD and the Satellite Agencies must jointly demonstrate at specified intervals that this work has resulted in a sufficient, pre-determined level of reduction in WWF discharges. If sufficient I/I reductions are not achieved, additional investment into the region's wastewater infrastructure would be required, which may result in significant financial implications for East Bay residents.

To ensure that the proposed project contributes to these legally required I/I reductions, the lead agency should require the project applicant to comply with EBMUD's Regional Private Sewer Lateral Ordinance. Additionally, it would be prudent for the lead agency to require the following mitigation measures for the proposed project: (1) replace or rehabilitate any existing sanitary sewer collection systems, including sewer lateral lines to ensure that such systems and lines are free from defects or, alternatively, disconnected from the sanitary sewer system, and (2) ensure any new wastewater collection systems, including sewer lateral lines, for the project are constructed to prevent I/I to the maximum extent feasible while meeting all requirements contained in the Regional Private Sewer Lateral Ordinance and applicable municipal codes or Satellite Agency ordinances.

## **WATER CONSERVATION**

The proposed project presents an opportunity to incorporate water conservation measures. EBMUD requests that the City include in its conditions of approval, a requirement that the project sponsor comply with Assembly Bill 325, "Model Water Efficient Landscape Ordinance," (Division 2, Title 23, California Code of Regulations, Chapter 2.7, Sections 490 through 495). The project sponsor should be aware that Section 31 of EBMUD's Water Service Regulations requires that water service shall not be furnished for new or expanded service unless all the applicable water-efficiency measures described in the regulation are installed at the project sponsor's expense.

Rebecca Lind, Planner III  
February 14, 2020  
Page 4

If you have any questions concerning this response, please contact Timothy R. McGowan,  
Senior Civil Engineer, Major Facilities Planning Section at (510) 287-1981.

Sincerely,



David J. Rehnstrom  
Manager of Water Distribution Planning

DJR:WTJ:sjp  
sb20\_018.doc

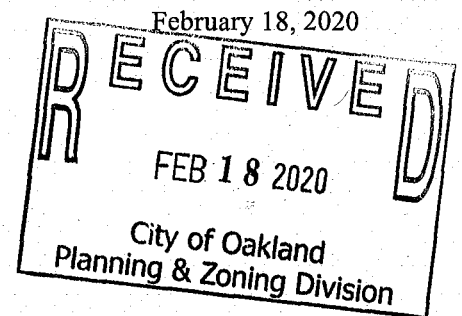
cc: Signature Development Group  
2335 Broadway #200  
Oakland, CA 94612



(By electronic transmission)

Members of the City of Oakland Planning Commission  
Robert Merkamp, Pete Vollmann, Betty Marvin, Rebecca Lind  
250 Frank H. Ogawa Plaza, 3rd Floor  
Oakland, California 94612

**Subject:** PLN 19096, PLN 19096-ER-01



Dear Planning Commissioners and planning staff,

Here are comments on the Notice of Preparation for PLN 19096, PLN 19096-ER-01. Oakland Heritage Alliance is concerned that the 25th Street District API is being eroded, incrementally, over a long period, mostly by this developer. Since the early 2000s, with the Broadway/Grand development, each successive project has entailed considerable destruction of historic resources. Some façades and structures have remained; these survivors have proven to attract visitors, residents, and businesses. However, the aggregated Signature Properties projects have caused and continue to cause cumulative irreversible losses of a historic Area of Primary Importance.

In describing the integrity of the district, one of the defining characteristics is “1-story brick truss roofed garages and largely intact.” The current project removes most of the trussed roofs, so that although some of the façades remain or partially remain, defining characteristics would be compromised. If this process continues, the API will be further damaged. The context and feeling of the historic district are proposed to be drastically altered.

The Environmental Impact Report should provide information on past and on all plans for future projects in the area, even if preliminary—not just this one—because this project is part of a pattern of development that will have major cumulative impacts on the API. We wonder if it may actually fit the concept of “piecemealing”—it proposes to remove all but a thin façade of 4 contributing buildings in the district. Another Signature project is reducing 2 more buildings to shallow façades, next door on 25th street. There are 24 buildings in the garage district. As Signature Property reduces buildings to thin façades, cumulatively this makes a major impact on the district. Can we be confident that this is the last project? What is the full vision? What is the entire program this developer intends to build out?

On page A3.5, there are two other façadectomies that are listed as “not part of the project,” but their architecture suggest that they are indeed a part of the project. They have the same design of the upper floors. This EIR must consider Signature’s larger scope and plans for the entire garage district. This project’s impacts must be considered in the context of Signature’s other projects in the neighborhood.

Here are some detailed questions that should be addressed:

1. Can the project be redesigned to preserve all or a greater portion of the buildings which contribute to the district? Can a deeper setback be used, so that more of the historic building envelopes and roof

truss structures survive, perhaps something such as 30 feet?

2. Can surface materials for the new construction blend in better with its context—the mostly red brick historic buildings? Red or other medium-dark earth tone brick surfaces, especially for the vertical additions, would make the additions less noticeable than the proposed surfaces, which look like stucco or concrete. It would be good to see architectural plans that call out those proposed surfaces.
3. Can this development depart from the recurrent pattern of retaining a few feet of façade, and take a more sophisticated approach, preserving historic building volumes while concentrating new development on less sensitive parts of the project?
4. Can the walkway (here called a “paseo”) be constructed such that it does not carve additional apertures into old buildings? Could it be moved to the east to align with the walk-through that leads to The Hive (another development just to the south, by the same company)?
5. Historic preservation
  - a) Study the impacts to the building more fully including interiors, doors, windows, impacts of new openings on exterior, the impact of converting fronts from industrial/garage vocabulary to retail vocabulary.
  - b) How can the project avoid a repeat of the façadectomies near 24th and Broadway where the buildings look pasted on (attached photo)?
  - c) How can the project avoid a repeat of the Firestone Showroom-to-CVS conversion (attached photo)? A better architectural approach is required.
  - d) How can we work around rather than demolish historic buildings, leaving a shallow façade, and calling it historic preservation? Can the significant variance requested generate a trade-off for benefits such as below-market arts spaces housed in preserved structures?
6. Preservation Alternatives
  - a) Can serious consideration be given to alternatives that leave more historic structures intact?
  - b) Can historic structures be devoted to more significant arts space, concentrating market-rate space in the new building?
  - c) Can the walk-through be re-designed into the newer construction area of the project?
7. Garage Access: Do we read correctly that garage access is through one of the old structures? Can an alternative be provided?
8. Parking
  - a) On the plans when looking at parking vs arts space, all the arts stalls could fit into 8 parking spaces. Do we really value parking **10 times** more than arts space?
  - b) Study climate impacts of the parking. How does this project fit into city’s climate goals?
  - c) Can parking incorporated into the project be converted to other uses in the future?

d) Downtown no longer has a parking minimum. Does including parking reduce the project's capacity to preserve historic structures and light industrial/maker/art spaces?

9. Parking Alternatives

a) Study an alternative that eliminates parking, uses extra space and money saved to retain more historic structures and provide expanded below-market-rate arts spaces.

b) Note that the very small proposed arts spaces along the proposed walkway would not have vehicular access. These spaces appear only marginally viable as commercial spaces, at very small size, off the main sidewalk, and invisible to passing traffic.

10. Walkway ("Paseo")

a) Study designing walkway into the new structure rather than removing historic materials.

b) Avoid destroying a historic building for a walkway (The Spanish/Southern California use of the word "Paseo" renames an 8-foot-wide sidewalk; it may be euphemistic and perhaps the city ought not use it in its own documents.)

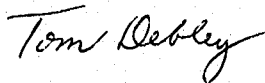
11. Impact on arts space

a) Beyond the minimal arts stalls, how do we create a district where artists can afford to stay, thrive, and expand? These stalls don't make up for the garage and light industrial space lost with this project. The existing historic buildings should be retained for arts space, light industrial space, and commercial activity, and the new structure should be built around it.

12. Just east of the current proposal, the developer undermined and thus destroyed a historic wall that was intended for preservation, a result of lax engineering study and inadequate bracing. We are not aware of any compensation or apology. How is the city going to guarantee performance?

13. Can there be a robust and immediate effort to preserve the brick façades from graffiti and other damage? Extant brick facades should be sealed (but not painted!) with an appropriate coating. Appropriate gentle cleaning methods should be used. Consult the OCHS staff for recommendations as needed. In the long run it will save money to protect these structures from further damage to the surfaces.

Sincerely,



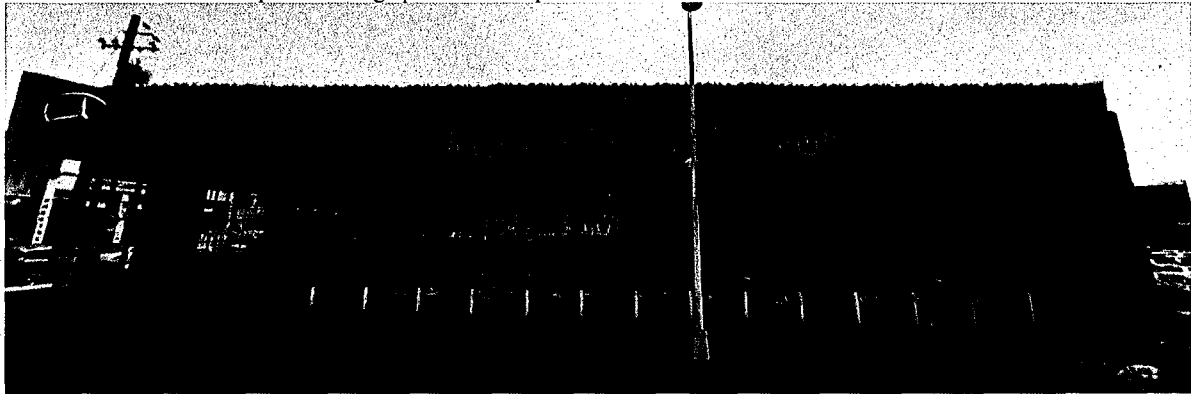
Tom Debley, President

By electronic transmission:

cc: William Gilchrist, Ed Manasse, Robert Merkamp, Bureau of Planning/Zoning

3 photos attached

Before-and-after views of the reworked Firestone Building show a flattened retail window and undistinguished entry treatment, with minimalist canopies intruding upon terracotta pillars.



Broadway façades might have benefitted from a more significant setback of the second story, and design that “turns the corner” to allow historic buildings to preserve some sense of depth.





# Oakland City Planning Commission

MINUTES

*Amanda Monchamp, Chair  
Tom Limon, Vice-Chair  
Jonathan Fearn  
Nischit Hegde  
Clark Manus  
Jahmese Myres  
Sahar Shirazi*

**March 4, 2020**  
**Regular Meeting**

## ROLL CALL

**Present:** Monchamp, Limon, Fearn, Hegde, Manus, Myers, Shirazi

**Excused:** None

**Staff:** Robert Merkamp, Ed Manassee, Brian Mulry, Desmna Armstrong

## WELCOME BY THE CHAIR

## COMMISSION BUSINESS

### Agenda Discussion

- Director's Report #1 has been cancelled.
- Agenda items are out of order and will be called in the sequence of 5, 1, 2, 3, 4 & 7
- Item 6 is moved to April 1, 2020 PC Agenda
- Item 8 is continued to a date uncertain

### Director's Report

1. ~~Census 2020 Presentation - This presentation is being provided in support of Census 2020 in Oakland. It is important for the City of Oakland to have as complete a count as possible to move forward in~~

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*For further information on any case listed on this agenda, please contact the case planner indicated for that item. For further information on Historic Status, please contact the Oakland Cultural Heritage Survey at 510-238-6879. For other questions or general information on the Oakland City Planning Commission, please contact the Planning and Building Department at 510-238-3941.*

♿ This meeting is wheelchair accessible. To request materials in alternative formats, or to request an ASL interpreter, or assistive listening device, please call the Planning and Building Department at 510-238-3941 or TDD 510-238-3254 at least three working days before the meeting. Please refrain from wearing scented products to this meeting so attendees who may experience chemical sensitivities may attend. Thank you.

El lugar de la a reunión es accesible en silla de ruedas. Para solicitar materiales en formatos alternativos o solicitar un intérprete de lenguaje de señas o un aparato para escuchar, por favor llame al Departamento de Planificación y Construcción al 510-238-3941 o TDD 510-238-3254 al menos tres días hábiles antes de la reunión. Por favor absténgase de usar perfumes en esta reunión para que las personas sensitivas a perfume puedan asistir.

此會議場地有適合輪椅出入設施。如需要其他格式的會議資料，或ASL手語服務，或助聽器，請於會議至少三(3)天以前聯絡規劃及建設局，以便安排服務，電話510-238-3941或TDD 510-238-3254。請勿塗搽香氛產品，參加者可能對化學成分敏感。多謝。





~~the coming decade with appropriate political representation and funding.~~

- 2. Update on Community Cabins and Safe RV Sites by Joe DeVries  
-Item Report with no discussion

**Committee Reports**

Commissioner Manus reported out on DRC meeting on March 4, 2020  
Item 1- CWS will move to Planning Commission  
Item 2-2715 Adeline St; Project will return to DRC after commission  
Actions are completed.

**Commission Matters**

None

**City Attorney’s Report**

None

**OPEN FORUM**

At this time members of the public may speak on any item of interest within the Commission’s jurisdiction. At the discretion of the Chair, speakers are generally limited to two minutes or less if there are six or less speakers on an item, and one minute or less if there are more than six speakers.

**Public Speakers:**

- 1. Alexis Schroder
- 2. Linda Pinwell

**CONSENT CALENDAR**

The Commission will take a single roll call vote on all of the items listed below in this section. The vote will be on approval of the staff report and recommendation in each case. Members of the Commission may request that any item on the Consent Calendar be singled out for separate discussion and vote.

**PUBLIC HEARINGS**

The hearing provides opportunity for all concerned persons to speak; the hearing will normally be closed after all testimony has been heard. If you challenge a Commission decision in court, you will be limited to issues raised at the public hearing or in correspondence delivered to the Planning and Building Department, at, or prior to, the public hearing.

The Commission will then vote on the matter based on the staff report and recommendation. If the Commission does not follow the staff recommendation and no alternate findings for decision have been prepared, then the vote on the matter will be considered a “straw” vote, which essentially is a non-binding vote directing staff to return to the Commission at a later date with appropriate findings for decision and, as applicable, conditions of approval that the Commission will consider in making a final decision.

If you wish to be notified on the decision of an agenda item, please indicate the case number and submit a self-addressed stamped envelope, for each case.



Planning Commission decisions that involve “major” cases (e.g., major variances, major conditional use permits) are usually appealable to the City Council. If any interested party seeks to challenge such decision in court, an appeal **must be filed** within ten (10) calendar days of the date of the announcement of the Planning Commission decision and by 4:00 p.m. An appeal shall be on a form provided by the Planning and Building Department, and submitted to the same at 250 Frank H. Ogawa Plaza, Suite 2114, to the attention of the case planner. The appeal shall state specifically wherein it is claimed there was error or abuse of discretion by the Planning Commission or wherein their decision is not supported by substantial evidence and must include payment of the required fee in accordance with the City of Oakland Master Fee Schedule. Failure to timely appeal will preclude you from challenging the City’s decision in court. The appeal itself must raise each and every issue that is contested, along with all the arguments and evidence in the record which supports the basis of the appeal; failure to do so will preclude you from raising such issues during your appeal and/or in court. However, the appeal will be limited to issues and/or evidence presented to the Planning Commission prior to the close of the Planning Commission’s public hearing on the matter.

Any party seeking to challenge a final decision in court must do so within ninety (90) days of the date of the announcement of a final decision, pursuant to Code of Civil Procedure section 1094.6, unless a shorter period applies.

**ITEM #5 CONTUNUED FROM 2/19/20 DUE TO HEARING CANCELLATION**

5.	<b>Location:</b>	<b>8291, 8300, and 8304 Baldwin Street (APN#'s 042-4318-044-00, 043-00, and 042-00) &amp; 685 85<sup>th</sup> Avenue (APN: 042-4318-008-00)</b>
	<b>Proposal:</b>	Appeal of a determination letter that states the rock and concrete crushing activity at the site is: 1) classified as Heavy/High Impact Manufacturing Industrial Activities in the Planning Code, and 2) not a legal nonconforming activity. (Continuation from the 9/18/19 planning Commission Meeting)
<b>Appellant:</b>		William Crotinger and Sean R. Marciniak, for Silverado Contractor
<b>Contact Person/Phone Number:</b>		Sean Marciniak (925)935-9400
<b>Owner:</b>		Kenneth Morris W TR
<b>Case File Number:</b>		<b>DET180082-A01</b>
<b>General Plan:</b>		Commercial Industrial Mix and General Industrial
<b>Zoning:</b>		CIX-2, Commercial Industrial Mix Zone-2 & IG General Industrial Zone
<b>Environmental Determination:</b>		The determination is not considered a project as defined by 15378 of the State CEQA Guidelines and, therefore, does not require CEQA review.
<b>Historic Status:</b>		None
<b>City Council District:</b>		7
<b>Status:</b>		Pending
<b>Action to be Taken:</b>		Decision of Application by Planning Commission
<b>Finality of Decision:</b>		<i>Not Appealable to City Council</i>
<b>For Further Information:</b>		Contact case planner Moe Hackett at (510) 238-39730 or by email: <a href="mailto:mhackett@oaklandnet.com">mhackett@oaklandnet.com</a>

**Staff Member:** Neil Gray and Moe Hackett gave project description

**Applicants:** Sean Marciniak with Silverado Contracors and Argent Materials gave a Power Point with Noise impact report

**Land owner:** Perry Godessbald gave a presentation with Health Pollution and Air Impact report

**Public Speakers:**

1. Shanna Lazeral
2. Margie Lewis
3. Esther Goldsby
4. Catherine Key
5. Ameer Gazemi
6. Bishop Bob Jackson
7. DeAnte Taylor
8. Lulliana Tihea
9. Tina Berak
10. Donald Whiteside
11. Rosemary Sims
12. Antonique Williams
13. Kim Carter
14. Lodi Whiteside
15. Christina Sandoval



- 16. Dwane Jones 17. Angela Scott 18. Isacc Cost Reed 19. Clarence Block 20. Ona Lamply
- 21. Eric Shanks 22. Audree V. Jones Taylor 23. Susan Potts 24. Michael Jones 25. Bill Croger
- 26. Pricilia Wong 27. Jewel Hagolloyd 28. Eric Shanks 29. Jim Moore 30. Mike Hester
- 31. Alison Linquest 32. Moran Rotbaum 33. John Butler 34. Diedra Smith 35. Leah Duncan
- 36. Daryll Taylor 37. Gabriel Lucci 38. Joe Caperola 39. Barbara Leslie

**Motion made by Commissioner Shirazi to:** Uphold appeal and re-classify the rock crushing operation as a General Manufacturing Industrial Activity as recommended by staff

**Seconded by:** Commissioner Fearn

**Action:** 5 ayes, 2, noes

**ITEM #1 CONTUNUED FROM 2/19/20 DUE TO HEARING CANCELLATION**

<b>1.</b>	<b>Location:</b>	<b>Citywide</b>
	<b>Proposal:</b>	Proposed changes to the Planning Code that relate to the following: 1) where to file and who schedules appeals; 2) accessory auto repair in the D-BV-4 Zone; 3) expiration of a Variance; 4) home occupation regulations; 5) Group Assembly Commercial Activities in the D-BV Zone; 6) appeal of determinations regarding General Plan consistency; 7) front setbacks on small lots in the RM Zones; 8) location of commercial facilities above residential facilities; 9) consideration of Design Review and Conditional Use Permit applications with subdivisions; 10) sidewalk width required for sidewalk cafes; 11) use of barbed and razor wire at construction sites; 12) height and distance of walls from open space zones and the right of way; 13) permit requirements for a change in alcohol licenses; 14) carshare requirements in the Downtown zones; 15) timeframe required to approve a Final Planned Unit Development Permit; 16) defining Small Project Design Review as a discretionary project under the California Environmental Quality Act; and 18) reducing parking requirements for fitness centers and other group assembly activities.
	<b>Applicant:</b>	Planning Commission
	<b>Case Number:</b>	<b>ZA190007</b>
	<b>Planning Permits Required:</b>	Planning Code Amendment
	<b>General Plan:</b>	Citywide
	<b>Zoning:</b>	Citywide
	<b>Environmental Determination:</b>	The proposed amendments to the Planning Code rely on the previously certified Final Environmental Impact Reports for the Coliseum Area Specific Plan (2105); Broadway Valdez Specific Plan (2014); West Oakland Specific Plan (2014); Central Estuary Area Plan EIR (2013); Land Use and Transportation Element of the General Plan (1998); the Oakland Estuary Policy Plan (1998); the West Oakland, Central City East, Coliseum, and Oakland Army Base Redevelopment Areas; the 1998 Amendment to the Historic Preservation Element of the General Plan; the 2007-2014 Housing Element Final EIR (2010); and various Redevelopment Plan Final EIRs (collectively, "EIRs"). No further environmental review is required under CEQA Guidelines Sections 15162 and 15163. Moreover, as a separate and independent basis, this proposal is also exempt from CEQA pursuant to CEQA Guidelines Sections 15183 (projects consistent with General Plan and Zoning) and 15061(b)(3) (general rule, no significant effect on the environment).
	<b>City Council District:</b>	Each District
	<b>Status:</b>	Pending



<b>Action to be Taken:</b>	Recommendation to City Council
<b>Staff Recommendation:</b>	Recommend Code Amendments to City Council
<b>Finality of Decision:</b>	Recommendation to City Council
<b>For Further Information:</b>	Contact case planner Neil Gray at (510)238-3878 or ngray@oaklandca.gov.

**Staff Member:** Neil Gray gave project description

**Public Speakers:** None

**Motion to Approve made by:** Commissioner Manus to affirm staff’s approval of the environmental determination to City Council and recommendations to the CUP based on all findings and subject to the conditions of approval.

**Seconded by:** Vice-Chair Limon

**Actions:** 6 ayes, 1 no

**ITEM #2 CONTUNUED FROM 2/19/20 DUE TO HEARING CANCELLATION**

<b>2.</b>	<b>Location:</b>	<b>401 27<sup>th</sup> Street</b>
	<b>Assessors Parcel Number:</b>	<b>009-0684-004-008</b>
	<b>Proposal:</b>	Legalize an existing auto repair and service facility and make interior and façade improvements.
	<b>Owner:</b>	Ishi Real Estate Partnership
	<b>Applicant:</b>	Adam Carr of RRR Architects (510)272-0654
	<b>Case Number:</b>	<b>PLN19-029</b>
	<b>Planning Permits Required:</b>	Minor Conditional Use Permit for an Auto Repair and Cleaning Commercial Activity in the D-BV-4 Zone and Regular Design Review for exterior changes to the building.
	<b>General Plan:</b>	Community Commercial
	<b>Zoning:</b>	D-BV-4
	<b>Environmental Determination:</b>	Exempt 15332; State CEQA Guidelines, Infill development; Exempt 15301; State CEQA Guidelines, Existing Facilities; and Section 15183 of the CEQA Guidelines (projects consistent with a community plan, general plan, or zoning).
	<b>Historic Status:</b>	Not a Potential Designated Historic Property (PDHP)
	<b>City Council District:</b>	3
	<b>Status:</b>	Pending
	<b>Action to be Taken:</b>	Recommendation to City Council. Approval only permitted after adoption of proposed code amendments by the City Council.
	<b>Staff Recommendation:</b>	Approval subject to conditions
	<b>Finality of Decision:</b>	Recommendation is not appealable
	<b>For Further Information:</b>	Contact case planner Neil Gray at (510)238-3878 or ngray@oaklandca.gov.



**Staff Member:** Neil Gray gave project description

**Public Speakers:**

- 1. David Tapacio 2. Janice Johnson 3. Dan Varvauch

**Commissioner Manus recommends** to adopt the staff recommendation of the determination to City Council and to approve the recommendation of the CUP following necessary code Amendments based on the attached findings and subject to the attached conditions of approval.

**Seconded by:** Commissioner Hegde

**Action:** 7 ayes, 0 noes

**ITEM #3 CONTUNUED FROM 2/19/20 DUE TO HEARING CANCELLATION**

<b>3.</b>	<b>Location:</b>	<b>460 24<sup>th</sup> St-465 25<sup>th</sup> St. and 2354 Valley St.</b>
	<b>Assessor's Parcel Number(s):</b>	<b>008-0674-033-1, 008-0674-006,008-0674-007, 008-0739-008</b>
	<b>Proposal:</b>	Scoping session for environmental review of an office and retail proposal on two sites. Site 1: Developing a 99,788 square foot mixed-use office and retail building on a site partially in the 25 <sup>th</sup> Street District API. The project would provide an interior midblock retail paseo connecting 24 <sup>th</sup> and 25 <sup>th</sup> Streets. Site 2: Developing a 640 square foot portion of the lot at 2354 Valley St. with artist and craft stalls.
	<b>Applicant:</b>	Signature Development Group
	<b>Contact Person/Phone Number:</b>	Elisse Douglass 510-251-9269
	<b>Case File Number:</b>	<b>PLN19096, PLN19096-ER01</b>
	<b>General Plan:</b>	Community Commercial
	<b>Zoning:</b>	Site 1:CC-3. Site 2: D-BV-4
	<b>Environmental Determination:</b>	Staff has determined that an Environmental Impact Report (EIR) will be prepared for this project. A NOP to prepare the EIR was published on January 17, 2020. The comment period for the NOP ends on February 20, 2020.
	<b>Historic Status:</b>	Site 1: Garage District API, PDHP OCHS rating Cb1+, C1+ Site 2: 2356-98 Valley St. ASI PDHP OCHS rating D2+
	<b>City Council District:</b>	3
	<b>Action to be Taken:</b>	Receive public and Planning Commission comments about what information and analysis should be included in the EIR.
	<b>For Further Information:</b>	Contact Case Planner <b>Rebecca Lind</b> at <b>(510) 238-3472</b> or by email at <a href="mailto:rlind@oaklandca.gov">rlind@oaklandca.gov</a> .

**Staff Member:** Rebecca Lind gave a presentation

**Applicant:** Elyse Douglas from Signature Development Group gave a Power Point presentation

**Public Speakers:** 1. Naomi Shift 2. Hiyyoko Kurihara 3. Monica Rescala 4. Daniel Levi



- 5. Tom Debly
- 6. Mary Harper
- 7. Peter Berkhalt
- 8. Amelia Marshall

Staff requests the public and the Planning Commission to provide comments on what types of information and analysis, including alternatives, should be considered in the EIR.

**Motion:** None

**Action:** No decision requested during scoping session

**ITEM #4 CONTUNUED FROM 2/19/20 DUE TO HEARING CANCELLATION**

<b>4.</b>	<b>Location:</b>	<b>5650 Balmoral Drive</b>
	<b>Assessor’s Parcel Number:</b>	<b>085-0102-014-00</b>
	<b>Proposal:</b>	The project involves installation of a 75’ tall Monopole Telecommunication Facility (monopole) located on an EBMUD Reservoir property adjacent to the existing water tank. The proposal will also include nine (9) antennas panels measuring 96 x 11.9 x 7.1 inches; six (6) Remote Radio Units (RRU) measuring 15 x 13.2 x 11.1 inches and Surge Suppression units mounted to the monopole; four (4) associated equipment cabinets and a backup generator / battery to be ground mounted on a new screened cement pad located next to the monopole.
	<b>Applicants/ Phone Number:</b>	David Haddock for Verizon Wireless by Ridge Communications.(916) 420-5802
	<b>Owners:</b>	East Bay Municipal Utility District (EBMUD).
	<b>Planning Permits Required:</b>	Major Conditional Use Permit and Design Review to install a new Monopole Telecommunication Facility within a residential zone.
	<b>General Plan:</b>	Institutional
	<b>Zoning:</b>	RH-1 Hillside Residential – 1 Zone
	<b>Environmental Determination:</b>	Exempt, Section 15303 of the State CEQA Guidelines; installation a new telecommunication monopole and Section 15183; projects consistent with a community plan, General Plan or Zoning.
	<b>Historic Status:</b>	Not a Potential Designated Historic Property; Survey Rating: N/A
	<b>City Council District:</b>	6
	<b>Date Filed:</b>	September 26, 2019
	<b>Staff Recommendation:</b>	To approve the application with Conditions
	<b>Finality of Decision:</b>	<i>Appealable to City Council within 10 days</i>
	<b>For Further Information:</b>	Contact case planner Jason Madani, at (510) 238-4790 or jmadani@oaklandca.gov

**Staff Member:** Jason Mandani gave a project description

**Applicant:** David Haddock of Verizon Wireless gave a presentation

**Consultant:** Raj Matzr of Hammott and Eddison, Engineering Consultant gave a presentation

**Public Speakers:** 1. Alexis Schroder



Motion to approve made by: Vice-Chair Limon to affirm staff’s environmental determination and Approve the Major Conditonal Use Permit and Design Review application subject to the attached findings and Conditions of approval.

Seconded by: Commissioner Manus

Actions: 5 ayes, 0 noes, 1 abstain, 1 absence

ITEM #6 REMOVED FROM MARCH 4, 2020 TO APRIL 1, 2020 AGENDA

6.	<b>Location:</b>	<b>2619 Magnolia Street. APN: (005-0445-006-01).</b>
	<b>Proposal:</b>	The proposal is to convert an existing 105,000 square-foot warehouse facility into 12 work/live units for total of 30,248 sf and maintain 40,539 square feet of industrial spaces for industrial use . The project will provide 29 parking spaces on site ; and retention of 739 sf. café located on a 97,139 square-foot parcel.
	<b>Applicant:</b>	Thomas Dolan Architecture
	<b>Contact Person/Phone Number:</b>	(510) 435-4366
	<b>Owner:</b>	Libitzky Holdings, LP; Eric Schmier 2010 Living Trust; Kenneth J. Schmier 2010 Separate Property Trust; Michael Schmier; Aaron Aftergood; Hannah Reinstein.
	<b>Case File Number:</b>	<b>PLN19-153</b>
	<b>Planning Permits Required:</b>	Major Conditional Use Permit and Design Review to convert an existing industrial building into work & live spaces located on 97,139 square-foot parcel.
	<b>General Plan:</b>	Business Mix
	<b>Zoning:</b>	CIX-1A West Oakland Plan Area Commercial Industrial Mix-1A Industrial Zone. S-19 Health and Safety Protection Combining Zone.
	<b>Environmental Determination:</b>	Exempt, Section 15301 and 15303 of the State CEQA Guidelines; addition and alterations to an existing warehouse facilities; Section 15183 of the State CEQA Guidelines; projects consistent with a Community Plan, General Plan or Zoning.
	<b>Historic Status:</b>	Potential Designated Historic Property; Survey Rating: C3
	<b>City Council District:</b>	3
	<b>Status:</b>	Pending
	<b>Date Filed:</b>	June 25, 2019
	<b>Finality of Decision:</b>	<i>Appealable to City Council within 10 days</i>
	<b>For Further Information:</b>	Contact case planner Jason Madani at (510) 238-4790 or by email: <a href="mailto:jmadani@oaklandca.gov">jmadani@oaklandca.gov</a>

7.	<b>Location:</b>	<b>Brooklyn Basin (formerly known as “Oak to 9th Avenue”); specifically, Parcel H</b>
	<b>Assessor’s Parcel Number(s):</b>	<b>APN 018 046501700</b>



<b>Proposal:</b>	Final Development Permit (FDP) for Parcel H, including 380 residential units, approximately 16,598 sf ground-floor commercial space, and 307 parking spaces in an 8 story building. Includes design for Harbor Lane East, a private street.
<b>Applicant:</b>	Zarsion-OHP I, LLC
<b>Contact Person/ Phone Number:</b>	Patrick Van Ness, (510) 251-9272
<b>Owner:</b>	Zarsion-OHP I, LLC
<b>Case File Number:</b>	PUD06010-PUDF010
<b>Planning Permits Required:</b>	FDP, compliance with CEQA, variance request for reduction of parking and variance request for reduction of residential open space
<b>General Plan and Estuary Plan:</b>	Planned Waterfront Development-1
<b>Zoning:</b>	Planned Waterfront Zoning District (PWD-4)/D-OTN-4
<b>Environmental Determination:</b>	Final EIR certified on January 20, 2009
<b>Historic Status:</b>	Non-Historic Property
<b>Service Delivery District:</b>	3
<b>City Council District:</b>	2 – Nikki Fortunato Bas
<b>Action to be Taken:</b>	Consider approval of FDP and Two Minor Variances, based on attached findings
<b>Finality of Decision:</b>	Appealable to City Council
<b>For Further Information:</b>	Contact case planner <b>Dara O’Byrne</b> at <b>510-238-6983</b> or by e-mail at <b>do Byrne@oaklandca.gov</b>

**Staff Member:** Dara O’Byrne gave a presentation

**Applicant:** Patrick VanNess of ZUHP gave a Power Point Presentation

**Public Speakers:**

**Motion to approve made by:** Commissioner Fearn pursuant to CEQA Guidelines Section 15162, and based on the attached findings (and incorporated herein by reference), rely on the Oak to Ninth Avenue Project EIR as adequate under CEQA for analysis of the Brooklyn Basin Parcel H Final Development Permit; Approve the Brooklyn Basin Parcel H Final Development Permit, subject to the attached findings; Approve a Minor Variance for residential off-street parking requirements, subject to the attached findings; and Approve a Minor Variance for residential open space requirements, subject to the attached findings.

Action: 6 ayes, 0 noes, 1 absence

**APPEALS**

The Commission will take testimony on each appeal. If you challenge a Commission decision in court, you will be limited to issues raised at the public hearing or in correspondence delivered to the Planning and Building Department, at, or prior to, to the public hearing; provided, however, such issues were previously raised in the appeal itself.

Following testimony, the Commission will vote on the staff report and recommendation. If the Commission reverses/overturns the staff decision and no alternate findings for decisions have been prepared, then the vote on the matter will be considered a “straw” vote, which essentially is a non-binding vote directing staff to return to the Commission at a later date with appropriate findings for decision and, as applicable, conditions of approval that the Commission will consider in making a final decision. Unless otherwise noted, the decisions in the following matters are final and not administratively





appealable. Any party seeking to challenge these decisions in court must do so within ninety (90) days of the date of the announcement of the final decision, pursuant to Code of Civil Procedure section 1094.6, unless a shorter period applies.

ITEM #8 CONTINUED TO A DATE UNCERTAIN

<b>8. Location:</b>	<b>801-805 Washington</b>
<b>Assessor's Parcel Number(s):</b>	<b>001-020302700</b>
<b>Proposal:</b>	Appeal of Zoning Manager's Determination filed under DET190030
<b>Case File Numbers:</b>	APL19023 (Appeal of DET190030)
<b>Appellants:</b>	Kai Eng and Pamela Eng
<b>Owner:</b>	Kai Eng and Pamela Eng
<b>Planning Permits Required:</b>	No permit required, item is regarding a Residential Hotel Status Determination.
<b>General Plan:</b>	Central Business District
<b>Zoning:</b>	CBD P/S-7
<b>Environmental Determination:</b>	Categorically Exempt under California Environmental Quality Act (CEQA) Guidelines Section 15306: Information Collection
<b>Historic Status:</b>	Local Register, API: Old Oakland, OCHS Rating: B*1+, Local Landmark (Gooch (A.J.) Block Winsor House)
<b>City Council District:</b>	3
<b>Staff Recommendation</b>	Deny the Appeal and uphold the Zoning Manager's Determination.
<b>Finality of Decision:</b>	Final Decision, Not Administratively Appealable per OMC 17.132.030
<b>For Further Information:</b>	Contact Case Planner <b>Brittany Lenoir</b> at (510) 238-4977 or <b>blenoir@oaklandca.gov</b>

COMMISSION BUSINESS

Approval of Minutes: None

Correspondence: Note from Secretary Merkamp 700 filing due in April

City Council Actions:

1. Project: Mandela Hotel Appeal was heard by City Council and effectively denying the project based on CUP specific to hotels were not satisfied.
2. Project: 1750 Broadway two appeals were heard together and both denied upholding the approval of 1750 Broadway.

ADJOURNMENT At 10:53 P.M.



**ROBERT D. MERKAMP**  
**Zoning Manager**  
**Secretary to the Planning Commission**  
**Planning and Building Department**

**NEXT REGULAR MEETING:** March 18, 2020



March 6, 2020

(By electronic transmission)

Members of the City of Oakland Planning Commission  
Robert Merkamp, Pete Vollmann, Betty Marvin, Rebecca Lind  
250 Frank H. Ogawa Plaza, 3rd Floor  
Oakland, California 94612

**Subject:** PLN 19096, PLN 19096-ER-01 Addendum to our comments on the NOP

Dear Planning Commissioners and planning staff,

Here are some additional comments on the Notice of Preparation for PLN 19096, PLN 19096-ER-01. As stated earlier, Oakland Heritage Alliance is concerned that the 25th Street District API is being eroded, incrementally, over a long period, mostly by this developer. Since the early 2000s, with the Broadway/Grand development, each successive project has entailed considerable destruction of historic resources. Some façades and structures have remained; these survivors have proven to attract visitors, residents, and businesses. However, the aggregated Signature Properties projects have caused and continue to cause cumulative irreversible losses of a historic Area of Primary Importance.

In a recent project, a remnant exterior wall that the developer had agreed to retain was inadequately studied, insufficiently shored up, and was declared a hazard by the building department, as it began to fail, resulting in immediate demolition. We do not believe that replication or simulation is an acceptable substitute for the preservation of original historic fabric, and so we would like to make sure that for all future projects in this API the conditions of approval and any environmental documents include more robust protection, better mitigations, and a commitment to ongoing monitoring by the city.

We copy below three paragraphs, from a San Francisco example, of requirements for construction amid historic resources. In addition, we also request that specific language be included in approvals for guaranteeing performance in the preservation elements of the proposed project, providing bonding, and detailing exactly what measures would be required should there be damage to a historic resource, whether replication, restoration, reconstruction, substantial financial contribution to other historic preservation efforts in the area, or other restorative measures.

#### Construction Impacts

Construction activity can generate vibration that can cause structural damage to nearby buildings. As described in the FEIR (pp. 269-270), pile-driving, as well as other construction activity would result in a potentially significant impact on unreinforced masonry buildings, as well as non-engineered timber buildings. FEIR **Mitigation Measures M-CP-5a** (Construction Best Practices for Historical Resources, p. 270) and **M-CP-5b** (Construction Monitoring Program for Historical Resources, p. 270) were identified in the FEIR to reduce Plan impacts to a less-than-significant level by requiring contractors to implement best-management practices during construction, as well as perform pre-construction surveys of historical resources within 125 feet of a project site.

**FEIR M-CP-5b: Construction Monitoring Program for Historical Resources.**

The project sponsor shall undertake a monitoring program to minimize damage to adjacent historic buildings and to ensure that any such damage is documented and repaired. The monitoring program would include the following components. Prior to the start of any ground-disturbing activity, the project sponsor shall engage a historic architect or qualified historic preservation professional to undertake a preconstruction survey of historical resource(s) identified by the Planning Department within 125 feet of planned construction to document and photograph the buildings' existing conditions. Based on the construction and condition of the resource(s), the consultant shall also establish a maximum vibration level that shall not be exceeded at each building, based on existing condition, character-defining features, soils conditions, and anticipated construction practices (a common standard is 0.2 inches per second, peak particle velocity). To ensure that vibration levels do not exceed the established standard, the project sponsor shall monitor vibration levels at each structure and shall prohibit vibratory construction activities that generate vibration levels in excess of the standard.

Should vibration levels be observed in excess of the standard, construction shall be halted and alternative techniques put in practice, to the extent feasible. The consultant shall conduct regular periodic inspections of each building during ground-disturbing activity on the project site. Should damage to either building occur, the building(s) shall be remediated to its preconstruction condition at the conclusion of ground-disturbing activity on the site.

**FEIR M-CP-5a: Construction Best Practices for Historical Resources.**

The project sponsor of a development project in the Plan area shall incorporate into construction specifications for the proposed project a requirement that the construction contractor(s) use all feasible means to avoid damage to adjacent and nearby historic buildings, including, but not necessarily limited to, staging of equipment and materials as far as possible from historic buildings to avoid direct impact damage; using techniques in demolition (of the parking lot), excavation, shoring, and construction that create the minimum feasible vibration; maintaining a buffer zone when possible between heavy equipment and historical resource(s) within 125 feet, as identified by the Planning Department; appropriately shoring excavation sidewalls to prevent movement of adjacent structures; design and installation of the new foundation to minimize uplift of adjacent soils; ensuring adequate drainage from adjacent sites; covering the roof of adjacent structures to avoid damage from falling objects; and ensuring appropriate security to minimize risks of vandalism and fire.

We appreciate your adding these to our previous comments. Thank you!

Sincerely,

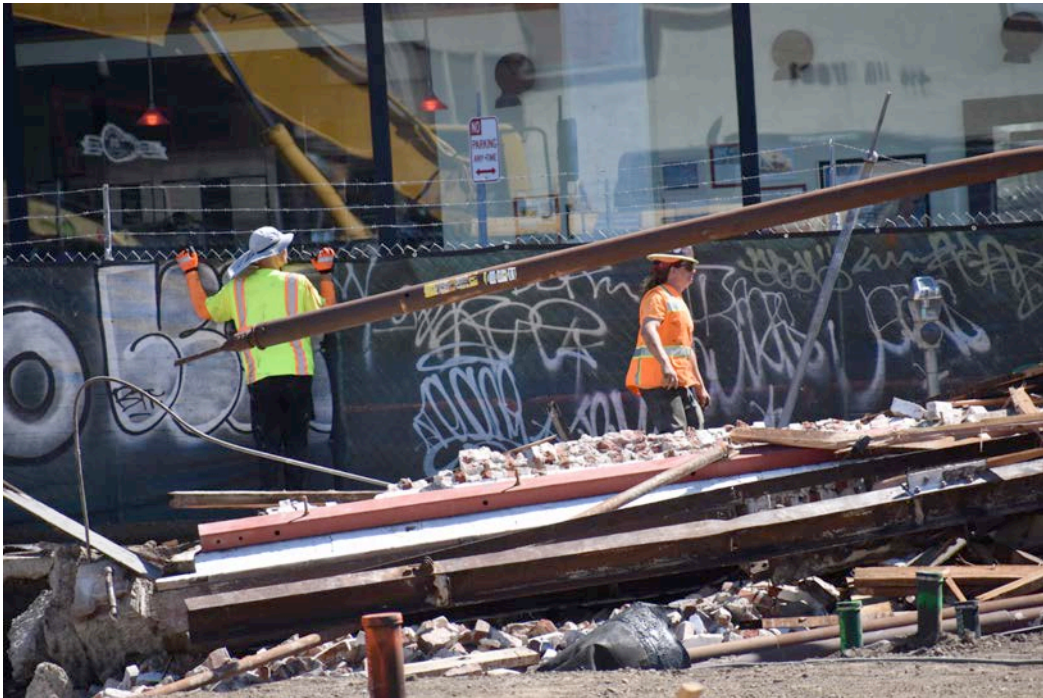


Tom Debley, President

By electronic transmission:

cc: William Gilchrist, Ed Manasse, Robert Merkamp, Bureau of Planning/Zoning

2 photos attached : historic loss on 24th St.



**From:** [Lind, Rebecca](#)  
**To:** [Elisse Douglass](#); [Jillian Feyk-Miney](#)  
**Subject:** Fw: Signature Proposal for 24th and 25th Street  
**Date:** Thursday, March 19, 2020 3:30:38 PM

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Additional comments

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**From:** Hiroko Kurihara <h2oakland@sbcglobal.net>  
**Sent:** Monday, March 9, 2020 3:41 AM  
**To:** Lind, Rebecca <RLind@oaklandca.gov>  
**Cc:** Manasse, Edward <EManasse@oaklandca.gov>; Gilchrist, William <WGilchrist@oaklandca.gov>; Bedoya, Roberto <RBedoya@oaklandca.gov>; Naomi Schiff <naomi@17th.com>; Ashara Ekundayo <ashara@ashara.io>; Lonnie Lee <lonnie@vessel-gallery.com>; Peter Birkholz <pbirkholz@gmail.com>; Mercury 20 <milgrim@gmail.com>; Eric Arnold <escribe68@gmail.com>; Binta Ayofemi <binta.ayofemi@gmail.com>; Regina Evans <evans.regina@gmail.com>; Nischit Hegde <nhegdeopc@gmail.com>; Jahmese Myres <jmyres.oakplanningcommission@gmail.com>; Tom Limon <tlimon.opc@gmail.com>; Jonathan Fearn <jfearnopc@gmail.com>; Amanda Monchamp <amandamonchamp@gmail.com>; Clark Manus <cmanusopc@gmail.com>; Sahar Shirazi <sshiraziopc@gmail.com>  
**Subject:** Signature Proposal for 24th and 25th Street

[EXTERNAL] This email originated outside of the City of Oakland. Please do not click links or open attachments unless you recognize the sender and expect the message.

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Dear Ms. Lind,

Thank you for receiving these additional considerations as part of the NOPA EIR for the 99,788 SF project proposed by Signature Development Group. I had emailed Friday that I wouldn't be able to submit comments by 4PM due to unexpectedly needing to assist a friend during First Friday.

The [National Association of County and City Health Officials](#) (NACCHO) deems Art and Culture and Creative Placemaking as an indicator of an equitable and healthy community.

*"... structural inequities [are] present in the distribution of resources and power in this country. [T]o redress this history, communities need strong assets to build equitable places, as well as social capital and collective efficacy to overcome the systems historically contributing to health inequity.*

*The past decade has seen robust research on ecological models of health, place-based outcomes, and the connection between arts and culture, the outdoors, and health. Economic improvements are not the only important factor for improving health outcomes of a neighborhood; local creative places and organizations play a big role.*

*Central to moving America towards health equity is building healthier communities. Research*

*shows that citizens that participate in neighborhood organizations report significantly better health. The growing body of evidence shows that health outcomes are determined by strong, culturally resilient communities. As such, CPHC is developing strategies to leverage the arts and culture's role as a driver of community health.*

***Origins of Creative Placemaking***

*Land use planning and concern for the built environment originated from a public health focus in the nineteenth century when overcrowding, factory pollution, and poor sanitation led to infectious diseases being the major cause of death in the United States. The new challenge is chronic disease prevention because nearly 80% of the 10,000 people who turn 65 each day have at least one chronic health condition, and most have multiple chronic conditions. Creative placemaking enables local health departments (LHD) to address the modern challenge of chronic disease prevention and management through place-based community engagement.*

***Improving Health Outcomes through Arts & Cultural Expression and Parks & Green Space***

*[These] two determinants, based on evidence and research, have strong impacts on health outcomes at an individual and population level: art and cultural expression, and parks and green space. Arts and culture can mend collective trauma, improve social isolation and exclusion, address mental health, and reduce certain chronic diseases. The presence of parks and green space also has a demonstrated impact on mental health, social isolation and exclusion, and chronic disease, not to mention the benefits of reducing heat islands and stormwater runoff."*

=====

**Please consider the impact of this proposal on this vital public health issue.  
Culture IS Equity.**

**There MUST be community arts benefits built into the ground floor spaces of this project and the walkway must be built as a true paseo further southeast on the property where there is a current open space that is at least 25 ft wide and is in direct axial alignment with "The Hive" at 24th Street and additional outdoor event space on 25th Street.**

**Lastly, the architectural design, must be revised to reflect the design excellence that is deserved in the soon to be designated Art + Garage Cultural District.**

**The historically designed spaces cannot just remain at the facade and must reflect the ground floor uses as built expressions of their current industrial and arts uses, not simply retail and certainly not entrances into parking structures.**

This past First Friday, I was struck by the diversity of Oakland and what makes our town, still, so special.

Thank you again for receiving these additions to previous submissions.

Hiroko Kurihara

Co-Founder of the AGD Group

**hiroko m kurihara**

510. 384. 3146



# Appendix B

## Initial Study

# ENVIRONMENTAL CHECKLIST

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## Initial Study

1. **Project Title:** 460 24<sup>th</sup> Street Project
2. **Lead Agency Name and Address:** City of Oakland  
Bureau of Planning  
250 Frank H. Ogawa Plaza, Suite 2114  
Oakland, CA 94612
3. **Project Case File Number:** PLN19096-ER01
4. **Contact Person and Phone Number:** Rebecca Lind, Planner IV  
Bureau of Planning  
250 Frank H. Ogawa Plaza, Suite 2114  
Oakland, CA 94612  
(510) 238-3472  
rlind@oaklandca.gov
5. **Project Location:** 460 24<sup>th</sup> Street  
Assessor's Parcel Nos. 008-0674-033-1,  
008-0674-006 and -007, and 008-0739-008
6. **Project Applicant's Name and Address:** Signature Development Group  
Attn: Jamie Choy, Project Manager  
2335 Broadway, Suite 200  
Oakland, CA 94612  
(510) 251-9270  
jchoy@signaturedevelopment.com
7. **Existing General Plan Designation(s):** The General Plan land use designation for the 24<sup>th</sup> and 25<sup>th</sup> Street site is Community Commercial (CC) and the Valley Street site has a General Plan land use designation of Central Business District (CBD).
8. **Existing Zoning:** The 24<sup>th</sup> and 25<sup>th</sup> Street site is located in the Community Commercial (CC-3) zone, and is also included in the yet to be adopted Downtown Oakland Specific Plan (DOSP). The Valley Street site is located in the Broadway Valdez District Specific Plan (BVDSP) Area, and specifically Subdistrict 1 of the Valdez Triangle Subarea, within the Broadway Valdez District Mixed Use - 4 Commercial Zone (D-BV-4) zone.

## **9. Description of Project:**

The 460 24<sup>th</sup> Street Project (Project) description is provided in environmental impact report (EIR) Chapter 3, Project Description, to which this Initial Study is attached.

## **10. Surrounding Land Uses and Setting.**

The Project setting, and surrounding and existing project site land use characteristics are provided in EIR Chapter 3, Project Description. A brief environmental setting also accompanies each environmental topic discussion in Section 2, Environmental Checklist, of this Initial Study.

## **11. Other public agencies whose approval is required**

The currently anticipated City and other agency permits and approvals that may be required for the Project are listed in Section 3.5, Discretionary Actions and Other Planning Considerations, of EIR Chapter 3, to which this Initial Study is attached.

## **12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

*Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.*

On October 20, 2021, the City sent letters to eight Native American tribes provided by the Native American Heritage Commission as potentially interested in projects in the City of Oakland. The letters provided a description of the Project, a map showing the Project location, and an invitation to respond to a request for consultation within 30 days (as required by PRC Section 21080.3.1.d). No responses were received.

# 1. Environmental Factors Potentially Affected


The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- |  |  |  |
|--|--|--|
| <input checked="" type="checkbox"/> Aesthetics/Shadow/ Wind <sup>1</sup> | <input type="checkbox"/> Agriculture/Forestry Resources                | <input type="checkbox"/> Air Quality                   |
| <input type="checkbox"/> Biological Resources                            | <input checked="" type="checkbox"/> Cultural/Tribal Cultural Resources | <input type="checkbox"/> Energy                        |
| <input type="checkbox"/> Geology/Soils                                   | <input type="checkbox"/> Greenhouse Gas Emissions                      | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality                         | <input type="checkbox"/> Land Use/Planning                             | <input type="checkbox"/> Mineral Resources             |
| <input type="checkbox"/> Noise   | <input type="checkbox"/> Population/Housing                            | <input type="checkbox"/> Public Services               |
| <input type="checkbox"/> Recreation                                      | <input type="checkbox"/> Transportation                                | <input type="checkbox"/> Utilities/Service Systems     |
| <input type="checkbox"/> Wildfire  | <input type="checkbox"/> Mandatory Findings of Significance            |  |

## DETERMINATION: (To be completed by the Lead Agency)

On the basis of this Initial Study:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
Edward Manasse (Apr 21, 2022 14:24 PDT)  
Signature

Apr 21, 2022  
Date

<sup>1</sup> As discussed in Section 2.1.2 below, the Project qualifies as an employment center project on an in-fill site located within a transit priority area under CEQA Section 21099(d), and this EIR need not consider aesthetics in determining the significance of the Project impacts under CEQA. Aesthetics is addressed for informational purposes only.

## 2. Environmental Checklist

### 2.1 Aesthetics, Shadow, and Wind

<u>Issues (and Supporting Information Sources):</u>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporated</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
<b>I. AESTHETICS, SHADOW, AND WIND —</b> The project would have a significant impact on the environment if it would:				
1) Have a substantial adverse effect on a scenic vista; <sup>2</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state or locally designated scenic highway;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Substantially degrade the existing visual character or quality of the site and its surroundings;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Create a new source of substantial light or glare which would substantially and adversely affect daytime or nighttime views in the area;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) 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);	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7) Cast shadow that substantially impairs the beneficial use of any public or quasi-public park, lawn, garden, or open space;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8) Cast shadow on an historic resource, as defined by CEQA Guidelines section 15064.5(a), such that the shadow would materially impair the resource's historic significance by materially altering those physical characteristics of the resource that convey its historical significance and that justify its inclusion on or eligibility for listing in the National Register of Historic Places, California Register of Historical Resources, Local Register of historical resources, or a historical resource survey form (DPR Form 523) with a rating of 1-5;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9) 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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10) Create winds that exceed 36 mph for more than one hour during daylight hours during the year. <sup>3</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>2</sup> **NOTE:** Only impacts to scenic views enjoyed by members of the public generally (but not private views) are potentially significant.

<sup>3</sup> **NOTE:** 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.,

### 2.1.1 Setting

See Section 4.1, *Aesthetics, Shadow, and Wind*, of the EIR, for a description of the existing environmental setting as it relates to aesthetics, shadow, and wind.

### 2.1.2 Topics Considered and No Impact Determined

#### ***Aesthetics (Criteria 1 through 4)***

Under CEQA Section 21099(d), “Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an in-fill site located within a transit priority area shall not be considered significant impacts on the environment.” Accordingly, for projects that meet all three of the following criteria, aesthetics is no longer considered in determining if a project were to have the potential to result in significant environmental effects:

- The project is in a Transit Priority Area (TPA).
- The project is on an in-fill site.
- The project is residential, mixed-use residential, or an employment center.

The Project meets all three of the above criteria because it is (1) within a Transit Priority Area (TPA) according to *Plan Bay Area 2040* (see Section 2.11, *Land Use and Planning*); (2) on a site that was previously developed and is within an urban area of Oakland that includes commercial, office, and residential uses; and (3) meets the definition of an employment center as the project site is zoned for commercial use and the Project has a floor area ratio (FAR) greater than 0.75. For this reason, this Initial Study and EIR need not consider aesthetics in determining the significance of the Project impacts under CEQA. However, in order to disclose aesthetic considerations of the Project and requested height variance to the public and decision makers, this topic is addressed in Section 4.1, *Aesthetics, Shadow, and Wind*, of the EIR for informational purposes only.

#### ***Wind (Criterion 10)***

According to the City’s CEQA Thresholds of Significance, wind analysis only needs to be done if a 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. The Project would construct a building ranging from approximately 20-85 feet in height, less than 100 feet. Therefore, the Project would have no impact with regard to wind.

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Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown. Downtown is defined in the Land Use and Transportation Element of the General Plan (page 67) as the area generally bounded by West Grand Avenue to the north, Lake Merritt and Channel Park to the east, the Oakland Estuary to the south and I-980/Brush Street to the west. The wind analysis must consider the project’s contribution to wind impacts to on- and off-site public and private spaces. Only impacts to public spaces (on- and off-site) and off-site private spaces are considered CEQA impacts. Although impacts to on-site private spaces are considered a planning-related non-CEQA issue, such potential impacts still must be analyzed.

### 2.1.3 Project Impacts and Discussion

See Section 4.1, *Aesthetics, Shadow, and Wind*, of the EIR, for an evaluation of potential impacts of the Project on shadow.

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## 2.2 Agriculture and Forestry Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>II. AGRICULTURE AND FORESTRY RESOURCES —</b>				
The project would have a significant impact on the environment if it would:				
1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g));	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Result in the loss of forest land or conversion of forest land to non-forest use; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.2.1 Setting

The entirety of Downtown Oakland, including the project site, is located within an area designated as urban and built-up land by the California Department of Conservation’s (DOC) Farmland Mapping and Monitoring Program (FMMP) (DOC, 2019). There are also no Williamson Act contracts on or adjacent to the project site (DOC, 2015). The City of Oakland does not designate land uses for agriculture or forestry in its General Plan or Zoning Map (City of Oakland, 2015; 2018).

### 2.2.2 Topics Considered and No Impact Determined

Since the project site is located on land designated as urban and built-up land, and is not subject to a Williamson Act contract, the Project would not convert FMMP- designated Farmland or cause a conflict with an existing Williamson Act contract.

The 24<sup>th</sup> and 25<sup>th</sup> Street site currently has a land use designation of Community Commercial (CC) and the Valley Street site has a General Plan land use designation of Central Business District (CBD). The 24<sup>th</sup> and 25<sup>th</sup> Street site is located in the Community Commercial (CC-3) zone, and is also included in the yet to be adopted Downtown Oakland Specific Plan (DOSP). The Valley Street site is located in the Broadway Valdez District Specific Plan (BVDSP) Area, and specifically Subdistrict 1 of the Valdez Triangle Subarea, within the Broadway Valdez District Mixed Use - 4 Commercial Zone (D-BV-4) zone. The project site does not contain agricultural production or forest land on site, and does not propose agricultural or forestry-related land uses as



part of the Project. Thus, the Project would not conflict with existing zoning for agricultural use, forest land, or timberland, nor would it result in the loss or conversion of forest land.

Current uses on the 24<sup>th</sup> and 25<sup>th</sup> Street site include automotive repair uses, vacant garage buildings, and a surface parking lot. The Valley Street site is also occupied by a surface parking lot. Therefore, the change in use of the 24<sup>th</sup> and 25<sup>th</sup> Street site from automotive repair uses and parking to a mixed-use retail and office development, and the change in use of the Valley Street site from a parking to pop-up retail use would not result in the conversion of Farmland to non-agricultural use, or conversion of forest land to non-forest use. Therefore, no impact to agricultural and forestry resources would occur.

### **2.2.3 Cumulative**

Because the Project would have no impact related to the loss or conversion of agricultural or forestry resources, it would not cause or contribute to any cumulative impact to these resources.

### **2.2.4 References**

California Department of Conservation (DOC), 2019. California Important Farmland Finder, Alameda County Important Farmland 2016, database updated December 27, 2019. <https://gis.data.ca.gov/datasets/8ab78d6c403b402786cc231941d1b929>, accessed December 30, 2020.

DOC, 2015. Division of Land Resource Protection, *Alameda County Williamson Act FY 2014/2015*.

City of Oakland, 2018. *City of Oakland Zoning and Estuary Policy Plan Maps*. Bureau of Planning. December 11, 2018. [https://cao-94612.s3.amazonaws.com/documents/Zoning\\_EPP\\_Map\\_20181211.pdf](https://cao-94612.s3.amazonaws.com/documents/Zoning_EPP_Map_20181211.pdf), accessed December 30, 2020.

City of Oakland, 2015. Planning & Building Department, *General Plan Designations*, May 19, 2015. <https://cao-94612.s3.amazonaws.com/documents/General-Plan-Designations-20150519.pdf>, accessed December 30, 2020.

## 2.3 Air Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>III. AIR QUALITY —</b>				
The project would have a significant impact on the environment if it would: <sup>4,5</sup>				
1) During project construction result in average daily emissions of 54 pounds per day of ROG, NOx, or PM2.5 or 82 pounds per day of PM10;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) During project operation result in average daily emissions of 54 pounds per day of ROG, NOx, or PM2.5 or 82 pounds per day of PM10; or result in maximum annual emissions of 10 tons per year of ROG, NOx, or PM2.5 or 15 tons per year of PM10;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Contribute to carbon monoxide (CO) concentrations exceeding the California Ambient Air Quality Standards (CAAQS) of nine parts per million (ppm) averaged over eight hours and 20 ppm for one hour; <sup>6</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) For new <b>sources</b> of Toxic Air Contaminants (TACs), during either project construction or project operation expose sensitive receptors to substantial levels of TACs <b>under project conditions</b> resulting in (a) an increase in cancer risk level greater than 10 in one million, (b) a non-cancer risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average PM2.5 of greater than 0.3 micrograms per cubic meter; or, <b>under cumulative conditions</b> , resulting in (a) a cancer risk level greater than 100 in a million, (b) a non-cancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average PM2.5 of greater than 0.8 micrograms per cubic meter; <sup>7</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<sup>4</sup> **NOTE:** The thresholds below that pertain to the effect of the environment on the project (as compared to the project's impact on the environment) are not legally required to be analyzed under CEQA but are nevertheless evaluated in order to provide information to decision-makers and the public.

<sup>5</sup> **NOTE:** The thresholds below related to criteria air pollutants (thresholds 1 through 3) pertain to impacts that are, by their nature, cumulative impacts because one project by itself cannot generate air pollution that would violate regional air quality standards. Thresholds 1 through 3 pertain to a project's contribution to cumulative impacts but are labeled "Project-Level Impacts" here to be consistent with the terminology used by BAAQMD.

<sup>6</sup> **NOTE:** Pursuant to BAAQMD CEQA Guidelines, localized CO concentrations should be estimated for projects in which (a) project-generated traffic would conflict with an applicable congestion management program established by the county congestion management agency or (b) project-generated traffic would increase traffic volumes at affected intersections to more than 44,000 vehicles per hour (or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited, such as tunnels, parking garages, bridge underpasses, natural or urban street canyons, and below-grade roadways). In Oakland, only the MacArthur Maze portion of Interstate 580 exceeds the 44,000 vehicles per hour screening criteria.

<sup>7</sup> **NOTE:** Pursuant to the BAAQMD CEQA Guidelines, when siting new TAC sources consider receptors located within 1,000 feet. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers. The cumulative analysis should consider the combined risk from all TAC sources.

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
5) Expose new <b>sensitive receptors</b> to substantial ambient levels of Toxic Air Contaminants (TACs) resulting in (a) a cancer risk level greater than 100 in a million, (b) a non-cancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average PM <sub>2.5</sub> of greater than 0.8 micrograms per cubic meter, <sup>8</sup> or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6) Frequently and for a substantial duration, create or expose sensitive receptors to substantial objectionable odors affecting a substantial number of people. <sup>9</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.3.1 Setting

The project site is located in the City of Oakland within the San Francisco Bay Area Air Basin (Bay Area) under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The Bay Area is designated as a non-attainment area for violation of the state 1-hour and 8-hour ozone standards, the federal ozone 8-hour standard, the state respirable particulate matter (PM<sub>10</sub>) 24-hour and annual average standards, the state fine particulate matter (PM<sub>2.5</sub>) annual average standard, and the federal PM<sub>2.5</sub> 24-hour standard. The Bay Area is designated as attainment for all other state and federal standards (BAAQMD, 2017a). The BAAQMD has prepared the 2017 Clean Air Plan (2017 CAP; BAAQMD, 2017b) to address non-attainment issues in the Bay Area. This is the applicable air quality plan for the Project area.

#### ***City of Oakland General Plan***

##### **Land Use and Transportation Element (LUTE)**

The LUTE (which includes the Pedestrian Master Plan and Bicycle Master Plan) of the Oakland General Plan contains the following objectives that address issues related to reducing transportation-related sources of emissions (City of Oakland, 2007):

- **Objective T2:** Provide mixed use, transit-oriented development that encourages public transit use and increases pedestrian and bicycle trips at major transportation nodes.
- **Objective T4:** Increase use of alternative modes of transportation.
- **Objective T6:** Make streets safe, pedestrian accessible, and attractive.

##### **Open Space, Conservation and Recreation Element (OSCAR)**

The OSCAR Element of the Oakland General Plan contains the following air quality-related policies that would apply to the proposed Project (City of Oakland, 1996).

<sup>8</sup> **NOTE:** Pursuant to the BAAQMD CEQA Guidelines, when siting new sensitive receptors consider TAC sources located within 1,000 feet including, but not limited to, stationary sources, freeways, major roadways (10,000 or greater vehicles per day), truck distribution centers, airports, seaports, ferry terminals, and rail lines. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers.

<sup>9</sup> **NOTE:** For this threshold, sensitive receptors include residential uses, schools, daycare centers, nursing homes, and medical centers (but not parks).

**Policy CO-12.1: Land Use Patterns Which Promote Air Quality.** Promote land use patterns and densities which help improve regional air quality conditions by: (a) minimizing dependence on single passenger autos; (b) promoting projects which minimize quick auto starts and stops, such as live-work development, mixed use development, and office development with ground floor retail space; (c) separating land uses which are sensitive to pollution from the sources of air pollution; and (d) supporting telecommuting, flexible work hours, and behavioral changes which reduce the percentage of people in Oakland who must drive to work on a daily basis.

**Policy CO-12.2: Coordinated Transportation Systems.** Maintain a coordinated bus, rail, and ferry transit system which provides efficient service to major destinations and promotes alternatives to the single passenger auto.

**Policy CO.12.3: Transportation Systems Management.** Expand existing transportation systems management and transportation demand management strategies which reduce congestion, vehicle idling, and travel in single passenger autos.

**Policy CO-12.4: Design of Development to Minimize Air Quality Impacts.** Require that development projects be designed in a manner which reduces potential adverse air quality impacts. This may include: (a) the use of vegetation and landscaping to absorb carbon monoxide and to buffer sensitive receptors; (b) the use of low-polluting energy sources and energy conservation measures; and (c) designs which encourage transit use and facilitate bicycle and pedestrian travel.

**Policy CO-12.5: Use of Best Available Control Technology.** Require new industry to use best available control technology to remove pollutants, including filtering, washing, or electrostatic treatment of emissions.

**Policy CO-12.6: Control of Dust Emissions.** Require construction, demolition and grading practices which minimize dust emissions. These practices are currently required by the City and include the following:

- Avoiding earth moving and other major dust generating activities on windy days.
- Sprinkling unpaved construction areas with water during excavation, using reclaimed water where feasible (watering can reduce construction-related dust by 50 percent).
- Covering stockpiled sand, soil, and other particulates with a tarp to avoid blowing dust.
- Covering trucks hauling dirt and debris to reduce spills. If spills do occur, they should be swept up promptly before materials become airborne.
- Preparing a comprehensive dust control program for major construction in populated areas or adjacent to sensitive uses like hospitals and schools.
- Operating construction and earth-moving equipment, including trucks, to minimize exhaust emissions.

**Policy CO-12.7: Regional Air Quality Planning.** Coordinate local air quality planning efforts with other agencies, including adjoining cities and counties and the public agencies responsible for monitoring and improving air quality. Cooperate with regional agencies such as the BAAQMD, the MTC, the ABAG, and the Alameda County Congestion Management Agency in developing and implementing regional air quality strategies. Continue to work with BAAQMD and the California Air Resources Board in enforcing the provisions of the California and Federal Clean Air Acts, including the monitoring of air pollutants on a regular and ongoing basis.

**Policy CO13.2: Energy Efficiency.** Support public information campaigns, energy audits, the use of energy-saving appliances and vehicles, and other efforts which help Oakland residents, businesses, and City operations become more energy efficient.

**Policy CO13.3: Construction Methods and Materials.** Encourage the use of energy-efficient construction and building materials. Encourage site plans for new development which maximize energy efficiency.

**City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval**

The City's SCAs relevant to reducing impacts on air quality and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to air quality. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA AIR-1: Dust Controls – Construction Related** (*Standard Condition of Approval 20*)

Requirement: The project applicant shall implement all of the following applicable dust control measures during construction of the project:

- a. Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible.
- b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- d. Limit vehicle speeds on unpaved roads to 15 miles per hour.
- e. All demolition activities (if any) shall be suspended when average wind speeds exceed 20 mph.
- f. All trucks and equipment, including tires, shall be washed off prior to leaving the site.

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.

**SCA AIR-2: Criteria Air Pollutant Controls – Construction Related** (*Standard Condition of Approval 21*)

Requirement: The project applicant shall implement all of the following applicable basic control measures for criteria air pollutants during construction of the project as applicable:

- a. Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to

- two minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points.
- b. Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations (“California Air Resources Board Off-Road Diesel Regulations”).
  - c. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. Equipment check documentation should be kept at the construction site and be available for review by the City and the Bay Area Air Quality District as needed.
  - d. Portable equipment shall be powered by grid electricity if available. If electricity is not available, propane or natural gas generators shall be used if feasible. Diesel engines shall only be used if grid electricity is not available and propane or natural gas generators cannot meet the electrical demand.
  - e. Low VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings.
  - f. All equipment to be used on the construction site shall comply with the requirements of Title 13, Section 2449, of the California Code of Regulations (“California Air Resources Board Off-Road Diesel Regulations”) and upon request by the City (and the Air District if specifically requested), the project applicant shall provide written documentation that fleet requirements have been met.

**SCA AIR-3: Diesel Particulate Matter Controls – Construction Related** (*Standard Condition of Approval 22*)

**a. Diesel Particulate Matter Reduction Measures**

Requirement: The project applicant shall implement appropriate measures during construction to reduce potential health risks to sensitive receptors due to exposure to diesel particulate matter (DPM) from construction emissions. 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 current guidance from the California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment to determine the health risk to sensitive receptors exposed to DPM from project construction emissions. The HRA shall be submitted to the City (and the Air District if specifically requested) for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then DPM reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, DPM reduction measures shall be identified to reduce the health risk to acceptable levels as set forth under subsection b below. Identified DPM reduction measures shall be submitted to the City for review and approval prior to the issuance of building permits and the approved DPM reduction measures shall be implemented during construction.

- or -

- ii All off-road diesel equipment shall be equipped with the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by CARB. The equipment shall be properly maintained and tuned in accordance with manufacturer specifications. This shall be verified through an equipment inventory submittal and Certification Statement that the Contractor agrees to compliance and acknowledges that a significant violation of this requirement shall constitute a material breach of contract.

***b. Construction Emissions Minimization Plan (if required by a above)***

Requirement: The project applicant shall prepare a Construction Emissions Minimization Plan (Emissions Plan) for all identified DPM reduction measures (if any). The Emissions Plan shall be submitted to the City (and the Bay Area Air Quality [Management] District if specifically requested) for review and approval prior to the issuance of building permits. The Emissions Plan shall include the following:

- i. An equipment inventory summarizing the type of off-road equipment required for each phase of construction, including the equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. For all VDECS, the equipment inventory shall also include the technology type, serial number, make, model, manufacturer, CARB verification number level, and installation date.
- ii. A Certification Statement that the Contractor agrees to comply fully with the Emissions Plan and acknowledges that a significant violation of the Emissions Plan shall constitute a material breach of contract.

***SCA AIR-4: Stationary Source of Air Pollution (Toxic Air Contaminants) (Standard Condition of Approval 24)***

Requirement: 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. The approved risk reduction measures shall be implemented during construction and/or operations as applicable.

- 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.

#### **SCA AIR-5: Asbestos in Structures** (*Standard Condition of Approval 26*)

**Requirement:** The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request.

### **2.3.2 Topics Considered and No Impact Determined**

The Project would have no impact to the following topics based on the proposed Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- **Exposure of New Receptors to TACs** (Criterion 5). The Project would not introduce any land uses to the project site that would be considered sensitive to air quality. Therefore, this topic is not discussed further in this document.
- **Odors** (Criterion 6). With respect to odors, BAAQMD's 2017 CEQA Guidelines (BAAQMD, 2017c) identify facilities such as wastewater treatment plants, oil refineries, asphalt plants, chemical manufacturing, painting/coating operations, coffee roasters, food processing facilities, recycling operations, and metal smelters as potential sources of odors and, and recommend buffer zones around them to avoid potential odor conflicts. No such sources of odor are located at or in the vicinity of the project site. Further, the Project would not introduce any sensitive receptors to the site for whom exposure to odors might be a concern. Therefore, this topic is not discussed further in this document.

### **2.3.3 Project Impacts and Discussion**

#### **Criteria Pollutant Emissions from Project Construction**

**Impact AIR-1: Construction of the Project would not result in criteria air pollutant emissions that exceed the City of Oakland's significance thresholds. (Criterion 1) (*Less than Significant with SCAs*)**

The Project would involve demolition of one existing building and portions of four existing buildings and construction of an approximately 99,800 square foot mixed-use office and retail building on the 0.92-acre site. Construction activities would generate reactive organic gases (ROG), nitrogen oxides (NOx), PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from the combustion of fuel in construction equipment and vehicle trips associated with worker commute, material delivery, and hauling. ROG emissions would also be generated during paving and the application of architectural coatings (such as paints and varnishes). In addition, fugitive dust emissions would be generated from ground disturbance activities such as grading and excavation.



The analysis presented below used the following methodology and assumptions to calculate the average daily construction emissions associated with the Project:

- Construction emissions were estimated using the most recent version of CalEEMod (version 2016.3.2);
- Construction is assumed to last for approximately 27 months.<sup>10</sup> The durations of the various construction phases (e.g., demolition, grading, building construction) 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 on-road vehicle trips (worker, vendor, and hauling trips) during each phase were also provided by the Project Applicant;
- Demolition of 34,254 square feet of existing structures on the project site;
- Off-haul of 3,389 cubic yards of material; and
- All other inputs in CalEEMod were based on model defaults.

Based on these assumptions, the average daily construction-related emissions for the Project were estimated using CalEEMod and are presented in **Table 2.3-1**. As shown in the table, annual average daily construction emissions for the Project would not exceed the City’s thresholds for ROG, NOx, PM<sub>10</sub>, or PM<sub>2.5</sub>. 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.

**TABLE 2.3-1  
 PROJECT CONSTRUCTION EMISSIONS (AVERAGE POUNDS PER DAY)<sup>a</sup>**

	ROG	NOx	Exhaust PM <sub>10</sub> <sup>b</sup>	Exhaust PM <sub>2.5</sub> <sup>b</sup>
<b>Project</b>				
Average Daily Construction Exhaust Emissions	2.3	4.8	0.2	0.2
City of Oakland Thresholds	54	54	82	54
<b>Significant (Yes or No)?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

NOTES:

- a. Project construction emissions estimates were made using CalEEMod, version 2016.3.2. Emissions are average daily pounds and are estimated by dividing the total construction emissions generated by the Project with the total number of construction workdays.
- b. PM<sub>10</sub> and PM<sub>2.5</sub> emissions include only exhaust emissions. Fugitive emissions are addressed through implementation of City Standard Condition of Approvals (SCAs).

SOURCE: Appendix E.

While the City does not have quantitative thresholds for fugitive dust emissions during construction, the Project would be required to implement **SCA AIR-1, Dust Controls – Construction-Related**, which would reduce impacts from fugitive dust emissions to less-than-significant levels during

<sup>10</sup> As presented in Appendix E, construction was assumed to begin in February 2022, rather than in 2023 as currently anticipated. Build-out was also expected to be completed earlier than now anticipated. These assumptions are conservative because they do not account for new emissions-reducing technologies or regulations that may become applicable over time.

construction. In addition, implementation of **SCA AIR-2, Criteria Air Pollutant Controls – Construction Related**, and **SCA AIR-3, Diesel Particulate Matter Controls – Construction Related**, would reduce exhaust emissions of criteria air pollutants. Therefore, the Project would result in less-than-significant impacts to regional air quality during construction.

**SCA AIR-1: Dust Controls – Construction Related.** See Section 2.3.1.

**SCA AIR-2: Criteria Air Pollutant Controls – Construction Related.** See Section 2.3.1.

**SCA AIR-3: Diesel Particulate Matter Controls – Construction Related.** See Section 2.3.1.

**Mitigation:** None required.

### ***Criteria Pollutant Emissions from Project Operation***

**Impact AIR-2: Operation of the Project would not result in criteria air pollutant emissions that exceeds the City of Oakland’s significance thresholds for construction. (Criterion 2) (Less than Significant)**

Once operational, the Project would generate emissions from vehicle trips to and from the project site, natural gas combustion for space and water heating, testing and maintenance of the proposed emergency generator, and area sources such as landscaping, re-application of architectural coatings, and the use of consumer products. The analysis presented below relied on the following assumptions to calculate the daily operational emissions associated with the Project:

- The vehicle trip generation rates for existing conditions and the Project were obtained from the traffic analysis prepared for the Project and include a reduction of 46.9 percent assumed based on the City of Oakland’s *Transportation Impact Review Guidelines* for development in an urban environment within 0.5 miles of a BART station.
- Default EMFAC2014 emission factors for mobile sources in CalEEMod were updated to EMFAC2017 factors.
- Default energy consumption rates in CalEEMod were adjusted to account for reduced energy use rates in compliance with the most recent 2019 update to the Title 24 standards which became effective on January 1, 2020.
- All wastewater generated were assumed to be aerobically processed at the EBMUD plant. Septic and lagoons contributions were set to a zero percentage.
- One backup diesel generator was assumed pursuant to California Building Code Requirements for buildings in excess of 70 feet. Based on input from the Project Applicant, the generator was assumed to have a rating of 500 kW and was assumed to be operated for testing and maintenance purposes for 1 hour per test day and a maximum of 50 hours per year consistent with permitting requirements of the BAAQMD.

- All other inputs in CalEEMod were based on model defaults.<sup>11</sup>

The daily operational emissions for the Project, based on the assumptions above, are presented in **Table 2.3-2**. As shown in the table, average daily and annual regional emissions for the Project would not exceed the City’s thresholds for ROG, NO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>. 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. As shown in Table 2.3-2, the Project would have less-than-significant project-level impacts with respect to operational emissions of criteria pollutants.

**Mitigation:** None required.

**TABLE 2.3-2  
 PROJECT EMISSIONS FROM OPERATION<sup>a</sup>**

	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
Area Source Emissions (lbs/day)	2.4	<0.1	<0.1	<0.1
Energy Emissions (lbs/day)	0.1	0.5	<0.1	<0.1
Project Mobile Source Emissions <sup>b</sup> (lbs/day)	1.4	3.1	2.7	0.8
Backup Diesel Generator (lbs/day)	<0.1	0.4	<0.1	<0.1
<b>Average Daily Project Emissions (lbs/day)</b>	<b>3.9</b>	<b>4.0</b>	<b>2.8</b>	<b>0.8</b>
City of Oakland Thresholds	54	54	82	54
<b>Significant (Yes or No)?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Annual Emissions (tons/year)</b>	<b>0.7</b>	<b>0.7</b>	<b>0.5</b>	<b>0.2</b>
City of Oakland Thresholds	10	10	15	10
<b>Significant (Yes or No)?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

NOTES: Totals may not add up due to rounding.

- Project operational emissions estimates were made using CalEEMod, version 2016.3.2, with emission factors for mobile sources updated with EMFAC2017 factors.
- The vehicle trip rates used to calculate the emissions account 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.

SOURCE: Appendix E.

### **Carbon Monoxide Concentrations**

**Impact AIR-3: Carbon monoxide emissions generated by the Project would not significantly contribute to exceedances of the California Ambient Air Quality Standards. (Criterion 3) (Less than Significant)**

Based on regional ambient air quality monitoring data, CO concentrations in the Project area and the Bay Area at large are well below federal and state standards, despite long-term upward trends in regional vehicle miles travelled. In recent years, the potential for localized increases in CO

<sup>11</sup> To provide a conservative analysis, existing emissions from the Kia service and parts center in operation at the time the NOP was released (January 2020) were not discounted. The Kia service and parts center is no longer a tenant, and the Project site is fully vacant as of March 2022.

concentrations from increased traffic has been greatly reduced due to improvements in vehicle exhaust controls since the early 1990s and the use of oxygenated fuels.

The BAAQMD's recommended approach for determining if a project were to contribute to CO concentrations exceeding the CAAQS of 9 ppm averaged over eight hours and 20 ppm for one hour is to use screening criteria. If a project were to meet all of the BAAQMD's screening criteria, the project would result in a less-than-significant impact to air quality with respect to local CO concentrations. Pursuant to the BAAQMD CEQA Guidelines' screening criteria for CO, localized CO concentrations should be estimated for projects in which (a) project-generated traffic would conflict with an applicable congestion management program established by the county congestion management agency or (b) project-generated traffic would increase traffic volumes at affected intersections to more than 44,000 vehicles per hour (or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited, such as tunnels, parking garages, bridge underpasses, natural or urban street canyons, and below-grade roadways). In Oakland, only the MacArthur Maze portion of Interstate 580 exceeds the 44,000 vehicles per hour screening criteria, which is approximately 1.7 miles northwest of the project site and would therefore not result in elevated CO concentrations at the project site. Further, ambient CO standards have not been exceeded in the Bay Area for over a decade, largely due to reformulated fuels in California, increasingly stringent vehicle emissions controls and increasing percentage of electric vehicles in the fleet. Therefore, the Project would not be required to estimate localized CO concentrations as it would not contribute to CO concentrations exceeding CAAQS. The impact would be less than significant.

**Mitigation:** None required.

### ***Toxic Air Contaminant Emissions***

**Impact AIR-4: Construction and operation of the Project would not expose sensitive receptors to substantial levels of TAC emissions. (Criterion 4) (*Less than Significant with SCAs*)**

Toxic Air Contaminants (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 (HRA) to determine what sources and pollutants to control as well as the degree of control. Such an assessment evaluates chronic cancer and non-cancer impacts from TACs, as well as impacts from exposure to elevated levels of PM<sub>2.5</sub> concentrations. Health risks from exposure TACs generated during Project construction and operation are evaluated below. The City's CEQA significance thresholds and SCAs require that new projects containing sensitive receptors (such as residences, schools, etc.) also be evaluated to determine whether those receptors would be exposed to health risks from nearby sources of TACs. However, the Project does not propose uses that include sensitive receptors.

### **Construction TAC Emissions**

Project construction activities would produce TACs primarily as diesel particulate matter (DPM) and PM<sub>2.5</sub> emissions from the exhaust of diesel fueled construction equipment such as loaders, backhoes, cranes, etc., as well as heavy duty truck trips used for material delivery and hauling.

These emissions could result in elevated concentrations of DPM and PM<sub>2.5</sub> at nearby receptors. Exposure of receptors in the vicinity of the project site to these elevated concentrations could lead to an increase in cancer risk or other health impacts.

The Project's construction-related activities would last for a period of 27 months. Regarding construction TACs emissions, BAAQMD recommends that an HRA be conducted when sensitive receptors are located within 1,000 feet of Project construction activities (BAAQMD, 2017c). The closest sensitive receptors are the residents of the apartments at 466 24<sup>th</sup> Street located adjacent to the western boundary of the project site. Residential uses are also located across the project site south of 24<sup>th</sup> Street (Mason at the Hive Apartments and Packard Lofts). Hotel and residential uses would be located at 2401 Broadway, which is currently under construction to the east of the project site. There are no schools and daycare centers located within 1,000 feet of the project site. An HRA was conducted to determine the level of risk generated by construction-related TACs at nearby residential receptors and to satisfy the requirements of SCA AIR-3a(i). The methods and results of the HRA are described below. Specific calculation tables and model outputs are included in **Appendix E**.

In accordance with the Office of Environmental Health and Hazard Assessment's (OEHHA) 2015 *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA, 2015), the HRA applied the highest estimated concentrations of DPM at the receptors analyzed to established cancer potency factors and acceptable reference concentrations for non-cancer health effects. The maximum DPM concentration as modeled using USEPA's AERMOD dispersion model occurred at the future residential receptors at 2401 Broadway approximately 125 feet to the east of the project site and represent the Maximum Exposed Individual Receptor (MEIR). Increased cancer risks were calculated using the modeled maximum DPM concentrations and OEHHA-recommended methodologies for infants (third trimester through two years of age), the most sensitive age group. Child and adult exposure at this location would be less than the risk assessed for infants.

**Table 2.3-3** shows that the cancer risk, chronic Hazard Index (HI), and PM<sub>2.5</sub> concentrations at the residential MEIR from Project-related construction activities. As shown in Table 2.3-3, uncontrolled risks would exceed the City's thresholds for cancer risk and PM<sub>2.5</sub> concentrations at the residential MEIR. Consistent with SCA AIR-3a(i), this analysis identifies the use of all off-road diesel equipment equipped with Tier 4 Final engines as the proposed DPM reduction measure to reduce risks below the thresholds. Currently, Tier 4 Final engines represent best available control technology for control of DPM, and are expected to reduce emissions by approximately 85 percent.<sup>12</sup> As required by SCA AIR-3b, a Construction Emissions Minimization Plan, and all measures identified by the HRA (including this DPM reduction measure for Tier 4 Final equipment), would be submitted to the City for review and approval prior to the issuance of building permits. The Construction Emissions Minimization Plan would also include a detailed equipment inventory of the types of off-road equipment required for each phase of construction and a certification statement that the contractor agrees to comply fully with the Emissions Plan

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<sup>12</sup> <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>

and acknowledges that a significant violation of the Emissions Plan shall constitute a material breach of contract.

Table 2.3-3 shows that with the use of Tier 4 Final controls, health risks at the MEIRs would be less than the City’s significance thresholds. Therefore, with the implementation of SCA AIR-3a(i) and AIR-3b, health risks from Project construction to nearby sensitive receptors would not exceed the City’s CEQA significance thresholds. The potential impact of the Project regarding exposure of existing receptors to construction-related health risks would be less than significant and no mitigation measures would be required.

**TABLE 2.3-3  
MAXIMUM HEALTH RISKS FROM PROJECT CONSTRUCTION**

Health Risk at MEIR	Maximum Cancer Risk (in a million)	Chronic Risk (Hazard Index)	Maximum PM <sub>2.5</sub> concentration
<b>Uncontrolled Scenario</b>			
Residential Receptor - Infant	99.0	0.1	0.4
Project-level Threshold	10	1.0	0.3
<b>With Tier 4 Final Construction Equipment</b>			
Residential Receptor - Infant	7.1	<0.1	<0.1
Project-level Threshold	10	1.0	0.3
<b>Significant?</b>	No	No	No

SOURCE: Appendix E.

The Project would include demolition of existing structures on the site totaling an area of approximately 34,254 square feet. The existing structures may contain Asbestos Containing Materials (ACM), which could pose a health risk to workers and nearby receptors during demolition. Consistent with **SCA AIR-5, Asbestos in Structures**, the Project would comply with all applicable laws and regulations regarding demolition and renovation of ACM.

**Operational TAC Emissions**

A 500 kW backup diesel emergency generator is proposed as part of the Project to comply with the California Building Code requirement for elevator safety in all buildings in excess of 70 feet in height. There would be no other on-site operational TAC emission sources associated with the Project. Installation and operation of the back-up diesel generator would require an Authority to Construct permit from the BAAQMD, which would involve an evaluation of emissions based on size and require Best Available Control Technology, if warranted. A site-specific HRA would be conducted as part of the BAAQMD’s permitting process and the BAAQMD would deny an Authority to Construct or a Permit to Operate for 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. This would be consistent with the requirements of **SCA AIR-4, Stationary Sources of Air Pollution (Toxic Air Contaminants)**, and therefore, operation of the emergency generator would result in a less-than-significant impact.

**SCA AIR-3: Diesel Particulate Matter Controls – Construction Related.** See Section 2.3.1.

**SCA AIR-4: Stationary Source of Air Pollution (Toxic Air Contaminants).** See Section 2.3.1.

**SCA AIR-5: Asbestos in Structures.** See Section 2.3.1.

## 2.3.4 Cumulative

**Impact AIR-1.CU: Construction and operation of the Project, combined with cumulative development in the Project area, would not lead to significant cumulative air quality impacts. (*Less than Significant with SCAs*)**

### Criteria Air Pollutants

According to the BAAQMD, no single project will, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The BAAQMD *CEQA Air Quality Guidelines* recommends using its quantitative thresholds of significance to determine if an individual project's emissions would considerably contribute to cumulative air quality impacts in the region. If a project's emissions exceed the identified significance thresholds, its contribution to cumulative air quality would be considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD, 2017c). Alternatively, if a project does not exceed the identified significance thresholds, then the project would not be considered cumulatively considerable and would result in less-than-significant air quality impacts.

As discussed above under Impacts AIR-1 and AIR-2, the Project would not result in significant air quality impacts during construction or operation. Therefore, the Project's contribution to the cumulative adverse air quality of the area would be considered less than significant.

### Cumulative TAC Impact

In addition to a Project's individual TAC impacts during construction and operation, the BAAQMD recommends evaluating the potential cumulative health risks to sensitive receptors from existing and reasonably foreseeable future sources of TACs. The BAAQMD's CEQA Air Quality Guidelines include standards and methods for determining the significance of cumulative health risk impacts. The method for determining cumulative health risk requires the tallying of health risk from permitted stationary sources, major roadways, railroads, freeways, and any other identified substantial sources of TACs in the vicinity of a project site (i.e., within a 1,000-foot radius) and then adding the individual sources to determine whether the BAAQMD's cumulative health risk thresholds are exceeded. As the Project does not include sensitive receptors, a cumulative screening analysis was conducted for the residential MEIR identified in the construction HRA for the Project. Health risks from permitted stationary sources within 1,000 feet of the MEIR were obtained from BAAQMD's Stationary Sources Risk and Hazards web tool supplemented with details from the BAAQMD in response to the Stationary Source Inquiry Form submitted for the Project. Background health risks from highway, railroad, and major roadways were also obtained from BAAQMD. In addition, the cumulative analysis included future sources, primarily emergency

generators, proposed as part of projects within 1,000 feet of the MEIR. **Table 2.3-4** shows the cumulative health risks to the residential MEIR from the various sources. The screening analysis shows that health risks to the receptors in the Project vicinity would be less than the City's cumulative thresholds and thus, less than significant.

**SCA AIR-1: Dust Controls – Construction Related.** See Section 2.3.1.

**SCA AIR-2: Criteria Air Pollutant Controls – Construction Related.** See Section 2.3.1.

**SCA AIR-3: Diesel Particulate Matter Controls – Construction Related.** See Section 2.3.1.

**SCA AIR-4: Stationary Source of Air Pollution (Toxic Air Contaminants).** See Section 2.3.1.

**SCA AIR-5: Asbestos in Structures.** See Section 2.3.1.

**Mitigation:** None required.

**TABLE 2.3-4  
CUMULATIVE HEALTH IMPACTS TO PROJECT MEIR**

Source	Source Type	Distance to MEIR (feet)	Cancer Risk (persons per million)	Chronic Hazard Impact	PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )
<b>Existing Permitted Stationary Sources (BAAQMD Plant Number) within 1,000 feet</b>					
Johnson Plating Works (3490)	Coating Operation	670	<0.01	0.00	0.00
State Department of Transportation (14195)	Generator	850	2.55	<0.01	<0.01
City of Oakland Fire Station #15 (21819)	Generator	510	1.48	<0.01	<0.01
Verizon Wireless (22279)	Natural Gas Generator	1,500	0.00	0.00	0.00
Royal Coffee Company (23098)	Coffee Roaster	50	0.00	0.00	0.16
Uptown Body & Fender (200538)	Coating Operation	280	0.00	0.00	0.00
BA1 2201 Broadway LLC (200620)	Generator	930	0.11	0.00	0.00
<b>Backup Generators at Proposed Projects within 1,000 feet</b>					
24 <sup>th</sup> & Harrison	Diesel Generator	650	1.0	<0.01	<0.01
88 Grand <sup>a</sup>	Diesel Generator	600	0.9	<0.01	<0.01
2100 Telegraph	Diesel Generator	1030	0.2	0.01	<0.01
2201 Valley Street	Diesel Generator	905	0.1	<0.01	<0.01
2270 Broadway	Diesel Generator	190	0.3	<0.01	<0.01
2305 Webster <sup>a</sup>	Diesel Generator	370	0.2	<0.01	<0.01
2424 Webster <sup>a</sup>	Diesel Generator	200	4.1	<0.01	0.01
2600 Telegraph <sup>a</sup>	Diesel Generator	310	2.5	<0.01	0.01
<b>Mobile Sources</b>					
	Highways		18.9	--	0.4
	Major Roadways		3.2	--	<0.1
	Railroad		3.9	--	<0.1



**TABLE 2.3-4 (CONTINUED)  
 CUMULATIVE HEALTH IMPACTS TO PROJECT MEIR**

Source	Source Type	Distance to MEIR (feet)	Cancer Risk (persons per million)	Chronic Hazard Impact	PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )
<b>Project Sources</b>					
	Controlled Project Construction		6.7	<0.1	<0.1
	Project Generator Operation <sup>a</sup>		6.4	<0.1	<0.1
	<b>Cumulative Impacts<sup>b</sup></b>		<b>52.6</b>	<b>&lt;0.1</b>	<b>0.7</b>
	City of Oakland Cumulative Significance Threshold		100	10	0.8
	Exceeds Significance Threshold?		No	No	No

NOTES:

- a. Risks posed by the generators are conservatively assumed to be at the maximum permitted value, but would likely be less.
- b. Cumulative totals may not add up due to rounding.

SOURCE: Appendix E.

### 2.3.5 References

Bay Area Air Quality Management District (BAAQMD), 2017a. *Air Quality Standards and Attainment Status*. Last updated January 5, 2017. Available at <https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status>. Accessed December 2020.

BAAQMD, 2017b. *Clean Air Plan, Spare the Air, Cool the Climate*. April 19, 2017. Available at [https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a\\_-\\_proposed-final-cap-vol-1-pdf.pdf?la=en](https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-_proposed-final-cap-vol-1-pdf.pdf?la=en). Accessed December 2020.

BAAQMD, 2017c. *California Environmental Quality Act Air Quality Guidelines*. May 2017. Available at [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en).

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

City of Oakland, 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*, adopted June 11, 1996.

Office of Environmental Health Hazard Assessment, 2015. *Guidance Manual for Preparation of Health Risk Assessments*. February 2015. Available at <https://oehha.ca.gov/air/cmr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>.

## 2.4 Biological Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>IV. BIOLOGICAL RESOURCES</b> — The project would have a significant impact on the environment if it would:				
1) 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 Game or U.S. Fish and Wildlife Service;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6) 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; <sup>13</sup> or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7) Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources. <sup>14</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 2.4.1 Environmental Setting

The 24<sup>th</sup> and 25<sup>th</sup> Street site is predominantly flat and currently occupied by a surface parking lot and five vacant garage buildings. The site is paved, with no existing vegetation. The Valley Street site is occupied by a surface parking lot with three spaces and landscaping. The Valley Street site

<sup>13</sup> **NOTE:** Factors to be considered in determining significance include the number, type, size, location and condition of (a) the protected trees to be removed and/or impacted by construction and (b) protected trees to remain, with special consideration given to native trees. Protected trees include *Quercus agrifolia* (California or coast live oak) measuring four inches diameter at breast height (dbh) or larger, and any other tree measuring nine inches dbh or larger except eucalyptus and *Pinus radiata* (Monterey pine); provided, however, that Monterey pine trees on City property and in development-related situations where more than five Monterey pine trees per acre are proposed to be removed are considered to be protected trees.

<sup>14</sup> **NOTE:** Although there are no specific, numeric/quantitative criteria to assess impacts, factors to be considered in determining significance include whether there is substantial degradation of riparian and/or aquatic habitat through (a) discharging a substantial amount of pollutants into a creek, (b) significantly modifying the natural flow of the water, (c) depositing substantial amounts of new material into a creek or causing substantial bank erosion or instability, or (d) adversely impacting the riparian corridor by significantly altering vegetation or wildlife habitat.

contains one street tree and three small trees as a part of the existing landscaping that would be adjacent to the Project's disturbance area on the site.

## **2.4.2 Regulatory Setting**

### ***Federal and State Special-Status Species***

Individual plant and animal species listed as rare, threatened or endangered under state and federal Endangered Species Acts are considered "special-status species." Federal and state "endangered species" legislation has provided the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project will result in the "take" of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" said species. "Take" is more broadly defined by the federal Endangered Species Act to include "harm" of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Section 15380(b) and (c) of the CEQA Guidelines provided that all potential rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review per the CEQA Guidelines. These may include plant species of concern in California listed by the California Native Plant Society and CDFW listed "Species of Special Concern."

### **Migratory Bird and Birds of Prey Protection**

The federal Migratory Bird Treaty Act prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Construction disturbances during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, a violation of the Migratory Bird Treaty Act. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines take as causing abandonment and/or loss of reproductive efforts through disturbance.

### **Sensitive Habitats**

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation, protection, or consideration by the US Army Corps of Engineers (USACE), RWQCB, CDFW, and /or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

## **City of Oakland General Plan**

The *Open Space, Conservation, and Recreation (OSCAR) Element* of the City of Oakland General Plan was adopted in 1996. OSCAR policies pertaining to natural resources with potential relevance to the Project include the following (City of Oakland, 1996):

### **Open Space**

**Policy OS-12.1: Street Tree Selection.** Incorporate a broad and varied range of tree species which is reflected on a city-maintained list of approved trees. Street tree selection should respond to the general environmental conditions at the planting site, including climate and micro-climate, soil types, topography, existing tree planting, maintenance of adequate distance between street trees and other features, the character of existing development., and the size and context of the tree planting area.

**Policy OS-12.2: Street Tree Maintenance.** Maintain street trees to promote their natural forms, eliminate hazardous conditions, provide adequate vertical clearance over streets and sidewalks, and abate pest and disease problems.

**Policy OS-12.3: Street Tree Removal.** Remove street trees only if they are hazardous, severely and incurably infested with insects or blight, or are severely and irreversibly damaged and deformed. Provide replacement trees in all cases where the site is suitable for street trees.

### **Conservation**

**Policy C0-4.2: Drought-Tolerant Landscaping.** Require use of drought-tolerant plants to the greatest extent possible and encourage the use of irrigation systems which minimize water consumption.

**Policy C0-7.4: Tree Removal.** Discourage the removal of large trees on already developed sites unless removal is required for biological, public safety, or public works reasons.

**Policy C0-9.1: Habitat Protection.** Protect rare, endangered, and threatened species by conserving and enhancing their habitat and requiring mitigation of potential adverse impacts when development occurs within habitat areas.

## **Oakland Municipal Code**

### **City of Oakland Protected Tree Ordinance**

The City of Oakland Protected Tree Ordinance (OMC Chapter 12.36) permits removal of protected trees under certain circumstances. To grant a tree removal permit, the City must determine that removal is necessary in order to accomplish one of the following objectives:

- to ensure public health and safety,
- to avoid an unconstitutional taking of property,
- to take reasonable advantage of views,
- to pursue acceptable professional practice of forestry or landscape design, or
- to implement the vegetation management prescriptions in the S-11 site development review zone.

Protected trees include the following:

- *Quercus agrifolia* (California or coast live oak) measuring four inches diameter at breast height (dbh) or larger, and any other tree measuring nine inches dbh or larger except *Eucalyptus* spp. and *Pinus radiata* (Monterey pine); provided, however, Monterey pine trees on City property and in development-related situations where more than five Monterey pine trees per acre are proposed to be removed are considered to be Protected trees.

### ***Oakland Municipal Code Chapter 13.16***

The City's Creek Protection, Stormwater Management, and Discharge Control Ordinance (Chapter 13.16 of the Oakland Municipal Code) prohibits activities that would result in the discharge of pollutants to Oakland's waterways or in damage to creeks, creek functions, or habitat. The Ordinance requires the use of standard BMPs to prevent pollution or erosion to creeks and/or storm drains. Additionally, a creek protection permit is required for any construction work on creekside properties. The Ordinance establishes comprehensive guidelines for the regulation of discharges to the City's storm drain system and the protection of surface water quality. Under the ordinance, the City of Oakland Public Works Agency issues permits for storm drainage facilities that would be connected to existing city drainage facilities. The Ordinance includes enforcement provisions to provide more effective methods to deter and reduce the discharge of pollutants to the storm drain system, local creeks, and San Francisco Bay.

### ***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City's SCAs relevant to reducing impacts on biological resources and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to biological resources. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

#### **SCA BIO-1: Tree Permit. (*Standard Condition of Approval 30*)**

- a. ***Tree Permit Required.*** Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit.
- b. ***Tree Protection During Construction.*** Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist:
  - i. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.

- ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree.
  - iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.
  - iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.
  - v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.
  - vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.
- c. ***Tree Replacement Plantings.*** Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria:
- i. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.
  - ii. Replacement tree species shall consist of *Sequoia sempervirens* (Coast Redwood), *Quercus agrifolia* (Coast Live Oak), *Arbutus menziesii* (Madrone), *Aesculus californica* (California Buckeye), *Umbellularia californica* (California Bay Laurel), or other tree species acceptable to the Tree Division.
  - iii. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.

- iv. Minimum planting areas must be available on site as follows:
  - For Sequoia sempervirens, three hundred fifteen (315) square feet per tree;
  - For other species listed, seven hundred (700) square feet per tree.
- v. In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee in accordance with the City's Master Fee Schedule may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians.
- vi. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to become established within one year of planting shall be replanted at the project applicant's expense.

### 2.4.3 Topics Considered and No Impact Determined

The Project would have no impact to the following topics based on the Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- **Wetlands (Criterion 3).** Lake and riverine wetland features occur approximately 0.32 miles southeast of the project site that include Lake Merritt and the southern daylighted portion of Glen Echo Creek; however, Project construction or operations would not result in impacts to these resources (USFWS, 2021). There are no potentially jurisdictional wetlands or other waters of the U.S. or waters of the state within the project site; therefore, the Project would not have a substantial adverse effect on federally protected wetlands or state protected wetlands, through direct removal, filling, hydrological interruption, or other means.
- **Wildlife Movement (Criterion 4).** Given the small size of the project site, lack of surface waters, and surrounding built environment, the Project would not 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.
- **Habitation Conservation Plan / Natural Community Conservation Plan (Criterion 5).** Review and comparison of the setting circumstances and Project characteristics with the significance criteria clearly show that no impacts would be associated with criterion "5," as no adopted habitat conservation plan or natural community conservation plan covers the project site and therefore the Project could not conflict with these plans. The closest Habitat Conservation Plan is the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), located more than 15 miles east of the project site (East Contra Costa County Habitat Conservancy, 2006).

## 2.4.4 Project Impacts and Discussion

**Impact BIO-1: The Project would not 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 Game or U.S. Fish and Wildlife Service. (Criterion 1) (*Less than Significant*)**

Several special-status animal species are identified as having a moderate or high potential to occur, or are known to occur, in or adjacent to the project vicinity include peregrine falcon, California brown pelican, Cooper's hawk, red-shouldered hawk, red-tailed hawk, Alameda song sparrow, double-crested cormorant, pallid bat, silver-haired bat, hoary bat, and big free-tailed bat. Other migratory birds protected under the federal Migratory Bird Treaty Act and/or the California Fish and Game Code may also use the project vicinity for foraging, resting, and nesting. Some areas in the project vicinity may provide foraging and roosting habitat for these special-status animal species, but breeding habitat is generally very limited due to urbanization and intensity of human activities. Maternity roosts for special-status bat species are not expected to occur in the project vicinity, and foraging opportunities remain in open space areas along the shoreline of Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary. Additionally, species potentially impacted by the Project are likely to have adapted to the continuously evolving environments by which this portion of Oakland is defined (City of Oakland, 2019). The Project would involve infill development located in a highly urbanized area and would not involve any tree removal. Therefore, Project impacts related to sensitive or special status species would be less than significant.

**Mitigation:** None required.

**Impact BIO-2: The Project would not 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 or fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources. (Criteria 2 and 7) (*Less than Significant with SCAs*)**

The project site is located in a densely developed, urban area and contains no lakes, creeks, or other surface waters on or adjacent to the site. Lake Merritt and the southern daylighted portion of Glen Echo Creek are the closest water bodies to the project site and are located approximately 0.32-mile southeast of the project site. Thus, the Project is not located directly adjacent to a riparian area or creek as defined in Oakland Municipal Code Chapter 13.16. As discussed in detail in Section 2.10, *Hydrology and Water Quality*, the Project would control stormwater on-site and would not include any non-stormwater discharges to the storm drain system. Implementation of SCAs HYD-1, Erosion and Sedimentation Control Plan for Construction, HYD-2, State Construction General Permit, SCA HYD-3, NPDES C.3 Stormwater Requirements for Regulated Projects, and SCA UTIL-6, Storm Drain System, would ensure that stormwater that could affect receiving waters including Lake Merritt and Glen Echo Creek is managed during Project construction and operation. Therefore, the Project would not have a substantial adverse effect on any riparian habitat or fundamentally conflict with the City of Oakland Creek Protection Ordinance.



**SCA HYD-1: Erosion and Sedimentation Control Plan for Construction.** See Section 2.10.2.

**SCA HYD-2: State Construction General Permit.** See Section 2.10.2.

**SCA HYD-3: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 2.10.2.

**SCA UTIL-6: Storm Drain System.** See Section 2.18.2.

**Mitigation:** None required.

**Impact BIO-3: The Project would not 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. (Criterion 6) (*Less than Significant with SCAs*)**

There are no existing trees on the 24<sup>th</sup> and 25<sup>th</sup> Street site, and there are no trees within the Project's disturbance area on the Valley Street site, and tree removal is not proposed as part of the Project. The Valley Street site contains one street tree and three small trees as a part of the existing landscaping that would be adjacent to the Project's disturbance area on the site. Implementation of **SCA BIO-1, Tree Permit**, would ensure that existing trees are protected during construction per City requirements. Therefore, with implementation of SCA BIO-1, the Project would not fundamentally conflict with the City's Tree Protection Ordinance, and the impact would be less than significant.

**SCA BIO-1: Tree Permit.** See Section 2.4.2.

**Mitigation:** None required.

## 2.4.5 Cumulative

**Impact BIO-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts on biological resources. (*Less than Significant with SCAs*)**

The potential impacts of the Project on biological resources are largely site-specific, and the overall cumulative effects would be dependent on the degree to which significant vegetation and wildlife resources are present on a particular development site and, if present, the degree to which they are avoided or potential impacts are addressed through various forms of mitigation. As discussed above, the Project would result in less-than-significant impacts to biological resources including sensitive or special status species, riparian habitats or conflicts with the City of Oakland Creek Protection Ordinance, and conflict with the City's Tree Protection Ordinance (with SCAs). SCAs HYD-1, HYD-2, HYD-3, and UTIL-6, would ensure that stormwater that could affect receiving waters including Lake Merritt and Glen Echo Creek is managed during Project construction and operation. Therefore, the Project would not result in or contribute to a significant cumulative impact on biological resources and the impact would be less than significant.

**SCA BIO-1: Tree Permit.** See Section 2.4.2.

**SCA HYD-1: Erosion and Sedimentation Control Plan for Construction.** See Section 2.10.2.

**SCA HYD-2: State Construction General Permit.** See Section 2.10.2.

**SCA HYD-3: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 2.10.2.

**SCA UTIL-6: Storm Drain System.** See Section 2.18.2.

**Mitigation:** None required.

## 2.4.6 References

City of Oakland, 2019. *Downtown Oakland Specific Plan Draft Environmental Impact Report*, August 2019. Available at: <https://www.oaklandca.gov/documents/draft-dosp-eir>, accessed February 12, 2021.

City of Oakland, 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*, adopted June 11, 1996.

U.S. Fish and Wildlife Service (USFWS), 2021. Wetlands Mapper. Available at: <https://www.fws.gov/wetlands/data/mapper.html>, accessed February 14, 2021.

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## 2.5 Cultural and Tribal Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>V. CULTURAL AND TRIBAL CULTURAL RESOURCES</b> — The project would have a significant impact on the environment if it would:				
1) Cause a substantial adverse change in the significance of a 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 <b>and</b> 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 Historical Resources, Local Register, or historical resources survey form (DPR Form 523) with a rating of 1-5);	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Disturb any human remains, including those interred outside of dedicated cemeteries; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 2.5.1 Environmental Setting

#### **Historic Architectural Resources**

See Section 4.2, *Historic Architectural Resources*, of the EIR, for a description of the existing environmental setting as it relates to historic architectural resources.

### **Archaeological Resources**

A review of records from the Northwest Information Center of the California Historical Resources Information System indicates that there are no previously recorded prehistoric archaeological sites in the general vicinity of the project site (NWIC, 2019). The nearest prehistoric resources are located nearly 0.5 mile to the south and over 1.5 mile to the west, closer to the bay margins. The project site is in an area mapped as latest Pleistocene alluvial deposits. Given the age of this geologic landform, the project site has a low potential to contain prehistoric archaeological sites buried by natural alluvial processes. Prehistoric archaeological sites in this context, should they exist, would be at or very near to the existing ground surface. Considering the extensive historic-era development of the project site, there is a low potential to encounter prehistoric archaeological resources during project implementation.

Historic maps and aerial imagery show that by 1889 only the northern portion of the project site along 25<sup>th</sup> Street (formerly Laurel Street) was developed with two small residential dwellings with basements, a windmill/water tank, and small outbuildings. The remaining portions of the project site, including the parcel on Valley Street, remained vacant. By 1903, five additional one-story dwellings with basements had been constructed along 24<sup>th</sup> Street, as well as a series of small outbuildings on the Valley Street parcel associated with dwellings to the north on 24<sup>th</sup> Street. By 1912, a factory building had been constructed on an empty lot on 24<sup>th</sup> Street and a two-story residential building on an empty lot on 25<sup>th</sup> Street. The 1951 Sanborn map shows that by that time many of the residential dwellings had been replaced with factory buildings, including on the lots where the earliest dwellings from the 1880s had once stood. In 1951, the lot on Valley Street included a machine shop and a one-room outbuilding. Mid-century construction in the project site likely destroyed any potential historic-era archaeological deposits associated with outbuildings (such as artifact-filled privies or wells) that may have been associated with the earliest residential dwellings. Given the limited early development and the mid-century construction, there is a low potential to encounter historic-era archaeological resources during project implementation.

### **Tribal Cultural Resources**

On October 20, 2021, the City sent letters to eight Native American tribes provided by the Native American Heritage Commission (NAHC) as potentially interested in projects in the City of Oakland. The letters provided a description of the project, a map showing the project location, and an invitation to respond to a request for consultation within 30 days (as required by PRC Section 21080.3.1.d). No responses were received.

## **2.5.2 Regulatory Setting**

See Section 4.2, *Historic Architectural Resources*, of the EIR, for a description of the existing regulatory setting as it relates to historic architectural resources.

### **Native American Heritage Commission**

The NAHC was created by statute in 1976, is a nine-member body appointed by the Governor to identify and catalog cultural resources (i.e., places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands) in

California. The Commission is responsible for preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items, maintaining an inventory of Native American sacred sites located on public lands, and reviewing current administrative and statutory protections related to these sacred sites.

### **California Public Resources Code Sections 5097.98 and 5097.99**

PRC Section 5097.98 (reiterated in CEQA Guidelines Section 15064.5(e)) identifies steps to follow in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery. PRC Section 5097.99 prohibits obtaining or possessing any Native American artifacts or human remains that are taken from a Native American grave or cairn (stone burial mound).

### **California Health and Safety Code Section 7050.5**

California Health and Safety Code Section 7050.5 protects human remains by prohibiting the disinterment, disturbance, or removal of human remains from any location other than a dedicated cemetery.

### **California Public Resources Code and Tribal Cultural Resources**

In 2014, the California Legislature enacted Assembly Bill (AB) 52, which added provisions to the Public Resources Code regarding the evaluation of impacts on tribal cultural resources under CEQA, and requirements to consult with California Native American tribes. In particular, AB 52 requires lead agencies to analyze project impacts on tribal cultural resources separately from archaeological resources (PRC Sections 21074 and 21083.09). AB 52 defines “tribal cultural resources” in PRC Section 21074 and requires lead agencies to engage in additional consultation procedures with respect to California Native American tribes (PRC Sections 21080.3.1, 21080.3.2, and 21082.3).

A *tribal cultural resource* is defined in PRC Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k); or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying the criteria set forth in PRC Section 5024.1(c), the lead agency shall consider the significance of the resource to a California Native American tribe.

### **General Plan Historic Preservation Element**

In March 1994, the Oakland City Council adopted the Historic Preservation Element of the Oakland General Plan (amended July 21, 1998). The following goal and policies address cultural resources and are relevant to the Project (City of Oakland, 1998):

**Goal 2:** To preserve, protect, enhance, perpetuate, use, and prevent the unnecessary destruction or impairment of properties or physical features of special character or special historic, cultural, educational, architectural or aesthetic interest or value.

Such properties or physical features include buildings, building components, structures, objects, districts, sites, natural features related to human presence, and activities taking place on or within such properties or physical features.

**Policy 4.1: Archaeological resources.** To protect significant archaeological resources, the City will take special measures for discretionary projects involving ground disturbances located in archaeologically sensitive areas.

### ***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City's SCAs relevant to reducing impacts on cultural resources and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to cultural resources. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

#### **SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.** (*Standard Condition of Approval 32*)

**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 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.

**SCA CUL-2: Human Remains – Discovery During Construction.** (*Standard Condition of Approval 34*)

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.

## 2.5.3 Project Impacts and Discussion

### ***Historical Resources***

**Impact CUL-1: Project-related demolition could result in significant impacts to the historic setting of the 25<sup>th</sup> Street Garage District API. (Criterion 1) (*Potentially Significant*)**

The Project would demolish one existing building addition outside of and adjacent to the 25<sup>th</sup> Street Garage District API as well as portions of four contributing buildings within the API as shown in Figure 3-3 (see Chapter 3, *Project Description*), and has the potential to result in a significant impact related to historical architectural resources. Therefore, this topic is addressed in Section 4.2, *Historic Architectural Resources*, of the EIR.

**Impact CUL-2: Project-related new construction would not result in significant impacts to the historic setting of the 25<sup>th</sup> Street Garage District API. (Criterion 1) (*Potentially Significant*)**

The Project would construct vertical additions to the same four API contributors (all of which are one story in height), resulting in an overall height of 45 feet above grade, and a new 93-foot-tall building adjacent to the API, and has the potential to result in a significant impact related to historical architectural resources. Therefore, this topic is addressed in Section 4.2, *Historic Architectural Resources*, of the EIR.

**Impact CUL-3: The Project would not result in significant impacts to individually eligible historical resources. (Criterion 1) (Potentially Significant)**

The Project would alter the following four API contributors: 442 24<sup>th</sup> Street, 450 24<sup>th</sup> Street, 459-461 25<sup>th</sup> Street, and 465 25<sup>th</sup> Street, and has the potential to result in a significant impact related to historical architectural resources. Therefore, this topic is addressed in Section 4.2, *Historic Architectural Resources*, of the EIR.

**Archaeological Resources**

**Impact CUL-4: Activities undertaken during construction of the Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. (Criterion 2) (Less than Significant with SCAs)**

This section discusses archaeological resources, both as historical resources according to CEQA Guidelines Section 15064.5, as well as unique archaeological resources, as defined in Public Resources Code (PRC) Section 21083.2(g). A significant impact would occur if the Project were to cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

While there is a low potential to impact prehistoric and historic-era archaeological resources, the possibility cannot be entirely discounted. Impacts to previously undiscovered archaeological resources would be potentially significant. **SCA CUL-1, Archaeological and Paleontological Resources – Discovery During Construction**, would reduce impacts by requiring all work to halt within 50 feet of an inadvertent discovery of any subsurface archaeological materials and a qualified archaeologist to assess the significance of the find according to regulatory guidance. Implementation of SCA CUL-1 would ensure that appropriate procedures are followed and the impact would be reduced to a less-than-significant level.

**SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.** See Section 2.5.2.

**Mitigation:** None required.

**Human Remains**

**Impact CUL-5: Activities undertaken during construction of the Project would not disturb any human remains, including those interred outside of formal cemeteries. (Criterion 3) (Less than Significant with SCAs)**

There is no indication from the background research that the project site was used for human burial purposes and the potential to encounter human burials during project implementation is low.

While there is a low potential to disturb human remains, including those interred outside of formal cemeteries, the possibility cannot be entirely discounted. Impacts to human remains would be potentially significant. **SCA CUL-2, Human Remains – Discovery During Construction**,



would reduce impacts by requiring all work to halt within 50 feet of an inadvertent discovery of any human remains and the Project Applicant to notify the City and the Alameda County Coroner, who would determine whether an investigation of the cause of death is required or if the remains are Native American in origin. Implementation of SCA CUL-2 would ensure that appropriate regulatory procedures are followed and the impact would be reduced to a less-than-significant level.

**SCA CUL-2: Human Remains – Discovery During Construction.** See Section 2.5.2.

**Mitigation:** None required.

### ***Tribal Cultural Resources***

**Impact CUL-6: The Project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074. (Criterion 4) (*Less than Significant with SCAs*)**

There are no tribal cultural resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), nor has the City of Oakland determined a resource to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. Based on background research and the environmental context, the project site has a low potential to uncover previously undiscovered archaeological resources, including those that could be considered tribal cultural resources.

While unlikely, the inadvertent discovery of tribal cultural resources would be a potentially significant impact. However, implementation of SCA CUL-1 and SCA CUL-2 would reduce impacts to archaeological resources and human remains, including those considered tribal cultural resources, by requiring that work halt in the vicinity of a find until it is evaluated by a qualified archaeologist and a Native American representative. Implementation of SCA CUL-1 and SCA CUL-2 would ensure that appropriate procedures are followed and the impact would be reduced to a less-than-significant level.

**SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.** See Section 2.5.2.

**SCA CUL-2: Human Remains – Discovery During Construction.** See Section 2.5.2.

**Mitigation:** None required.

### **2.5.4 Cumulative**

**Impact CUL-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, could contribute to cumulative adverse impacts on historic architectural resources. (*Potentially Significant*)**

The Project would demolish one existing building and portions of four existing buildings on the project site and has the potential to contribute to a cumulative adverse impact related to historic

cultural resources. Therefore, this topic is addressed in Section 4.2, *Historic Cultural Resources*, of the EIR.

**Impact CUL-2.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not contribute to cumulative adverse impacts on archaeological resources, human remains, and tribal cultural resources. (*Less than Significant with SCAs*)**

The geographic scope for cumulative effects on archaeological resources, human remains, and tribal cultural resources includes the immediate vicinity of locations where the project could cause disturbance to these resources. Similar to the Project, cumulative projects in the vicinity could have a significant impact on previously undiscovered archaeological resources, including human remains interred outside of formal cemeteries, during ground-disturbing activities. The potential impacts of the Project when considered together with similar impacts from other probable future projects in the vicinity could result in a significant cumulative impact on archaeological resources or human remains. However, implementation of SCA CUL-1 and SCA CUL-2 would require that work halt in the vicinity of a find until it is evaluated by a qualified archaeologist, and in the case of human remains the Alameda County Coroner. In addition, cumulative projects undergoing CEQA review would also include these SCAs. Therefore, with implementation of SCA CUL-1 and SCA CUL-2, the Project's contribution to cumulative impacts would not be considerable, and the impact would be less than significant.

**SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.** See Section 2.5.2.

**SCA CUL-2: Human Remains – Discovery During Construction.** See Section 2.5.2.

**Mitigation:** None required.

## 2.5.5 References

City of Oakland, 1998. *Historic Preservation Element of the Oakland General Plan*, March 8, 1994, amended July 21, 1998.

Northwest Information Center. Records search results (File No. 19-0876). On file, ESA. November 21, 2019.

Sanborn Fire Insurance Company. Maps from Oakland, California – 1889, 1903, 1912, 1951, 1952. Available at <https://digitalsanbornmaps-proquest-com>. Accessed January 11, 2021.

## 2.6 Energy

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>VI. ENERGY</b> — Would the project:				
1) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Violate applicable federal, state and local statutes and regulations relating to energy standards; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 2.6.1 Environmental Setting

The project site is located within Pacific Gas and Electric's (PG&E) service area for electricity. PG&E delivered approximately 78 billion kilowatt-hours (kWh) in 2019, of which approximately 30 billion kWh were consumed by the commercial building sector. In Alameda County, approximately 10.7 billion kWh of electricity was consumed in 2019, with approximately 7.6 billion kWh consumed by non-residential uses (CEC, 2021). The California Energy Commission estimates that 591 million gallons of gasoline and approximately 84 million gallons of diesel were sold in 2019 in Alameda County (CEC 2020).

East Bay Community Energy (EBCE) is a community-governed, local power supplier that provides low-carbon electricity to Oakland residents and businesses under Alameda County's community choice energy (CCE) program at rates that are lower or comparable to PG&E's rates. Under a CCE program, the utility company (in this case PG&E) continues to operate and service the transmission and delivery system and provides billing and customer service. EBCE's standard electricity product that has a higher renewable energy content than PG&E at rates marginally lower than PG&E's base offering. It also provides a 100 percent renewable product at a rate equivalent to PG&E's base offering.

### 2.6.2 Regulatory Setting

#### ***City of Oakland General Plan***

The Open Space, Conservation and Recreation (OSCAR) Element of the Oakland General Plan describes the following policies regarding energy resources, adopted for the purpose of avoiding or mitigating an environmental effect, and that apply to the Project (City of Oakland, 1996).

***Policy CO-13.1:*** Promote a reliable energy network which meets future needs and long-term economic development objectives at the lowest practical cost.

***Policy CO-13.2:*** Support public information campaigns, energy audits, the use of energy-saving appliances and vehicles, and other efforts which help Oakland residents, businesses, and City operations become more energy efficient.

***Policy CO-13.3:*** Encourage the use of energy-efficient construction and building materials. Encourage site plans for new development which maximize energy efficiency.

### ***City of Oakland GHG Reduction Targets and Climate Action Plan***

In October 2018, the Oakland City Council passed Resolution 87183 adopting an interim citywide GHG emissions reduction target of 56 percent below 2005 levels by the year 2030 to keep the City on track to meet its 2050 target.

In July 2020, via Resolution 88267, Oakland City Council adopted the 2030 Equitable Climate Action Plan (ECAP), a comprehensive plan to achieve the 2030 GHG reduction target and increase Oakland's resilience to the impacts of the climate crisis, both through a deep equity lens (City of Oakland, 2020a). Alongside the 2030 ECAP, Council also adopted a goal to achieve community-wide carbon neutrality no later than 2045 (City of Oakland, 2020b). Achieving carbon neutrality will require complete decarbonization (ensuring that all mechanical systems run on clean electricity) of Oakland's building sector.

### ***City of Oakland Municipal Code for Plug-in Electric Vehicle Charging Stations***

As of March 2017, Chapter 15.04, Article II, Part 11 of the City's Municipal Code requires all new multifamily and non-residential buildings to include full circuit infrastructure for plug-in electric vehicle (PEV) charging stations for at least 10 percent of the total parking spaces. In addition, inaccessible conduits for future expansion of PEV spaces must be installed for 10 percent of the total parking at non-residential buildings. The new requirements are designed to accelerate the installation of vehicle chargers to address demand.

### ***City of Oakland Ordinance Requiring All-Electric Construction In Newly Constructed Buildings***

On December 1, 2020, the City of Oakland adopted Ordinance 13632 prohibiting newly constructed buildings (both residential and commercial) from connecting to natural gas or propane. Newly constructed buildings must use a permanent supply of electricity as the source of energy for all space heating, water heating (including pools and spas), cooking appliances, and clothes drying appliances. The prohibition does not affect existing buildings, renovations or additions made to a structure, including attached accessory dwelling units. The ban includes a waiver for developers who can demonstrate that it is not feasible for a new building to go 100% electric.

### 2.6.3 Project Impacts and Discussion

**Impact ENE-1: Construction and operation of the Project would not result in potentially significant environmental impact due to the wasteful, inefficient, and/ or unnecessary use of energy, and adequate capacity would be available to serve the Project's demand. (Criteria 1 and 4) (*Less than Significant with SCAs*)**

The analysis in this section utilizes the assumptions identified in Appendix E, *Air Quality and Health Risk Assessment Information*. Because the California Emissions Estimator Model (CalEEMod) program used in this technical report does not display the amount and fuel type for construction-related sources, additional calculations were conducted and are summarized below and provided in Appendix F, *Project Energy Calculations*.

#### Construction

During construction the Project would result in the consumption of fuel through the use of construction equipment, hauling truck trips, building material delivery truck trips, and worker trips to and from the project site. The Project's energy and fuel consumption during construction is summarized in **Table 2.6-1**. Project construction is expected to consume a total of approximately 298,122 gallons of diesel fuel from construction equipment and truck trips, and approximately 157,209 gallons of gasoline from construction worker vehicle trips. Project fuel use during construction would represent approximately 0.03 percent of diesel and 0.001 percent of gasoline sold in Alameda County in 2019 (CEC, 2020).

**TABLE 2.6-1  
PROJECT ENERGY CONSUMPTION DURING CONSTRUCTION**

Type (use)	Quantity	Units
Diesel (construction equipment and trucks)	23,644	gallons
Gasoline (worker vehicles)	8,049	gallons

NOTES: kWh = kilowatt-hours

SOURCE: Data compiled by Environmental Science Associates in 2021 (Appendix F).

SCA AIR-2, Criteria Air Pollutant Controls - Construction Related, requires limiting idling from diesel-fueled off-road vehicles over 25 horsepower and construction vehicles to two minutes, which would reduce the wasteful, inefficient, or unnecessary consumption of fuel during Project construction. Additionally, SCA AIR-2 requires portable equipment to be powered by grid electricity if available, and diesel engines are only allowed if grid electricity is not available and propane or natural gas generators cannot meet the electrical demand.

Construction activities and corresponding fuel energy consumption would be temporary and localized, as the use of diesel fuel and heavy-duty equipment would not be a typical condition of the Project. In addition, there are no unusual Project characteristics that would cause the use of construction equipment that would be less energy efficient compared with other similar construction sites in other parts of the City. Therefore, construction-related fuel consumption by

the Project would not result in inefficient, wasteful, or unnecessary energy use compared with other mixed-use development construction projects in the City.

**Operation**

The Project would use no natural gas for operation consistent with the City’s adopted ordinance prohibiting newly constructed buildings (both residential and commercial) from connecting to natural gas or propane (Ordinance 13632), and as indicated in the Equitable Climate Action Plan (ECAP) Checklist prepared for the Project (see Appendix G.1). The Project Applicant would implement the measure pertaining to building electrification in the ECAP Checklist. Therefore, the Project would have no impact on natural gas supplies.

The Project’s annual energy and fuel consumption that would occur during operation is summarized in **Table 2.6-2**. The Project would receive service power from PG&E, and would have an emergency generator available on-site. CalEEMod estimates were used to determine the electricity demand from the Project. The electricity demand from the Project was estimated to be 1,178 MWhr per year, which includes Project building-related energy use. Electricity associated with Project water consumption was estimated to be 0.57 MWh per year<sup>15</sup>, for a total energy demand of approximately 1,236 MWhr per year total when combined with estimated building electricity demand. For reference, the Project’s annual electricity demand represents approximately 0.004 percent of the commercial building electricity consumed in the PG&E service area in 2019, and 0.02 percent of non-residential electricity consumed in Alameda County in 2019 (CEC, 2021).

**TABLE 2.6-2  
PROJECT ANNUAL ENERGY CONSUMPTION DURING OPERATION**

Type (use)	Quantity	Units
<b>Electricity</b>		
Building	1,178,487	kWh/year
Water-related	57,447	kWh/year
<b>Total</b>	1,235,934	kWh/year
<b>Gasoline</b>		
Vehicle trips	59,594	gallons/year
<b>Diesel</b>		
Emergency Generator (if diesel)	1,729	gallons/year
<b>Total</b>	-	-

NOTES: kWh = kilowatt-hours

SOURCE: Data compiled by Environmental Science Associates in 2021 (Appendix E and Appendix F).

Additionally, the Project would seek LEED Silver level certification consistent with the City’s Green Building Requirements, and would comply with the CALGreen Code, and Title 24

<sup>15</sup> Based on the CalEEMod energy intensity of 0.0035 kWh per gallon for supply, distribution, and treatment of water for Alameda County.

building energy and water efficiency requirements. SCA UTIL-4, Green Building Requirements would ensure implementation of all mandatory City green building requirements and CALGreen measures. Project compliance with these regulations would ensure that the Project's building-related energy use would not be inefficient, wasteful, or unnecessary.

Project operation would also involve energy demand from gasoline fuel used by retail customers and employees traveling to and from the project site. Using the total CalEEMod mobile emissions rates (see Appendix E) during operations yields a conservative estimate of 59,594 gallons of gasoline required annually during Project operation. The gasoline consumption by Project residents and retail customers and employees during operation would represent approximately 0.01 percent of Alameda County's gasoline sales in 2019 (CEC, 2020). Further, the Project would be required to implement SCAs TRA-2, Bicycle Parking, TRA-4, Transportation and Parking Demand Management, and TRA-6, Plug-In Electric Vehicle (PEV) Charging Infrastructure, which would reduce the amount of gasoline consumed during Project operation by facilitating and encouraging alternative travel modes. The diesel fuel used for emergency generator maintenance and testing would also be minimal and represent approximately 0.002 percent of diesel fuel sold in the County in 2019 (CEC, 2020). Therefore, the energy demand from the operation of the Project would not result in wasteful, inefficient and unnecessary use of energy. This impact would be less than significant.

The project site is currently supplied electricity by PG&E and EBCE. PG&E and EBCE have established contracts and commitments to ensure there is adequate electricity generation capacity to meet its current and future energy loads. The Project would consume electricity typical of other mixed-use development in the project vicinity and is already supplied by PG&E and EBCE. Therefore, the Project would not result in a determination by PG&E or EBCE 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.

**SCA AIR-2: Criteria Air Pollutant Controls - Construction Related.** See Section 2.3.2.

**SCA TRA-2: Bicycle Parking.** See Section 2.17.2.

**SCA TRA-4: Transportation and Parking Demand Management.** See Section 2.17.2.

**SCA TRA-6: Plug-In Electric Vehicle (PEV) Charging Infrastructure.** See Section 2.17.2.

**SCA UTIL-4: Green Building Requirements.** See Section 2.18.2.

**Mitigation:** None required.

**Impact ENE-2: The Project would not conflict with or obstruct adopted energy conservation plans or violate energy efficiency standards. (Criteria 2 and 3) (*Less than Significant with SCAs*)**

As discussed under Impact ENE-1 above, the Project would seek LEED Silver level certification consistent with the City's green building requirements, and would comply with the CALGreen Code, and Title 24 building energy and water efficiency requirements. Implementation of SCA UTIL-4, Green Building Requirements, would ensure all applicable City green building requirements are met. The Project Applicant has committed to an all-electric building (see Appendix G.1), consistent with the City's adopted ordinance prohibiting newly constructed buildings (both residential and commercial) from connecting to natural gas and would allow the Project to receive energy from more renewable sources. Therefore, the Project would not conflict with or obstruct adopted energy conservation plans or violate energy efficiency standards and the impact would be less than significant.

**SCA UTIL-4: Green Building Requirements.** See Section 2.18.2.

**Mitigation:** None required.

## 2.6.4 Cumulative

**Impact ENE-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative energy impacts. (*Less than Significant with SCAs*)**

The geographic context for potential cumulative impacts related to electricity is within PG&E's service area. For potential cumulative impacts related to vehicle and construction equipment fuel use, the geographic context is within Alameda County, the area within which fuel would be demanded by and supplied to the Project. As described under Impact ENE-1, the Project's electricity use would represent a small fraction of the electricity usage attributed to commercial buildings in the PG&E service area, as well as non-residential uses in Alameda County. The Project would also use fuel resources during construction and operation, but these would be marginal increases in fuel consumption, when compared to County gasoline and diesel sales. Implementation of SCAs AIR-2, GHG-1, TRA-2, TRA-4, TRA-6, and UTIL-4 would ensure that the Project would not result in wasteful, inefficient and unnecessary use of energy resources and would not contribute to a cumulatively considerable impact.

Additionally, as described under Impact ENE-2, the Project would not conflict with or obstruct adopted energy conservation plans or violate energy efficiency standards, nor would it cause a significant environmental effect due to compliance with fuel and energy efficiency regulations, and a LEED Silver building design per the requirements of SCA UTIL-4. Cumulative development would also be subject to green building and other energy efficiency regulations. Therefore, the Project's less than significant energy impacts would not be cumulatively considerable.

**SCA AIR-2: Criteria Air Pollutant Controls - Construction Related.** See Section 2.3.2.

**SCA TRA-2: Bicycle Parking.** See Section 2.17.2.



**SCA TRA-4: Transportation and Parking Demand Management.** See Section 2.17.2.

**SCA TRA-6: Plug-In Electric Vehicle (PEV) Charging Infrastructure.** See Section 2.17.2.

**SCA UTIL-4: Green Building Requirements.** See Section 2.18.2.

### **2.6.5 References**

California Energy Commission (CEC), 2021. California Energy Consumption Database. Available at: <https://ecdms.energy.ca.gov/>, accessed January 8, 2021.

CEC, 2020. 2019 California Annual Retail Fuel Outlet Report Results (CEC-A15), September 22, 2020. Available at: <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>, accessed January 8, 2021.

City of Oakland, 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*, adopted June 11, 1996.

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## 2.7 Geology, Soils, and Paleontological Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>VII. GEOLOGY AND SOILS</b> — The project would have a significant impact on the environment if it would expose people or structures to geologic hazards, soils, and/or seismic conditions so unfavorable that they could not be overcome by special design using reasonable construction and maintenance practices. Specifically:				
1) Expose people or structures to substantial risk of loss, injury, or death involving:				
a) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; <sup>16</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Strong seismic ground shaking;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, collapse; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Landslides;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Result in substantial soil erosion or the loss of topsoil, creating substantial risks to life, property, or creeks/waterways;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Be located above a well, pit, swamp, mound, tank vault, or unmarked sewer line, creating substantial risks to life or property;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) Be located above landfills for which there is no approved closure and post-closure plan, or unknown fill soils, creating substantial risks to life or property; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 2.7.1 Setting

#### **Regional Setting**

The project site lies within the geologically complex region of California referred to as the Coast Ranges geomorphic province.<sup>17</sup> The project site is located at the northern most extent of the Southern Coast Ranges. The geologic map by R.W. Graymer (2000), published by the United

<sup>16</sup> **NOTE:** Refer to California Geological Survey 42 and 117 and Public Resources Code section 2690 et. seq.

<sup>17</sup> A geomorphic province is an area that possesses similar bedrock, structure, history, and age. California has 11 geomorphic provinces.

States Geological Survey, indicates the surficial geologic units at the project site are mapped as Holocene-age alluvial fan deposits and Pleistocene-age marine terrace deposits (Graymer, 2000; ENGEO, 2015). While not mapped at the surface, the Holocene to Pleistocene-age Merrit Sand Formation and Pleistocene-age alluvial fan and fluvial deposits are present in the subsurface beneath the project site.

## **Geologic and Seismic Hazards**

### **Seismicity**

The San Francisco Bay Area is a seismically active region on California. While there are several active faults in the Bay Area, there are none that cross the project site, and the project site is not within an Earthquake Fault Zone (EFZ), as delineated by the State Geologist (ENGEO, 2015). The risk of surface fault rupture at the project site is considered low to negligible due to the lack of any faults crossing the project site (ENGEO, 2015).

While there is little to risk of fault rupture at the site, strong seismic ground shaking is a potential risk due to the proximity of active faults. The 2015 *Working Group on California Earthquake Probabilities* (WGCEP) updated the 30-year earthquake forecast for California and it is estimated that the San Francisco Bay Area as a whole has a 72 percent chance of experiencing an earthquake of  $M_w$  6.7 or higher over the next 30 years. Of the various active faults in the region, the Hayward Fault is a fault with a high likelihood to cause such an event (ENGEO, 2015; Field et al., 2015). According to the WGCEP, there is a 32 percent probability that there will be a magnitude 6.7 earthquake, or larger, by 2045 on the Hayward Fault (ENGEO, 2015; Field et al., 2015); as modeled by the USGS ShakeMap (USGS, 2017), very strong to violent groundshaking is expected. The Preliminary Geotechnical Report by ENGEO echoes this expectation of considerable ground shaking at the project site (ENGEO, 2015).

### **Liquefaction**

Liquefaction is the rapid loss of shear strength experienced in saturated, predominantly loose granular soils below the groundwater level during strong earthquake ground shaking and occurs due to an increase in pore water pressure. Liquefaction-induced lateral spreading is defined as the finite, lateral displacement of gently sloping ground as a result of pore-pressure buildup or liquefaction in a shallow underlying deposit during an earthquake. The occurrence of this phenomenon is dependent on many complex factors, including the intensity and duration of ground shaking, particle-size distribution, and density of the soil.

The potential damaging effects of liquefaction include differential settlement, loss of ground support for foundations, ground cracking, heaving and cracking of structure slabs due to sand boiling, and buckling of deep foundations due to ground settlement. Dynamic settlement (i.e., pronounced consolidation and settlement from seismic shaking) may also occur in loose, dry sands above the water table, resulting in settlement of and possible damage to overlying structures. In general, a relatively high potential for liquefaction exists in loose, sandy soils that are within 40-feet of the ground surface and are saturated (below the groundwater table). Lateral spreading can move blocks of soil, placing strain on buried pipelines that can lead to leaks or pipe failure.

Localities most susceptible to liquefaction-induced damage are underlain by loose, water-saturated, granular sediment within 40-feet of the ground surface (CGS, 2003a). As the project site is underlain by potentially liquefiable materials, there is a very high potential for liquefaction at the project site. The CGS published a composite map of the Oakland West Quadrangle overlain with Alquist-Priolo Earthquake Fault Zones and Seismic Hazard Zones (i.e., liquefaction and earthquake-induced landslides). The map indicates the project site is within a Liquefaction Zone (CGS, 2003b). Additionally, ENGEO performed a detailed liquefaction potential analysis, the results of which indicate that the soils underlying the project site are subject to liquefaction and/or cyclic softening<sup>18</sup> (ENGEO, 2015).

### **Expansive and Corrosive Soils**

Expansive soils are soils that possess a “shrink-swell” characteristic, also referred to as linear extensibility. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying; the volume change is reported as a percent change for the whole soil. Changes in soil moisture can result from rainfall, landscape irrigation, utility leakage, roof drainage, or perched groundwater.<sup>19</sup> Expansive soils are typically very fine-grained and have a high to very high percentage of clay. Structural damage may occur incrementally over a long period of time, usually as a result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils.

The Preliminary Geotechnical Report by ENGEO indicates the soils underlying the project site have a moderate expansion potential (ENGEO, 2015). Further, previous laboratory testing of similar soils surrounding the project indicate a moderate to high expansion potential (ENGEO, 2015). ENGEO did not perform an analysis of the corrosion potential of the soils underlying the project site. However, the report recommends that a corrosion analysis be performed as part of a final, site-specific geotechnical investigation, which would be required per the Oakland Building Code.

### **Paleontological Resources**

Paleontological resources are the fossilized remains or impressions of plants and animals, including vertebrates (animals with backbones; mammals, birds, fish, etc.), invertebrates (animals without backbones; starfish, clams, coral, etc.), and microscopic plants and animals (microfossils). They are valuable, non-renewable, scientific resources used to document the existence of extinct life forms and to reconstruct the environments in which they lived. Fossils can be used to determine the relative ages of the depositional layers in which they occur and of the geologic events that created those deposits. The age, abundance, and distribution of fossils depend on the geologic formation in which they occur and the topography of the area in which they are exposed. The geologic environments within which the plants or animals became fossilized usually were quite different from the present environments in which the geologic formations now exist.

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<sup>18</sup> Liquefaction in clay is commonly referred to as “cyclic softening.” (ENGEO, 2015)

<sup>19</sup> Perched groundwater is a local saturated zone above the water table that typically exists above an impervious layer (such as clay) of limited extent.

As stated above, the surficial geologic units at the project site are mapped as Holocene-age alluvial fan deposits and Pleistocene-age marine terrace deposits (Graymer, 2000; ENGEO, 2015). While not mapped at the surface, the Holocene to Pleistocene-age Merrit Sand Formation and Pleistocene-age alluvial fan and fluvial deposits are present in the subsurface beneath the project site (Graymer, 2000, ENGEO, 2015).

Due to the relatively young age of Holocene deposits, they generally have a low paleontological potential at the surface, but the potential increases with depth into the older portions of Holocene-age deposits. Therefore, fossil resources may be encountered in the deeper levels of this unit (i.e., depths that correspond to 5,000 radiocarbon years or older). The University of California Museum of Paleontology (UCMP) online fossil locality database there are five fossil localities within Holocene-age deposits in California (UCMP, 2020a). Pleistocene-age deposits have a rich fossil history throughout California (Dundas, 2009; Ngo, 2013); according to the UCMP online fossil locality database, there are 65 vertebrate fossil localities within Alameda County (UCMP, 2020b).

The age and history of the Holocene and Pleistocene-age deposits underlying the project site suggest a low to high potential to encounter paleontological resources. Due to the presence of potentially fossiliferous deposits underlying the project site, demolition and construction activities associated with the project may encounter and impact significant paleontological resources.

## 2.7.2 Regulatory Setting

### ***City of Oakland General Plan***

Chapter 3, *Geologic Hazards*, of the *Safety Element* of the City of Oakland General Plan describes the following policies regarding geological resources, adopted for the purpose of avoiding or mitigating an environmental effect, and that apply to the Project (City of Oakland, 2012).

***Policy GE-1:*** Develop and continue to enforce and carry out regulations and programs to reduce seismic hazards and hazards from seismically triggered phenomena.

***Action GE-1.2:*** Enact regulations requiring the preparation of site-specific geologic or geotechnical reports for development proposals in areas subject to earthquake-induced liquefaction, settlement or severe ground shaking, and conditioning project approval on the incorporation of necessary mitigation measures.

### ***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City's SCAs relevant to reducing impacts on geology and soils and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to geology

and soils. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA GEO-1: Construction-Related Permit(s).** *(Standard Condition of Approval 36)*

**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.

**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).** *(Standard Condition of Approval 39)*

**Requirement:** The project applicant shall submit a site-specific geotechnical report, consistent with California Geological Survey Special Publication 177 (As amended), prepared by a registered geotechnical engineer for City review and approval containing at a minimum a description of the geological and geotechnical conditions at the site, an evaluation of site-specific seismic hazards based on geological and geotechnical conditions, and recommended measures to reduce potential impacts related to liquefaction and/or slope stability hazards. The project applicant shall implement the recommendations contained in the approved report during project design and construction.

### 2.7.3 Topics Considered and No Impact Determined

The Project would have no impact to the following topics based on the proposed Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- **Fault Rupture** (Criterion 1.a). There are no active faults that cross the project site, and the nearest active fault to the project site is the Northern Hayward section of the Hayward Fault Zone, located approximately five miles east of the project site. Therefore, the potential for fault rupture to affect the Project is very low and not discussed further.
- **Landslides** (Criterion 1.d). The project site is not within areas designated by the State Geologist where previous landslide movement has occurred. The project site is also not mapped within areas designated as having the potential for seismically-induced landslides. Therefore, no impact is associated with this hazard.
- **Landfills** (Criterion 5) The project site is not located above any landfill. Therefore, no impact is associated with this hazard.
- **Wastewater Disposal** (Criteria 6). The project site is located within an urban area where all development would connect with the existing wastewater sewer infrastructure. Therefore, the Project would not require the use of septic or other alternative disposal wastewater systems. Therefore, no impact is associated with this hazard.

## 2.7.4 Project Impacts and Discussion

### ***Seismic Ground Shaking and Seismic-Related Ground Failure***

**Impact GEO-1: The Project would not expose people or structures to substantial risk of loss, injury, or death involving seismic hazards such as ground shaking and seismic-related ground failure such as liquefaction, differential settlement, collapse, or lateral spreading. (Criteria 1.b and 1.c) (*Less than Significant with SCAs*)**

The project site is located in a seismically active region of California that contains a number of active faults. None of these faults cross the project site and so there would be no impact related to surface fault rupture. However, the project site is in proximity to active faults and is susceptible to strong seismic ground shaking, as well as the secondary seismic-related ground failures that are triggered by seismically-induced ground shaking. The liquefaction analysis performed by ENGEO indicates potentially liquefiable soils are present beneath the project site, and in the event of an earthquake those soils could lose their structural integrity and cause damage to foundations and structures. Based on topographic and geologic data, the risk of regional subsidence, lateral spreading, and landslides is considered low to negligible (ENGEO, 2015).

Implementation of **SCA GEO-1, Construction-Related Permits**, and **SCA GEO-2, Seismic Hazards Zone**, would reduce the impacts of seismic hazards during construction. SCA GEO-1 would require the Project Applicant to obtain any and all applicable construction-related permits/approvals from the City, and would be required to comply with all standards, requirements, and conditions contained in construction related codes (e.g. the Oakland Building Code [which incorporates by reference the California Building Code] and the Oakland Grading Regulations), which would ensure structural integrity and safe construction. SCA GEO-2 requires preparation and submittal of a site-specific geotechnical report that is to be consistent with the standards described in CGS Special Publication 177. The report would contain, at minimum, a description of the geologic and geotechnical conditions, and evaluation of site-specific seismic hazards, and recommended measures to reduce potential impacts. Implementation of the recommendations contained in the approved report during project design and construction will be required, and would reduce this impact to less than significant.

**SCA GEO-1: Construction-Related Permit(s).** See Section 2.7.2.

**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).** See Section 2.7.2.

**Mitigation:** None required.

### ***Soil Erosion and Expansive Soils***

**Impact GEO-2: The Project would not result in substantial soil erosion or loss of topsoil, creating substantial risks to life, property, or creeks/waterways. (Criterion 2) (*Less than Significant with SCAs*)**

The Project would include ground-disturbing construction activities, including grading, excavation for certain utilities, and installation of piles for building foundations, which could increase the risk

of erosion or sediment transport. Construction would have the potential to result in soil erosion during excavation and grading.

The overall footprint of construction activities would exceed one acre. Therefore, the Project would be required to implement SCA HYD-2, Construction General Permit, and comply with the Construction General Permit, which was developed to ensure that stormwater is managed and erosion is controlled on construction sites. The Construction General Permit requires Project Applicants to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), which requires applications of BMPs to control run-on and runoff from construction work sites. The BMPs would include, but would not be limited to, physical barriers to prevent erosion and sedimentation, construction of sedimentation basins, limitations on work periods during storm events, use of infiltration swales, protection of stockpiled materials, and a variety of other measures that would substantially reduce or prevent erosion from occurring during construction. Further, since the Project would require a grading permit, the Project Applicant would be required to comply with SCA HYD-1, Erosion and Sedimentation Control Plan for Construction, and prepare an Erosion and Sedimentation Control Plan. This Plan is required to include necessary grading and/or construction operations measures to prevent stormwater runoff that is excessive and/or solid materials on to lands of adjacent property owners, public streets, or to creeks (see Section 2.10, *Hydrology and Water Quality*). Compliance with these independently enforceable existing requirements would reduce the Project's potential impacts associated with soil erosion during construction to less than significant.

During operation, the Project would be required to comply with SCA HYD-3, NPDES C.3 Stormwater Requirements for Regulated Projects, relating to water quality and stormwater runoff during operation. The Project would also be subject to SCA UTIL-6, Storm Drain System, which requires, to the maximum extent practicable, a peak stormwater runoff reduction from the project site by at least 25 percent compared to the pre-Project condition (see Section 2.18, *Utilities and Service Systems*). Therefore, the Project's potential impacts associated with soil erosion during operation would be less than significant.

**SCA HYD-1: Erosion and Sedimentation Control Plan for Construction.** See Section 2.10.2.

**SCA HYD-2: State Construction General Permit.** See Section 2.10.2.

**SCA HYD-3: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 2.10.2.

**SCA UTIL-6: Storm Drain System.** See Section 2.18.2.

**Mitigation:** None required.



**Impact GEO-3: The Project would not be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code or corrosive soil, creating substantial risks to life or property. (Criterion 3) (*Less than Significant with SCAs*)**

The presence of expansive soils at the project site could cause damage to the pavements and structures founded on shallow foundations, which could create a risk to life or property and result in a significant impact. To address the potential risks associated with expansive soils, the report provides soil engineering recommendations and foundation design requirements to be implemented during construction that would help to reduce the risks associated with effects of expansive soils.

The report does not include an analysis of the corrosion potential of the soils at the project site. However, it does recommend that a corrosion potential analysis be performed as part of the site-specific geotechnical report, which is a requirement of SCA GEO-2, discussed below. Further, SCA GEO-1 requires the Project Applicant to obtain all necessary construction-related permits prior to construction. Adherence to all applicable standards and requirements of the Oakland Building Code and Oakland Grading Regulations would reduce the risks associated with expansive and corrosive soils.

SCA GEO-2 requires the Project Applicant to submit a site-specific geotechnical report, to be prepared by a registered geotechnical engineer, for City approval prior to construction. The forthcoming geotechnical report will include an evaluation of site-specific seismic hazards, including expansive and corrosive soils at the project site. Adherence to the applicable building code requirements, as required by SCA GEO-1, and implementation of the recommendations and design requirements provided in the Preliminary Geotechnical Report by ENGEO and the subsequent, site-specific geotechnical report required as part of SCA GEO-2, would reduce the impacts of expansive and corrosive soils to less than significant.

**SCA GEO-1: Construction-Related Permit(s).** See Section 2.7.2.

**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).** See Section 2.7.2.

**Mitigation:** None required.

### ***Subsurface Hazards***

**Impact GEO-4: The Project would not create substantial risks to life or property due to being located above a well, pit, swamp, mound, tank vault, or unmarked sewer line. (Criterion 4) (*Less than Significant with SCAs*)**

The Subsurface Investigation Report prepared by PES identified an auto service pit, a dry storage pit, and a fluid-filled sump underlying the 24<sup>th</sup> and 25<sup>h</sup> Street site. Additionally, PES identified an on-site sewer lateral constructed beneath the building (refer to Section 2.9, *Hazards and Hazards Materials*, for a more detailed discussion of the hazards associated with these subsurface features). These subsurface features could create significant risks to life or property if not addressed prior to demolition and construction activities associated with the Project. To address these issues the Subsurface Investigation Report recommends that existing Hazardous Material

Business Plan (HMBP) be closed in accordance with the Alameda County Department of Environmental Health (ADEH) and the Oakland Fire Department (OFD), which would require that the material and debris present in the pits and sump beneath the project site be removed and backfilled with properly engineered soil. SCA HAZ-2, Hazardous Building Materials and Site Contamination, would require the Project Applicant to implement the recommendations in the Subsurface Investigation Report and submit to the City evidence of approval for any proposed remedial action and required clearances by ADEH and OFD. As discussed above, the Project Applicant would be required to comply with the Oakland Building Code (SCA GEO-1), which would require the proper handling of the pits and sump beneath the 24<sup>th</sup> and 25<sup>th</sup> Street site. Additionally, the Project Applicant would be required to submit a site-specific geotechnical report prior to construction (SCA GEO-2), which would include design requirements and recommendations, including proper handling of the subsurface materials beneath the project site. Adherence to SCA GEO-1 and SCA GEO-2, and SCA HAZ-2, would reduce these impacts to less than significant. Upon completion of the construction, there would be no operational impacts related to the project site being located on a well, pit, swamp, mound, tank vault, or unmarked sewer line, resulting in a less-than-significant impact.

**SCA GEO-1: Construction-Related Permit(s).** See Section 2.7.2.

**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).** See Section 2.7.2.

**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** See Section 2.9.2.

**Mitigation:** None required.

### ***Paleontological Resources***

**Impact GEO-5: The Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Criterion 7) (*Less than Significant with SCAs*)**

A review of geologic maps, UCMP fossil locality data, and available literature pertaining to the project site indicates the geologic units underlying the project site have the potential to contain paleontological resources. The Holocene-age deposits have a low to high potential; the potential to encounter fossils increases with depth into the unit. Due to the numerous vertebrate fossils discovered within Pleistocene-age deposits, these deposits have a high potential for contain paleontological resources.

Excavation, grading, and other below-ground construction (i.e., mat slab foundations) into previously undisturbed deposits have the potential to encounter and disturb paleontological resources; the greater and deeper the ground disturbance, the higher the potential to encounter and disturb significant resources. In the event that paleontological resources are encountered during construction activities, SCA CUL-1, Archeological and Paleontological Resources – Discovery During Construction, would require all work to stop within 50 feet of any discovery and for a qualified paleontologist to assess the find. If the find is deemed significant, appropriate measures would be taken to either avoid the resource or institute additional measures (i.e., salvage and

excavation) to preserve any significant resource. The application of SCA CUL-1 would reduce any potential impact to significant paleontological resources. Therefore, the Project's impact to paleontological resources would be less than significant.

**SCA CUL-1: Archeological and Paleontological Resources – Discovery During Construction.** See Section 2.5.2.

**Mitigation:** None required.

### 2.7.5 Cumulative

As analyzed above, the Project would not result in a significant impact related to fault rupture, landslides, landfills, or wastewater disposal. Because no impact would result, the Project could not cause or contribute to any cumulative effect in this regard. Therefore, this cumulative analysis focuses on whether the Project's less-than-significant impacts relating to seismic ground shaking and seismic-related ground failure, soil erosion and expansive soils, subsurface hazards, and paleontological resources would contribute to a cumulative effect.

**Impact GEO-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts to geology, soils, seismicity, or paleontology. (*Less than Significant with SCAs*)**

The Project would be constructed within the Downtown Oakland Specific Plan (DOSP) planning area. While the DOSP has not been officially adopted yet, upon certification of the DOSP, the Project would be constructed consistent with the goals set forth in the Plan.

Other projects that would be near or adjacent to the Project that could be constructed at the same time, could result in cumulative erosion effects. Implementation of applicable erosion-related SCAs (i.e., SCAs HYD-1, HYD-2, HYD-3, and UTIL-6, discussed above) would reduce the Project's cumulative impact on soil erosion. The applicable SCAs include implementing erosion and sedimentation control measures and to prepare an erosion and sedimentation control plan (SCA HYD-1), would require compliance with the Construction General Permit (SCA HYD-2), and would require measures to reduce stormwater runoff (SCAs HYD-3 and UTIL-6). The state Construction General Permit would require cumulative projects to prepare and implement a SWPPP. The SWPPPs would describe BMPs to control runoff and prevent erosion for each project. Through compliance with this requirement, the potential for erosion impacts would be controlled. The Construction General Permit has been developed to address cumulative conditions arising from construction throughout the state, and is intended to maintain cumulative effects of projects subject to this requirement to less than significant levels. For example, two adjacent construction sites would be required to implement BMPs to reduce and control the release of sediment and/or other pollutants in any runoff leaving their respective sites. The runoff water from both sites would be required to achieve the same action levels, measured as a maximum amount of sediment or pollutant allowed per unit volume of runoff water. Thus, even if the runoff waters were to combine after leaving the sites, the sediments and/or pollutants in the combined runoff would still be at concentrations (amount of sediment or pollutants per volume of runoff water) below action levels and would not be cumulatively considerable.

Seismically induced groundshaking, liquefaction, and expansive soils could cause structural damage or ruptures during construction and operation of cumulative projects. However, as discussed for the Project, State and local building regulations and SCA GEO-1 and SCA GEO-2 have been established to address and reduce the potential for such impacts to occur. The cumulative projects would be required to comply with the same applicable provisions of these laws and regulations. Through compliance with these requirements, the potential for impacts would be reduced. The purpose of the Oakland Building Code and local ordinances is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all buildings and structures within its jurisdiction; by design, it is intended to reduce the cumulative risks from buildings and structures. Based on compliance with these requirements, the incremental impacts of the Project, combined with impacts of other projects in the area, would not combine to cause a significant cumulative impact related to seismically-induced groundshaking, liquefaction, or expansive soils.

Federal, State, and local laws can generally protect paleontological resources in most instances. Similar to the Project, any cumulative development would be required to comply with the same provisions of CEQA and implement measures similar to those identified above (SCA CUL-1). These measures would require protocols for responding in the event of any discovery of paleontological resources. Through compliance with applicable regulations and implementation of associated avoidance and minimization measures, the Project would not have a considerable contribution to adverse effects on paleontological resources of the region. This cumulative impact would be less than significant.

Potential exposure to geological and soils hazards, and impacts to paleontological resources, resulting from construction and operation of development of the Project would not have a cumulatively considerable contribution to a cumulative impact. No significant cumulative impact is identified.

**SCA GEO-1: Construction-Related Permit(s).** See Section 2.7.2.

**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).** See Section 2.7.2.

**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** See Section 2.9.2.

**SCA HYD-1: Erosion and Sedimentation Control Plan for Construction.** See Section 2.10.2.

**SCA HYD-2: State Construction General Permit.** See Section 2.10.2.

**SCA HYD-3: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 2.10.2.

**SCA UTIL-6: Storm Drain System.** See Section 2.18.2.

**SCA CUL-1: Archeological and Paleontological Resources – Discovery During Construction.** See Section 2.5.2.

**Mitigation:** None required.

## 2.7.6 References

- California Geological Survey (CGS), 2003a. *Seismic Hazard Zone Report for the Oakland West 7.5-Minute Quadrangle, Alameda County, California*
- CGS, 2003a. *Earthquake Fault Zones (1982) and Seismic Hazard Zones (2003), Oakland West Quadrant, Revised Official Map*. Map. Scale 1: 24,000.
- City of Oakland, 2012. *General Plan, Safety Element*. Adopted 2004, Amended 2012.
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-

## 2.8 Greenhouse Gas Emissions

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>VIII. GREENHOUSE GAS EMISSIONS</b> — The project would have a significant impact on the environment if it would: <sup>20</sup>				
1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, specifically:				
a) For a project involving a stationary source, produce total emissions of more than 10,000 metric tons of CO <sub>2</sub> e annually. [NOTE: Stationary sources are projects that require a BAAQMD permit to operate.]	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) For a project involving a land use development, <sup>21</sup> fail to demonstrate consistency with the 2030 Equitable Climate Action Plan (ECAP) adopted by the City Council on July 28, 2020. [NOTE: Land use developments are projects that do not require a BAAQMD permit to operate.] Consistency with the 2030 ECAP can be shown by either:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(a) committing to all of the GHG emissions reductions strategies described on the ECAP Consistency Checklist, <sup>22</sup> or				
(b) complying with the GHG Reduction Standard Condition of Approval that requires a project-level GHG Reduction Plan quantifying how alternative reduction measures will achieve the same or greater emissions than would be achieved by meeting the ECAP Consistency Checklist.				
2) Fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 2.8.1 Setting

#### ***State and Regional***

The California Global Warming Solutions Act (Assembly Bill [AB] 32, 2006), as amended, sets statewide greenhouse gas (GHG) emissions caps. The California Air Resources Board (CARB) established the Climate Change Scoping Plan, which outlined a framework for achieving the emission reduction goals set in the California Global Warming Solutions Act. In 2016, SB 32 and its companion bill AB 197 established a new climate pollution reduction target of 40 percent

<sup>20</sup> **NOTE:** Greenhouse gas impacts are, by their nature, cumulative impacts because one project by itself cannot cause global climate change. These thresholds pertain to a project’s contribution to cumulative impacts but are labeled “Project-Level Impacts” here to be consistent with the terminology used by BAAQMD.

<sup>21</sup> For projects that involve both a stationary source and a land use development, calculate each component separately and compare to the applicable threshold.

<sup>22</sup> The ECAP Consistency Checklist includes all of the project-level GHG emissions reduction strategies that are either regulatory requirements or are necessary at a project level to meet the adopted city-wide GHG emissions reduction targets of 56% reduction from 2005 levels by 2030 and 83% reduction by 2050. As new strategies are adopted to align with the 2030 ECAP, the Checklist will be updated and new projects will be expected to achieve the revised strategies or comply with GHG Reduction Standard Condition of Approval.

below 1990 levels by 2030 and included provisions to ensure the benefits of State climate policies reach into disadvantaged communities.

Senate Bill (SB) 375 requires CARB to develop regional GHG reduction goals for the automobile and light truck sectors. The *Plan Bay Area 2040* is a plan to achieve regional GHG reduction goals by improving transportation access, maintaining the region's infrastructure, and enhancing resilience to climate change through strategies such as fostering open space. There are a number of other laws in California intended to reduce GHG emissions through the regulation of construction standards, growth, and municipal operations.

Within the Bay Area, the Bay Area Air Quality Management District (BAAQMD) developed the 2017 Clean Air Plan, which lays the groundwork for the Bay Area to reduce reach regional GHG reduction goals (BAAQMD 2017a). Additionally, the BAAQMD CEQA Air Quality Guidelines provides thresholds and guidance for greenhouse gas emissions for CEQA. The guidelines include a threshold of 10,000 metric tons per year (MT/yr) of CO<sub>2</sub> equivalent (CO<sub>2</sub>e) for stationary-source projects that include land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate (BAAQMD, 2017b). BAAQMD has established no construction-related emission thresholds.

### ***California Building and Energy Efficiency Standards (Title 24)***

The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The current Title 24, Part 6 standards (2019 standards) were made effective on January 1, 2020.

### ***California Green Buildings Standards Code (CALGreen)***

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. CALGreen is intended to encourage more sustainable and environmentally friendly building practices, require low-pollution emitting substances that cause less harm to the environment, conserve natural resources, and promote the use of energy-efficient materials and equipment. Since 2011, the CALGreen Code has been mandatory for all new residential and non-residential buildings constructed in the State. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and nonresidential uses; the new measures took effect on January 1, 2020.

### ***City of Oakland General Plan***

#### **Land Use and Transportation Element**

The Land Use and Transportation Element (which includes the Pedestrian Master Plan and Bicycle Master Plan) of the Oakland General Plan contains the following policies that address

issues related to reducing transportation-related sources of GHG Emissions and their effects on Climate Change (City of Oakland, 2007):

***Policy T.2.1: Encouraging Transit-Oriented Development:*** Transit-oriented development should be encouraged at existing or proposed transit nodes, defined by the convergence of two or more modes of public transit such as BART, bus, shuttle service, light rail or electric trolley, ferry, and inter-city or commuter rail.

***Policy T.2.2: Guiding Transit-Oriented Development.*** Transit-oriented developments should be pedestrian oriented, encourage night and day time use, provide the neighborhood with needed goods and services, contain a mix of land uses, and be designed to be compatible with the character of surrounding neighborhoods.

***Policy T.3.5: Including Bikeways and Pedestrian Walks.*** The City should include bikeways and pedestrian ways in the planning of new, reconstructed, or realigned streets, wherever possible.

***Policy T.3.6: Incorporating Design Feature for Alternative Travel.*** The City will require new development, rebuilding, or retrofit to incorporate design features in their projects that encourage use of alternative modes of transportation such as transit, bicycling, and walking.

***Policy T.4.2: Creating Transportation Incentives.*** Through cooperation with other agencies, the City should create incentives to encourage travelers to use alternative transportation options.

***Policy N.3.2: Encouraging Infill Development.*** In order to facilitate the construction of needed housing units, infill development that is consistent with the General Plan should take place throughout the City.

### **Open Space, Conservation and Recreation Element (OSCAR)**

The OSCAR Element includes policies that address GHG reduction and adaptation to global climate change. Listed below are OSCAR policies that encourage the provision of open space, which increases vegetation area (trees, grass, landscaping, etc.) to effect cooler climate, reduce excessive solar gain, and absorb CO<sub>2</sub>; OSCAR policies that encourage stormwater management, which relates to the maintenance of floodplains and infrastructure to accommodate potential increased storms and flooding; and OSCAR policies that encourage energy efficiency and use of alternative energy sources, which directly address reducing GHG emissions (City of Oakland, 1996).

***Policy CO-12.1: Land Use Patterns Which Promote Air Quality:*** Promote land use patterns and densities which help improve regional air quality conditions by: (a) minimizing dependence on single passenger autos; (b) promoting projects which minimize quick auto starts and stops, such as live-work development, mixed use development, and office development with ground floor retail space; (c) separating land uses which are sensitive to pollution from the sources of air pollution; and (d) supporting telecommuting, flexible work hours, and behavioral changes which reduce the percentage of people in Oakland who must drive to work on a daily basis.

***Policy CO-12.4: Design of Development to Minimize Air Quality Impacts:*** Require that development projects be designed in a manner which reduces potential adverse air quality impacts. This may include: (a) the use of vegetation and landscaping to absorb carbon



monoxide and to buffer sensitive receptors; (b) the use of low-polluting energy sources and energy conservation measures; and (c) designs which encourage transit use and facilitate bicycle and pedestrian travel.

***Policy CO.13.2: Energy Efficiency.*** Support public information campaigns, energy audits, the use of energy-saving appliances and vehicles, and other efforts which help Oakland residents, businesses, and City operations become more energy efficient.

***Policy CO.13.3: Construction Methods and Materials.*** Encourage the use of energy-efficient construction and building materials. Encourage site plans for new development which maximize energy efficiency.

### **Historic Preservation Element**

A key Historic Preservation Element policy relevant to climate change encourages the reuse of existing building (and building materials) resources, which could reduce landfill material (a source of methane, a GHG), avoid the incineration of materials (which produces CO<sub>2</sub> as a by-product), avoid the need to transport materials to disposal sites (which produces GHG emissions), and eliminate the need for materials to be replaced by new product (which often requires the use of fossil fuels to obtain raw and manufacture new material) (City of Oakland, 1998).

### ***City of Oakland GHG Reduction Targets and Climate Action Plan***

In October 2018, the Oakland City Council passed Resolution 87183 adopting an interim citywide GHG emissions reduction target of 56 percent below 2005 levels by the year 2030 to keep the City on track to meet its 2050 target.

In July 2020, via Resolution 88267, Oakland City Council adopted the 2030 Equitable Climate Action Plan (ECAP), a comprehensive plan to achieve the 2030 GHG reduction target and increase Oakland's resilience to the impacts of the climate crisis, both through a deep equity lens (City of Oakland, 2020a). Alongside the 2030 ECAP, Council also adopted a goal to achieve community-wide carbon neutrality no later than 2045 (City of Oakland, 2020b). Achieving carbon neutrality will require complete decarbonization (ensuring that all mechanical systems run on clean electricity) of Oakland's building sector.

### ***Oakland Green Building Ordinance***

The City of Oakland adopted mandatory green building standards for private development projects on October 19, 2010. All buildings or projects must comply with all requirements of the 2013 California Building Energy Efficiency Standards and subsequent updates to those standards, as well as meet a variety of checklist requirements. These standards indirectly reduce GHGs through design features lowering building energy use.

### ***City of Oakland Municipal Code for Plug-in Electric Vehicle Charging Stations***

Chapter 15.04, Part 11 of the City's Municipal Code requires all new multifamily and non-residential buildings to include full circuit infrastructure for plug-in electric vehicle (PEV) charging stations for at least 10 percent of the total parking spaces. In addition, inaccessible conduits for future expansion of PEV spaces must be installed 10 percent of the total parking at

non-residential buildings. The new requirements are designed to accelerate the installation of vehicle chargers to address demand.

### ***City of Oakland Ordinance Requiring All-Electric Construction In Newly Constructed Buildings***

On December 1, 2020, the City of Oakland adopted Ordinance 13632 prohibiting newly constructed buildings (both residential and commercial) from connecting to natural gas or propane. Newly constructed buildings must use a permanent supply of electricity as the source of energy for all space heating, water heating (including pools and spas), cooking appliances, and clothes drying appliances.

### ***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City's SCAs relevant to reducing impacts on GHG emissions and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to GHG emissions. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

#### **SCA GHG-1: Greenhouse Gas (GHG) Reduction Plan. *(Standard Condition of Approval 42)***

##### ***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 to reduce GHG emissions to at least the amount that would be achieved by committing to all of the emissions reductions strategies identified on the ECAP Consistency Checklist as the City's project-level implementation of its Equitable Climate Action Plan (adopted in 2020), which calls for reducing city-wide GHG emissions by 56 percent below 2005 levels by 2030 and 83 percent by 2050. The GHG Reduction Plan shall include, at a minimum, (a) a detailed quantified GHG emissions inventory for the project taking into consideration energy efficiencies included as part of the project (including proposed mitigation measures, project design features, those strategies being implemented and other City requirements), (b) for each ECAP Consistency Checklist strategy that the project will not meet, a quantified calculation of the additional GHG emission reductions that would have occurred had it implemented the GHG emissions reduction measure consistent with the ECAP Consistency Checklist, (c) a quantified strategy for achieving an GHG emission reduction equivalent to the reduction that would have resulted from complying with the ECAP Consistency Checklist strategy, and (d) 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 additional 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; then (4) off-site within the State of California;.

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; then (3) within the State of California. 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 net difference operational emissions estimated in the GHG Reduction Plan for the project as compared to the Checklist baseline.

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.

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 Checklist baseline emissions reported in the GHG Plan.

The GHG Reduction Plan shall be considered fully attained when project emissions are less than the Checklist baseline, 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 described in the GHG Reduction Plan.

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 Equitable Climate Action 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.

## 2.8.2 Project Impacts and Discussion

**Impact GHG-1: The Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. (Criterion 1) (*Less than Significant with SCAs*)**

### Land Use Development

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 assesses whether the Project would make a considerable contribution to cumulative climate change effects. The City of Oakland’s current adopted thresholds for GHG emissions rely upon the technical and scientific basis for the City’s 2030 ECAP, which provide substantial evidence that adherence to the 2030 ECAP action items will achieve GHG emissions reduction targets of at least 56 percent below 2005 levels by 2030 and 83 percent below 2005 levels by 2050. These reduction targets are more aggressive than the State’s adopted 2030 reduction target of 40 percent below 1990 levels (per AB 32). Therefore, reductions below the City of Oakland’s reduction targets also meet the State’s adopted 2030 goals.

An ECAP Consistency Review Checklist was prepared for the Project (see **Appendix G.1**). The purpose of the ECAP Consistency Review Checklist is to determine, for purposes of compliance with CEQA, whether a development project complies with the ECAP and the City’s GHG emissions reduction targets. According to the Project’s ECAP Consistency Review Checklist, the Project has not committed to all applicable GHG emissions reduction strategies, and would, therefore, be required to comply with **SCA GHG-1, GHG Reduction Plan**, that requires a project-level GHG Reduction Plan quantifying how alternative reduction measures will achieve the same or greater emissions than would be achieved by meeting the ECAP Consistency Checklist. According to the ECAP Checklist submitted by the Project Applicant (Appendix G.1), the Project complies with all applicable ECAP Checklist items, with the exception of one, as shown in **Table GHG-1** below.

**TABLE GHG-1  
 PROJECT ECAP CHECKLIST COMPLIANCE**

ECAP Checklist Item	Compliance Response
2. For developments in “Transit Accessible Areas” as defined in the Planning Code, would the project provide: i) less than half the maximum allowable parking, ii) the minimum allowable parking, or iii) take advantage of available parking reductions?	No. The Project exceeds the minimum parking requirements but is not overparked. It is consistent with the amount of parking allowed under the Planning Code.

SOURCE: Appendix G.1

Regarding ECAP Checklist Item #2, while parking provided by the Project is consistent with the amount of parking allowed under the Planning Code, it exceeds the minimum parking requirements by 26 spaces. From a transportation standpoint, it is generally assumed that off-site parking is available in downtown Oakland; so even if a project has no on-site parking, it is conservatively assumed that it would not affect trip generation or vehicle miles traveled (VMT)

because there is other parking available nearby. However, for a conservative analysis of the GHG impacts of this measure, it was assumed that each parking space eliminated would result in one fewer employee driving to the Project site and therefore a reduction in VMT associated with that employee. Once operational, the Project would employ 407 employees (see Impact POP-1). Assuming VMT from employee commute is about 90 percent of the total VMT generated by the Project, eliminating one parking space would reduce VMT by 0.2 percent. Thus, eliminating 26 spaces would conservatively reduce VMT by approximately 5.8 percent. This would translate to a GHG reduction of approximately 25 MT CO<sub>2</sub>e per year from mobile sources if this measure had been implemented.

A GHG Reduction Plan has been prepared for the Project consistent with SCA GHG-1, that would reduce Project GHG emissions through alternative reduction measures to meet the requirements of SCA GHG-1 and achieve the same or greater emissions than would be achieved by meeting the ECAP Consistency Checklist Item #2 (see **Appendix G.2**). As shown in the GHG Reduction Plan, had the Project implemented ECAP Checklist Item #2, the Project would have achieved a total quantifiable reduction of approximately 24.9 MT CO<sub>2</sub>e per year from mobile sources. The GHG Reduction Plan identified three alternative reduction measures: (1) additional plug-in electric vehicle (PEV) only parking; (2) provision of end-of-trip bicycle facilities; and (3) a bicycle repair station. Increasing the number of PEV-capable parking spaces restricted to parking of electric vehicles to 20 percent of the total proposed parking, which amounts to 27 PEV-capable spaces, would result in an additional reduction of 19.3 MT CO<sub>2</sub>e per year from mobile sources. Providing end-of-trip facilities including bike lockers, showers, and personal lockers would also reduce an additional 2.7 percent in GHG reduction amounting in an additional reduction of 11.8 MT CO<sub>2</sub>e per year. The provision of a bicycle repair station in a designated and clearly marked, secure area within the Project's community room (or elsewhere at a location easily accessible to Project users), where bicycle maintenance tools and supplies are readily available on a permanent basis and offered in good condition would achieve an approximate one percent reduction in the Project's total estimated VMT, or a commensurate one percent reduction in mobile source GHG emissions, equivalent to a 4.32 MT CO<sub>2</sub>e per year GHG emissions offset. In total, by implementing the GHG Reduction Plan, the Project would achieve a reduction of up to 35.4 MT CO<sub>2</sub>e per year, greater than what would be achieved by meeting all of the items in the ECAP Consistency Checklist. SCA GHG-1 also contains reporting requirements and corrective procedures to ensure the implementation of the GHG Reduction Plan. Therefore, with implementation of SCA GHG-1, Project GHG emissions associated with land use development would be less than significant.

### **Stationary Source**

A backup diesel emergency generator is proposed as part of the Project on the 24<sup>th</sup> and 25<sup>th</sup> Street site to comply with the California Building Code requirement for elevator safety in all buildings in excess of 70 feet in height, which would represent a new stationary source of GHG emissions. According to the City's GHG thresholds, for projects that involve both a stationary source and a land use development, the stationary source emissions should be calculated separately and compared to the stationary source threshold. The air quality modeling and analysis for the Project (see Section 2.3, *Air Quality*, above) also calculated the GHG emissions that would be generated by stationary sources associated with the Project. Stationary source-related emissions would total approximately 18 MT CO<sub>2</sub>e annually, which is below City and BAAQMD threshold for stationary

sources of 10,000 metric tons CO<sub>2</sub>e per year. Therefore, GHG emissions associated with the Project's emergency generator (stationary source) would also be less than significant.

Although not required to mitigate a significant impact related to GHG emissions, the Project would be required to implement several other City of Oakland SCAs that would contribute to minimizing potential GHG emissions from Project construction and operations. These include SCA AIR-2, Criteria Air Pollutant Controls - Construction Related, SCA AIR-3, Diesel Particulate Matter Controls - Construction Related, SCA UTIL-1, Construction and Demolition Waste Reduction and Recycling, SCA AES-3, Landscape Plan, SCA TRA-2, Bicycle Parking, SCA TRA-4, Transportation and Parking Demand Management Plan, SCA TRA-6, Plug-In Electric Vehicle (PEV) Charging Infrastructure, and SCA UTIL-4, Green Building Requirements.

**SCA GHG-1: GHG Reduction Plan.** See Section 2.8.1.

**SCA AES-3: Landscape Plan.** See Section 4.1, *Aesthetics*, of the EIR.

**SCA AIR-2: Criteria Air Pollutant Controls - Construction Related.** See Section 2.3.2.

**SCA AIR-3: Diesel Particulate Matter Controls - Construction Related.** See Section 2.3.2.

**SCA TRA-2: Bicycle Parking.** See Section 2.17.2.

**SCA TRA-4: Transportation and Parking Demand Management Plan.** See Section 2.17.2.

**SCA TRA-6: PEV Charging Infrastructure.** See Section 2.17.2.

**SCA UTIL-1: Construction and Demolition Waste Reduction and Recycling.** See Section 2.18.2.

**SCA UTIL-4: Green Building Requirements.** See Section 2.18.2.

**Mitigation:** None required.

**Impact GHG-2: The Project would not fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions. (Criterion 2) (*Less than Significant with SCAs*)**

The Project would comply with the City of Oakland's ECAP, 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 Project. As discussed in detail in Section 2.11, the Project would be consistent with *Plan Bay Area 2040*.

Specifically, the Project would be consistent with the State's Updated Climate Change Scoping Plan and the City of Oakland's ECAP in that it has prepared a GHG Reduction Plan pursuant to SCA GHG-1 that would reduce Project GHG emissions through alternative reduction measures to

achieve the same or greater emissions than would be achieved by meeting all of the applicable ECAP Consistency Checklist items (see Impact GHG-1). The Project would be required to implement SCA GHG-1, which would ensure the implementation of the GHG Reduction Plan for the Project.

On December 15, 2020, the Oakland City Council adopted an Ordinance, adding to the Oakland Municipal Code Chapter 15.37, “All-Electric Construction In Newly Constructed Buildings.” These new regulations require all newly constructed buildings to meet the definition of an All-Electric Building, as defined therein. As a result, the Project will be required to be designed to use a permanent supply of electricity as the source of energy for all space heating, water heating, cooking appliances, and clothes drying appliances, and will be prohibited from having natural gas or propane plumbing installed in the building. Designing the building to use a permanent supply of electricity will reduce the estimated annual operational greenhouse gas emissions from energy emission sources of the Project.

The Project would seek LEED Silver level certification consistent with the City’s green building requirements, and would comply with the CALGreen Code, and Title 24 building energy and water efficiency requirements. The Project would optimize the efficiency of its building envelope, and it would reduce the building’s energy use through the use of efficient lighting and HVAC systems. Also, the Project would meet the most recently implemented Building Energy Efficiency Standards. Further, the Project would be located in area with diverse land uses and in proximity to transit services, which would reduce the number of vehicle trips and the associated GHG emissions generated. Therefore, the Project would be considered to be consistent with all applicable goals, policies and regulations adopted to reduce GHG emissions and this impact would be less than significant.

**SCA GHG-1: GHG Reduction Plan.** See Section 2.8.1.

**SCA UTIL-4: Green Building Requirements.** See Section 2.18.2.

**Mitigation:** None required.

### 2.8.3 References

Bay Area Air Quality Management District (BAAQMD), 2017a. *Final 2017 Clean Air Plan*, April 2017.

BAAQMD, 2017b. *BAAQMD CEQA Guidelines, California Environmental Quality Act Air Quality Guidelines*, [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en). May 2017.

City of Oakland, 2020a. *2030 Equitable Climate Action Plan*. Adopted June 20, 2020.

City of Oakland, 2020b. Resolution No. 88268: Resolution Approving Preliminary Planning Targets for Development of the Draft Oakland Energy and Climate Action Plan. June 20, 2020.

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



City of Oakland, 1998. *Historic Preservation Element of the Oakland General Plan*, March 8, 1994, amended July 21, 1998.

City of Oakland, 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*, adopted June 11, 1996.

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## 2.9 Hazards and Hazardous Materials

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>IX. HAZARDS AND HAZARDOUS MATERIALS —</b> The project would have a significant impact on the environment if it would:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Create a significant hazard to the public through the storage or use of acutely hazardous materials near sensitive receptors; <sup>23</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and would result in a significant safety hazard for people residing or working in the project area;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8) Be located within the vicinity of a private airstrip, and would result in a significant safety hazard for people residing or working in the project area;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9) Fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>23</sup> **NOTE:** Per the BAAQMD CEQA Guidelines, evaluate whether the project would result in persons being within the Emergency Response Planning Guidelines (ERPG) exposure level 2 for acutely hazardous air emissions either by siting a new source or a new sensitive receptor. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers.

## 2.9.1 Environmental Setting

### ***Definitions of Hazardous Materials***

Definitions of terms used in the characterization of baseline conditions, regulatory framework, and impact analysis for hazards and hazardous materials are provided below.

**Hazardous Material:** The term “hazardous material” can have varying definitions depending on the regulatory programs. For the purposes of this Initial Study, the term refers to both hazardous materials and hazardous wastes. The California Health and Safety Code Section 25501(n) defines hazardous material as: Hazardous material means any material that because of its quantity, concentrations, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

**Hazardous Waste:** A “hazardous waste” is a waste that because of its quantity, concentration, or physical, chemical, or infectious characteristic, causes or significantly contributes to an increase in mortality or illness or poses substantial or potential threats to public health or the environment (42 U.S.C. 6903(5)). Hazardous wastes are further defined under the Resource Conservation and Recovery Act (RCRA) as substances exhibiting the characteristics of ignitability, reactivity, corrosivity, or toxicity. Chemical-specific concentrations used to define whether a material is a hazardous, designated, or nonhazardous waste include Total Threshold Limit Concentrations (TTLCs), Soluble Threshold Limit Concentrations (STLCs), and Toxic Characteristic Leaching Procedure (TCLPs), listed in CCR Title 22, Chapter 11, Article 3, Section 66261, and used as waste acceptance criteria for landfills. Waste materials with chemical concentrations above TTLCs, STLCs, and TCLPs must be sent to Class I disposal facilities, may be sent to Class II disposal facilities depending on the waste material, and may not be sent to Class III disposal facilities.

**Screening Levels for Hazardous Materials in Soil, Soil Gas, or Groundwater:** The U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) and San Francisco Bay Area Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) are guidelines used to evaluate the potential risk associated with chemicals found in soil or groundwater where a release of hazardous materials has occurred. Although developed and maintained by the San Francisco Bay Area RWQCB, ESLs are used by regulatory agencies throughout the State. Screening levels have been established for both residential and commercial/industrial land uses, and for construction workers. Residential screening levels are the most restrictive. Soil with chemical concentrations below these ESLs generally would not require remediation and would be suitable for unrestricted uses if disposed of offsite. Commercial/industrial screening levels are generally less restrictive than residential screening levels because they are based on potential worker exposure to hazardous materials in the soil (and these are generally less than residential exposures). Screening levels for construction workers are also less restrictive than for commercial/industrial workers because construction workers are only exposed to the chemical

of concern for the duration of construction, while industrial workers are assumed to be exposed over a working lifetime. Chemical concentrations below these screening levels generally would not require remediation and would be suitable for unrestricted uses. In addition, there are other more specific but similar screening levels used more narrowly focused human health or ecological risk assessment considerations.

### **24<sup>th</sup> and 25<sup>th</sup> Street Site Conditions**

Phase I Environmental Site Assessments (ESA) were conducted for the parcels comprising the 24<sup>th</sup> and 25<sup>th</sup> Street site in June 2015, July 2015, and July 2017. In addition, Phase II (Subsurface Investigation Reports) were prepared in June 2016 and August 2017. The following is a summary of the Phase I ESAs and Phase II (Subsurface Investigation Reports) and their recommendations.

#### **460 24th Street and 465 25th Street Phase I ESA and Site Investigation Report**

The Phase I prepared for the parcel at 450 24<sup>th</sup> Street and 465 25<sup>th</sup> Street (APN 008-0674-033-1) identified a history of residential uses prior to 1889, redevelopment for commercial uses between 1912 and 1951, a machine shop and welding facility and stream cleaning facility in the late 1930s, machine parts storage after 1962. The Phase I ESA prepared for the Project indicates that the parcel was listed on the HAZNET database in the Environmental Data Resources, Inc. (EDR) report as a hazardous waste generator in 1995 and 2000. In 1994 an inspection report indicated multiple violations, including a leaking 55-gallon drum containing waste caustic degreasing fluid at the project site. Multiple subsurface features were observed, including a dry storage pit, former auto service pit, a fluid-filled sump, and a possible subsurface feature that was closed in-place. Grab groundwater results have identified volatile organic compound (VOC) contamination in the groundwater in the vicinity of the parcel. The presence of these subsurface features suggests the possibility of historical release of hazardous substances into the soil and groundwater at the parcel (PES, 2015b).

The Phase I ESA for the parcel at 460 24<sup>th</sup> Street and 465 25<sup>th</sup> Street revealed the following recognized environmental conditions (RECs)<sup>24</sup>:

- Multiple subsurface features were observed in the former welding shop including a dry storage pit, former auto service pit, fluid-filled sump, and an area of patched concrete indicating a possible subsurface feature closed in-place or former subsurface feature. The presence of these features are suggestive of a possible historical release of hazardous substances to the site subsurface.
- A long history of use of an oil-water separator (OWS) on the parcel for collection of hazardous waste materials suggests that a possible historical release of hazardous substances to the site subsurface has occurred.
- The presence of pooled lubricant oil on the concrete slab at various locations is suggestive of releases to the subsurface.

<sup>24</sup> Recognized Environmental Condition (REC) – the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that indicate pose a material threat of a future release to the environment.

- There is potential for vapor intrusion concerns for the parcel based on documented and undefined VOC impacts to groundwater in the vicinity of the parcel and the inferred groundwater flow direction.

The Phase I ESA also described the likely presence of subsurface soil and/or contamination on-site and in the immediate vicinity of the parcel and recommended soil and groundwater characterization for handling, reuse, and/or disposal purposes prior to redevelopment. Additionally, based on the construction date of the buildings at the project site, the potential exists to encounter asbestos-containing materials, lead-based paints, and other hazardous building materials, such as polychlorinated biphenyls (PCBs). For these reasons, a Subsurface Investigation Report (Phase II) was prepared (PES, 2015b).

Preparation of the Phase II included a review of regulatory agency files, soil and groundwater sample tests, and presentation of conclusions and recommendations for the project site.

The Phase II investigation identified low concentrations of VOCs in soil vapor beneath the site, with the exception of carbon tetrachloride, which was detected above the residential Environmental Screening Levels (ESLs), but below the commercial/industrial ESL, adjacent to the fluid-filled sump. Vinyl chloride was detected in groundwater at one location in excess of residential ESLs, but below the commercial/industrial ESL. Localized petroleum hydrocarbon and metals are present above the residential and commercial ESLs (PES, 2016).

#### Phase II Recommendations

The Phase II recommended that a site mitigation and contingency plan (SMP) be developed for use by the earthwork contractors during earthwork activities at the site. Elevator pits could allow for the migration of impacted vapor into portions of the planned development. If any features such as elevator pits are planned as part of the Project, those features should be reviewed and if present in the localized areas of VOC-impacted soil vapor or groundwater, installation of a vapor mitigation system should be considered, or re-sampling should be conducted for further analysis. Additionally, localized petroleum-hydrocarbon- and metal-impacted soil should be managed and removed from the site. Due to the contaminants detected on site, the Phase II also noted that it is anticipated that additional soil characterization may be required prior to off-site disposal during construction. A planning document is also recommended be developed to describe procedures to be followed for soil management and waste profiling purposes (PES, 2016).

#### **450 24<sup>th</sup> Street Phase I ESA**

The Phase I prepared for the parcel at 450 24<sup>th</sup> Street (APN 008-0674-007) identified a history of commercial and/or industrial land uses on the parcel that include auto repair, engine rebuilding, and auto body painting since the 1930s. Grab groundwater results from two properties (one upgradient and one downgradient) in the parcel vicinity have identified VOC contamination in groundwater. The Phase I ESA for the parcel at 450 24<sup>th</sup> Street identified the following REC:

- There is potential for vapor intrusion concerns for the parcel based on documented VOC impacts to groundwater in the vicinity of the parcel and the groundwater flow direction.

Given the age of site structure, asbestos, lead paint, and/or other hazardous building materials may be present in or on the structure on the parcel and a survey would be required as part of future site demolition. Additionally, one data gap was identified. Two drain/sump features were identified during the site inspection, but were not accessible to determine the use, construction, and/or condition, and it is not known whether soil and/or groundwater have been potentially affected (PES, 2015a).

#### **444 24<sup>th</sup> Street Phase I ESA and Site Investigation Report**

The Phase I prepared for the parcel at 444 24<sup>th</sup> Street (APN 008-0674-006) identified the history of land uses on the parcel that include residential from 1902-1939, and auto repair uses after 1939. Previously, two leaking hydraulic lifts associated with the auto repair activities on the parcel were removed along with contaminated soil and groundwater were removed from the parcel from 2012 through 2013. The Phase I ESA for the parcel at 444 24<sup>th</sup> Street identified the following RECs:

- There is potential for vapor intrusion concerns for the parcel based on documented VOC and petroleum hydrocarbon impact at the parcel and within the vicinity of the parcel, and the direction of groundwater flow.
- Soil containing petroleum hydrocarbons at concentrations above the respective ESLs has been documented to be present beneath the parcel.

Given the age of site structure, asbestos, lead paint, and/or other hazardous building materials may be present in or on the structure on the parcel and a survey would be required as part of future site demolition. The Phase I also recommended that backfill associated with the hydraulic lift cleanup be examined prior to removal. Additionally, it is recommended that three groundwater monitoring wells installed on the parcel in 2013 be properly destroyed under permit by the Alameda County Public Works Agency (PES, 2017a).

A Subsurface Investigation Report (Phase II) was prepared for the parcel, which included soil, groundwater, and soil vapor sampling to attempt to characterize conditions beneath the parcel and confirm groundwater VOC concentrations. The results of the Phase II indicate that widespread significant contamination is not present at the parcel, and that prior excavation appears to have removed the majority of soil and groundwater contaminated with petroleum hydrocarbons. However, since the building structure prohibited removal of all of the contamination, petroleum-impacted soil is reported to be present on the western portion of the parcel.

Soil samples collected during the Phase II investigation did not identify concentrations of organic constituent or metals above their respective ESLs with the exception of arsenic. Arsenic was detected in soil above the residential ESL; however, the concentrations of arsenic, as well as the other metals detected were within expected background levels (PES, 2017b).

#### **Phase II Recommendations**

The Phase II did not recommend further testing; however, based on concentrations of select VOCs detected in groundwater beneath the parcel exceeding commercial and residential ESLs, mitigation of vapor intrusion is recommended for elevator pits and occupied at-grade portions of

the site. The Phase II also recommended that a SMP be developed for use by the earthwork contractors during earthwork activities at the site (PES, 2017b).

### **Valley Street Site Conditions**

The Valley Street site was included in the Broadway-West Grand Mixed-Use Project EIR, certified in December 2004, which included most of the block bounded by 24<sup>th</sup> Street, Broadway, 23<sup>rd</sup> Street, and Valley Street (City of Oakland, 2004). Subsequently, an addendum was prepared in August 2013, which included retention and renovation of the building on the Valley Street site which was previously approved for demolition (City of Oakland, 2013). The Project disturbance area on the Valley Street site includes the parking area for this renovated building.

The greater block historically contained auto dealership/repair businesses. Known contamination on the greater block includes VOCs, petroleum hydrocarbons, lead and other metals in soil and groundwater, and land use covenants are present on a portion of the block to the east of the Valley Street site to restrict it to commercial use, and to restrict the use of the groundwater (EKI, 2017; DTSC, 2013). According to Phase II Soil and Groundwater Sampling on the Valley Street site, concentrations of VOCs and petroleum hydrocarbons do not appear to present a threat to human health, as they are below human-health based ESLs. Additionally, groundwater does not flow to the Valley Street site from the parcels to the east and potential migration of chemicals from those parcels has not occurred. Shallow fill soils on the Valley Street site generally contained lead at concentrations consistent with background levels; however, a soil sample beneath the existing building showed high lead concentrations. Thus, any excavated soils may require special handling if excavation takes place on the Valley Street site during development (EKI, 2012).

## **2.9.2 Regulatory Setting**

### **City of Oakland General Plan**

The *Safety Element* of the Oakland General Plan describes the following policies regarding hazards and hazardous materials, adopted for the purpose of avoiding or mitigating an environmental effect, and that apply to the Project (City of Oakland, 2012).

**Policy HM-1:** Minimize the potential risks to human and environmental health and safety associated with the past and present use, handling, storage, and disposal of hazardous materials.

**Policy HM-2:** Reduce the public's exposure to toxic air contaminants through appropriate land use and transportation strategies.

**Policy HM-3:** Seek to prevent industrial and transportation accidents involving hazardous materials, and enhance the City's capacity to respond to such incidents.

### ***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City's SCAs relevant to reducing impacts on hazards and hazardous materials and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to hazards and hazardous materials. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

#### **SCA HAZ-1: Hazardous Materials Related to Construction.** *(Standard Condition of Approval 43)*

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.

#### **SCA HAZ-2: Hazardous Building Materials and Site Contamination** *(Standard Condition of Approval 44)*

##### ***a. Hazardous Building Materials Assessment***

Requirement: The project applicant shall submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACMs), lead-based paint, polychlorinated biphenyls (PCBs), and any other building materials or stored materials classified as hazardous materials by State or federal law. If lead-based paint, ACMs,



PCBs, or any other building materials or stored materials classified as hazardous materials are present, the project applicant shall submit specifications prepared and signed by a qualified environmental professional, for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.

**b. *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.

**c. *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.

**d. *Best Management Practices (BMPs) Required for Contaminated Site***

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.

**SCA HAZ-3: Hazardous Materials Business Plan. (*Standard Condition of Approval 45*)**

Requirement: The project applicant shall submit a Hazardous Materials Business Plan for review and approval by the City, and shall implement the approved Plan. The approved Plan shall be kept on file with the City and the project applicant shall update the Plan as applicable. The purpose of the Hazardous Materials Business Plan is to ensure that employees are adequately trained to handle hazardous materials and provides information to the Fire Department should emergency response be required. Hazardous materials shall be handled in

accordance with all applicable local, state, and federal requirements. The Hazardous Materials Business Plan shall include the following:

- a. The types of hazardous materials or chemicals stored and/or used on-site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids.
- b. The location of such hazardous materials.
- c. An emergency response plan including employee training information.
- d. A plan that describes the manner in which these materials are handled, transported, and disposed.

### 2.9.3 Topics Considered and No Impact Determined

The Project would have no impact to the following topics based on the proposed Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- **Listed Hazardous Materials Site** (Criterion 5). The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (i.e., the “Cortese List”), therefore there would be no impact.
- **Airports Hazard/Safety** (Criteria 7 and 8). The project site is not located within 2 miles of a public airport or public use airport. The nearest airport to the project site is Oakland International Airport, approximately 5.75 miles southeast of the project site. According to the Airport Land Use Compatibility Plan (ALUCP) for the Oakland International Airport, the project site is neither within the Airport Influence Area (AIA), nor within the Safety or Noise Compatibility zones (Alameda County, 2010). Therefore, no impact would be associated with airports.
- **Wildland Fires** (Criterion 10). The Safety Element of the City’s General Plan identifies the geographic confines of the Oakland Hills as the fire prevention and assessment district boundary, designated by the California Department of Forestry and Fire Protection (CAL FIRE) as a very high fire hazard severity zone (City of Oakland, 2012; CAL FIRE, 2008). No other areas in the City, including the project site, are considered at high risk from wildfire. The project site is not located in or adjacent to any historic Bay Area fire perimeter from 1955 to 2018, including the 1991 fires in the Oakland and Berkeley Hills (MTC and ABAG, 2020). The Project is also not located within a Wildland-Urban Interface (WUI) zone (U.S. Forest Service, 2015). Factors that contribute to the risk of wildland fire include dense and fire-prone vegetation, poor access to fire-fighting equipment because of slopes or inadequate roads, and lack of adequate water pressure and service in fire-prone locations. The project site is currently developed within a highly urbanized area and flat lands near Downtown Oakland, does not contain dense vegetation, and is surrounded by other developed properties and roadways. Therefore, the Project would have no impact in this regard.

## 2.9.4 Project Impacts and Discussion

### ***Hazardous Materials***

**Impact HAZ-1: The Project would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. (Criteria 1 and 2) (*Less than Significant with SCAs*)**

Project construction activities would include import and export of soil, and in the event of encountering groundwater during construction, dewatering would be required. Groundwater has been encountered between 8 and 25 feet below ground surface (bgs) in the project area (ENGE0, 2015; PES, 2015), with groundwater expected to be encountered at approximately 10 feet bgs (ENGE0, 2015). Due to the past uses and contamination encountered on the project site, additional soil and groundwater characterization would need to be performed prior to off-site disposal of excess soil resulting from excavation and grading activities associated with the Project as recommended by the Phase I/II ESAs. The Project would be required to implement **SCA HAZ-2, Hazardous Building Materials and Site Contamination**, which obligates the Project Applicant to submit the Phase I/II ESAs to the City for approval. Once approved, SCA HAZ-2 further requires the Project Applicant to submit to the City evidence of approval for any proposed remedial action, including potential SMPs or vapor intrusion mitigation systems, and required clearances by the applicable local, state, or federal regulatory agency. As such, compliance with SCA HAZ-2 would ensure that the recommendations of the Phase I/II ESAs and requirements for remediation by the lead environmental regulatory agency are implemented. SCA HAZ-2 would also ensure that any extracted soil and groundwater is 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.

During the demolition and construction phases, construction equipment and materials would include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. The routine use or an accidental spill of hazardous materials used in construction could result in inadvertent releases, which could adversely affect construction workers, the public, and the environment. The Project Applicant would be required to implement **SCA HAZ-1, Hazardous Materials Related to Construction**, to ensure best management practices are followed during construction activities including those related to the use, storage, and disposal of chemical products used in construction.

The Project would involve the demolition and removal of existing structures on the 24<sup>th</sup> and 25<sup>th</sup> Street site. As discussed in the Phase I/II ESAs, hazardous building materials (i.e., asbestos containing materials, lead-based paint, and PCBs) are expected to be present in the structures due to the ages of the structures. The demolition could release hazardous building materials. Numerous existing regulations require that demolition and construction activities that may disturb or require the removal of hazardous materials must be inspected and/or tested for the presence of hazardous materials. If present, the hazardous materials must be managed and disposed of in accordance with applicable laws and regulations. The Project would also be subject to SCA AIR-5, Asbestos in Structures, and SCA HAZ-1, pertaining to the removal of asbestos-containing

materials from structures and implementation of best management practices for hazardous materials during construction, respectively.

Construction activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including stormwater and downstream receiving water bodies, including San Francisco Bay. Contractors would be required to prepare and implement Hazardous Materials Business Plans (HMBPs) that would require that hazardous materials used for construction would be used properly and stored in appropriate containers with secondary containment, as needed, to contain a potential release. The California Fire Code would also require measures for the safe storage and handling of hazardous materials.

As discussed in Section 2.7, *Geology, Soils, and Paleontological Resources*, and Section 2.10, *Hydrology and Water Quality*, construction contractors would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) for construction activities according to the National Pollutant Discharge Elimination System (NPDES) General Construction Permit requirements in compliance with SCA HYD-2, State Construction General Permit. The SWPPP would list the hazardous materials (including petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; protocols for responding immediately to spills; and describe Best Management Practices (BMPs) for controlling site run-on and runoff.

In addition, the transportation of hazardous materials would be regulated by the U.S. Department of Transportation (USDOT), the California Department of Transportation (Caltrans), and the California Highway Patrol (CHP). Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of an accidental release.

Finally, in the event of a spill that releases hazardous materials at the project site, a coordinated response would occur at the federal, state, and local levels, including the City of Oakland. The Oakland Fire Department is the local hazardous materials response team. In the event of a hazardous materials spill, the Oakland Police and Fire departments would be simultaneously notified and sent to the scene to respond and assess the situation.

Since development of the 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, and required compliance with the numerous laws and regulations discussed above that govern the transportation, use, handling, and disposal of hazardous materials would limit the potential for creation of hazardous conditions due to the use or accidental release of hazardous materials, this impact would be less than significant.

**SCA HAZ-1: Hazardous Materials Related to Construction.** See Section 2.9.2.

**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** See Section 2.9.2.

**SCA AIR-5: Asbestos in Structures.** See Section 2.3.2.

**SCA HYD-2: State Construction General Permit.** See Section 2.10.2.

**Mitigation:** None required.

**Impact HAZ-2: The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school resulting in a significant impact (Criterion 3 and 4) (*Less than Significant with SCAs*)**

There are two schools within 0.25-mile from the project site; Oakland Emiliano Zapata Street Academy, approximately 0.20-mile north from the project site and Westlake Middle School, approximately 0.25-mile west of the project site; and as previously discussed under Impact HAZ-1, construction activities would involve handling hazardous materials, substances, and waste. The transportation of hazardous materials would be regulated by the USDOT, Caltrans, and the CHP. Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of an accidental release. The SCAs specific to hazardous materials, first mentioned in Impact HAZ-1, would also be applicable here. Implementation of SCA HAZ-1, SCA HAZ-2, and SCA AIR-5 would ensure best management practices are followed during construction activities pertaining to any potentially contaminated materials.

During operation, the Project would involve office, arts and retail uses, which would by their nature not require the use of significant quantities of hazardous materials or generate significant amounts of hazardous waste. Arts uses in the proposed craft stalls may involve the limited use of hazardous materials and waste such as solvents or oil-based paints. **SCA HAZ-3, Hazardous Materials Business Plan**, would ensure that employees are adequately trained to handle hazardous materials in accordance with all applicable local, State, and federal requirements. Therefore, with implementation to SCA HAZ-1, HAZ-2, and HAZ-3, the potential impacts associated with emitting and handling hazardous substance within 0.25-mile of a school would be appropriately managed, and the impact would be less than significant.

**SCA HAZ-1: Hazardous Materials Related to Construction.** See Section 2.9.2.

**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** See Section 2.9.2.

**SCA HAZ-3: Hazardous Materials Business Plan.** See Section 2.9.2.

**SCA AIR-5: Asbestos in Structures.** See Section 2.3.2.

**Mitigation:** None required.

## **Emergency Access and Response**

**Impact HAZ-3: The Project would provide adequate emergency access and would not fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Criteria 6 and 9) (*Less than Significant with SCAs*)**

The Alameda County Office of Homeland Security and Emergency Services (OHSES) developed the Alameda County Emergency Operations Plan (2012); the Plan does not provide any specific evacuation routes, as these are anticipated to be coordinated by local law enforcement and emergency services. Construction may result in temporary road and lane closures, which could 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. Construction equipment and materials would enter and exit the project site through existing access roads. The temporary increases in construction traffic and potential temporary closures of nearby roads could interfere with emergency services traffic in the Project vicinity. Implementation of SCA TRA-1, Construction Activity in the Public Right-of-Way, would require that the Project Applicant obtain an obstruction permit prior to any temporary construction-related obstructions in the public right-of-way and prepare and submit a traffic control plan prior to construction.

The Project would be designed to comply with the most up-to-date building and fire codes and include fire safety measures and equipment, including the provision of adequate emergency access to the project site for emergency vehicles and personnel. Project plans would be subject to review and approval by the OFD. Therefore, with implementation of SCA TRA-1, the Project would provide adequate emergency access and would not fundamentally impair implementation of or physically interfere with an adopted emergency response or evacuation plan and the impact would be less than significant.

**SCA TRA-1: Construction Activity in the Public Right-of-Way.** See Section 2.17.2.

**Mitigation:** None required.

### **2.9.5 Cumulative**

As analyzed above, the Project would result in no impact with regard to the following criteria: being located on a list of hazardous materials sites (i.e., The Cortese List), being located within an airport land use plan or being within 2 miles of a public airport; significant risk of loss, injury, or death involving wildland fire. Because no impact would result, the Project could not cause or contribute to any cumulative effect in this regard. Therefore, this cumulative analysis focuses on the Project's less-than-significant impacts relating to routine transport, use, or disposal of hazardous materials; accidental release of hazardous materials into the environment, handling hazardous materials near sensitive receptors (e.g., within one-quarter mile of a school), and emergency access and response.

This section presents an analysis of the cumulative effects of the Project in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts.

The geographic area affected by the Project and its potential to contribute to cumulative impacts varies based on the environmental resource under consideration. The geographic scope of analysis for cumulative hazards and hazardous materials impacts encompasses and is limited to the project site and its immediately adjacent area. Hazards and hazardous materials are generally site-specific and depend on the nature and extent of the hazardous materials release, and existing and future soil and groundwater conditions. For example, hazardous materials incidents tend to be limited to a smaller more localized area surrounding the immediate spill location and extent of the release, and could only be cumulative if two or more hazardous materials releases spatially overlapped.

The timeframe during which proposed Project could contribute to cumulative hazards and hazardous materials effects includes the construction and operations phases. For the Project, the operations phase is permanent. However, similar to the geographic limitations discussed above, it should be noted that impacts relative to hazardous materials are generally location- and time-specific. Hazardous materials events could only be cumulative if two or more hazardous materials releases occurred at the same time, as well as overlapping at the same location.

**Impact HAZ-1.CU: The Project, combined with cumulative development in the Project vicinity, would not result in significant cumulative impacts relative to hazards and hazardous materials. (*Less than Significant with SCAs*)**

### **Cumulative Impacts during Project Construction**

Significant cumulative impacts related to hazards and hazardous material could occur if the incremental impacts of the Project combined with the incremental impacts of one or more cumulative projects to substantially increase risk that people or the environment would be exposed to hazards and hazardous materials. Cumulative projects would be subject to the same regulatory requirements discussed for the Project, including the implementation of health and safety plans and soil management plans, as needed. That is, cumulative projects involving releases of or encountering hazardous materials also would be required to remediate their respective sites to the same established regulatory standards. This would be the case regardless of the number, frequency, or size of the release(s), or the residual amount of chemicals present in the soil from previous spills. While it is possible that the Project and cumulative projects could result in releases of hazardous materials at the same time and in overlapping locations, the responsible party associated with each spill would be required to remediate site conditions to the same established regulatory standards. The residual less-than-significant effects of the Project (with SCAs) that would remain after remediation would not combine with the potential residual effects of cumulative projects to cause a potential significant cumulative impact because residual impacts would be highly site-specific. Accordingly, no significant cumulative impact with respect to the use or release of hazardous materials would result. For the above reasons, the combined effects of the construction of the Project in combination with cumulative projects would not have a cumulatively considerable contribution to a cumulative impact. Similarly, other cumulative construction projects would be required to provide appropriate traffic control and emergency

access for their projects and would be required to implement the applicable City's SCAs pertaining to hazards and hazardous materials. No significant cumulative impact related to hazards and hazardous materials is identified during construction of the Project.

### **Cumulative Impacts during Project Operation**

Significant cumulative impacts related to operational hazards could occur if the incremental impacts of the project combined with those of one or more other projects were to cause a substantial increase in risk that people or the environment would be exposed to hazardous materials used or encountered during the operations phase.

Similar to hazardous materials during construction, compliance with the laws and regulations regarding the safe transport, use, storage, and disposal of hazardous materials would reduce the Project-specific incremental impact to a less-than-significant level (with SCAs). The cumulative project components involving the handling, storage, and disposal of hazardous materials would also be required to prepare and implement HMBPs and comply with the same applicable laws and regulations, including those governing containment, site layout, and emergency response and notification procedures in the event of a spill or release. Transportation and disposal of wastes, such as spent cleaning solutions, would also be subject to regulations for the safe handling, transportation, and disposal of chemicals and wastes. As noted previously, such regulations include standards to which parties responsible for hazardous materials releases must return spill sites, regardless of location, frequency, or size of release, or existing background contaminant concentrations to their original conditions. Therefore, compliance with existing laws and regulations and the City's SCAs regarding hazardous materials would reduce the risk of environmental or human exposure to such materials. For the above reasons, the combined effects of the Project and cumulative projects would not have a cumulatively considerable contribution to a cumulative impact. No significant cumulative impact is identified.

Site review for individual building projects and existing emergency response requirements are sufficient to ensure that the Project's effect on potential impairment or implementation of any emergency response or evacuation plans would be considered a less-than-significant impact (with SCAs). Other non-Project cumulative development in the surrounding area could increase the amount of people and structures that could interfere with emergency evacuation or emergency response plan. The County OHSES is the lead agency to support and coordinate emergency response and recovery operations in the County. The OHSES also participates in the Local Hazard Mitigation Plan and the Alameda County Emergency Operations Plan. These regional plans are adaptive to changes in population and provide the inter-agency coordination to ensure that emergency response and evacuation can be effectively coordinated in an emergency. In addition, all cumulative projects would be required to comply with the same regulations and City SCAs. Therefore, the effects of the Project would not combine with other non-Project cumulative development in the surrounding area to become cumulatively considerable.

**SCA HAZ-1: Hazardous Materials Related to Construction.** See Section 2.9.2.

**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** See Section 2.9.2.



**SCA HAZ-3: Hazardous Materials Business Plan.** See Section 2.9.2.

**SCA AIR-5: Asbestos in Structures.** See Section 2.3.2.

**SCA HYD-2: State Construction General Permit.** See Section 2.10.2.

**SCA TRA-1: Construction Activity in the Public Right-of-Way.** See Section 2.17.2.

**Mitigation:** None required.

## 2.9.6 References

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- California Department of Toxic Substances Control (DTSC), 2013. DTSC Fact Sheet - Negherbon Project Draft Response Plan Available for Review and Comment, June 2013.
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- EKI Environment and Water, Inc. (EKI), 2017. *Soil Management Plan for Flynn Container Excavations Former Negherbon Property 2333 Broadway / 421-24th Street, Oakland, California*, April 25, 2017.
- EKI, 2012. *Results of Phase II Soil and Groundwater Sampling Lepanto Properties in the Broadway Grand II Development, Oakland, California*, October 9, 2012.
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- PES Environmental, Inc (PES), 2017a. *Phase I Environmental Assessment, 444 24<sup>th</sup> Street, Oakland, California*, July 10, 2017.
- PES, 2017b. *Subsurface Investigation Report, 444 24<sup>th</sup> Street, Oakland, California*, August 29, 2017.
- PES, 2016. *Subsurface Investigation Report, 460 24<sup>th</sup> Street and 465 25<sup>th</sup> Street, Oakland, California*, April 13, 2016.
- PES, 2015a. *Phase I Environmental Site Assessment 450 24<sup>th</sup> Street, Oakland, California*, June 18, 2015.
- PES, 2015b. *Phase I Environmental Site Assessment, 460 24<sup>th</sup> Street and 465 25<sup>th</sup> Street, Oakland, California*, July 20, 2015.
- U.S. Forest Service, 2015. The 2010 Wildland-Urban Interface of the Conterminous United States. [https://www.fs.fed.us/nrs/pubs/rmap/rmap\\_nrs8.pdf](https://www.fs.fed.us/nrs/pubs/rmap/rmap_nrs8.pdf), accessed June 5, 2020.

## 2.10 Hydrology and Water Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>X. HYDROLOGY AND WATER QUALITY —</b> The project would have a significant impact on the environment if it would:				
1) Violate any water quality standards or waste discharge requirements;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) 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);	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Result in substantial erosion or siltation on- or off-site that would affect the quality of receiving waters;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Result in substantial flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) Create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6) Create or contribute substantial runoff which would be an additional source of polluted runoff;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7) Otherwise substantially degrade water quality;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9) Place within a 100-year flood hazard area structures which would impede or redirect flood flows;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10) Expose people or structures to a substantial risk of loss, injury, or death involving flooding;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11) Expose people or structures to a substantial risk of loss, injury, or death as a result of inundation by seiche, tsunami, or mudflow;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12) 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 offsite; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13) Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect hydrologic resources. <sup>25</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<sup>25</sup> **Note:** Although there are no specific, numeric/quantitative criteria to assess impacts, factors to be considered in determining significance include whether there is substantial degradation of water quality through (a) discharging a substantial amount of pollutants into a creek, (b) significantly modifying the natural flow of the water or capacity, (c) depositing substantial amounts of new material into a creek or causing substantial bank erosion or instability, or (d) substantially endangering public or private property or threatening public health or safety.

## 2.10.1 Environmental Setting

### ***Surface Water, Runoff, and Water Quality***

The project site is located in a relatively flat and highly urbanized area. Lake Merritt and the southern daylighted portion of Glen Echo Creek are the closest water bodies to the project site. The project site drains toward the creek and Lake Merritt.

Stormwater runoff in Oakland is generally collected from the Oakland-Berkeley Hills to the northeast through the developed flatlands where it then flows primarily through underground storm drains and culverts to the San Francisco Bay via the Oakland Estuary (directly or by way of Lake Merritt) or through the City of Emeryville. The Alameda County Flood Control and Water Conservation District (ACFCWCD) constructs, operates, and maintains major trunk lines and flood-control facilities in Oakland, and the Oakland Public Works Agency is responsible for construction and maintenance of the local storm drainage system within Oakland's public areas and roads.

In the Bay Area, including the project area, the San Francisco Bay Regional Water Quality Control Board (RWQCB) is responsible for implementing the Water Quality Control Plan (Basin Plan). The Basin Plan establishes beneficial water uses for waterways and water bodies within the region and is a master policy document for managing water quality in the region (RWQCB, 2019).

### ***Groundwater***

The Department of Water Resources (DWR) considers the East Bay Plain (DWR Groundwater Basin No. 2-9.01) an important and beneficial groundwater basin underlying the East Bay, extending from Richmond to Hayward. The alluvial materials that extend westward from the East Bay hills to the edge of the San Francisco Bay constitute the deep water-bearing strata for East Bay Plain groundwater basin (DWR, 2004). This deep basin provides municipal, industrial, and agricultural water supply. However, water supply for the project area is not provided by groundwater sources in this basin, but rather from surface water sources maintained by East Bay Municipal Utility District (EBMUD).

## 2.10.2 Regulatory Setting

### ***National Pollutant Discharge Elimination System (NPDES) Permit***

The NPDES permit system was established in the federal Clean Water Act to regulate municipal and industrial point discharges to surface waters of the U.S. Each NPDES permit for point discharges contains limits on allowable concentrations of pollutants contained in discharges. The City of Oakland is covered by Municipal Regional Stormwater NPDES Permit No. CAS612008 and Order No. R2-2015-0049 (MRP). In accordance with the MRP requirements, new development and redevelopment projects are required to incorporate treatment measures and other appropriate source control and site design features to reduce the pollutant load in stormwater discharges and manage runoff flows.

Among many other stormwater management requirements included in the MRP, Provision C.3 contains specific post-construction runoff requirements for new development and redevelopment. Provision C.3 governs storm drain systems and regulates post-construction stormwater runoff. The provision requires new development and redevelopment projects to incorporate treatment measures and other appropriate source control and site design features to reduce the pollutant load in stormwater discharges and to manage runoff flows.

### ***Porter-Cologne Water Quality Control Act***

Porter-Cologne, passed in 1969, articulates with the federal Clean Water Act. It established the State Water Board and divided the state into nine regions, each overseen by a regional Water Board. In general, the State Water Board manages both water rights and statewide regulation of water quality, while the regional Water Boards focus exclusively on water quality in their regions.

Coverage under a Construction Stormwater General Permit (Construction General Permit) requires the preparation and implementation of a stormwater pollution prevention plan (SWPPP) and notice of intent (NOI). The SWPPP includes pollution prevention measures (erosion and sediment control measures and measures to control non-stormwater discharges and hazardous spills), demonstration of compliance with all applicable local and regional erosion and sediment control standards, identification of responsible parties, a detailed construction timeline, and a BMP monitoring and maintenance schedule. The NOI includes site-specific information and the certification of compliance with the terms of the Construction General Permit.

### ***City of Oakland General Plan***

The *Open Space, Conservation, and Recreation Element* of the Oakland General Plan describes the following policies regarding water resources, adopted for the purpose of protecting water resources, and that apply to the Project (City of Oakland, 1996).

***Policy CO-5.1:*** Encourage groundwater recharge by protecting large open space areas, maintaining setbacks along creeks and other recharge features, limiting impervious surfaces where appropriate, and retaining natural drainage patterns within newly developing areas.

***Policy CO-5.2:*** Support efforts to improve groundwater quality, including the use of non-toxic herbicides and fertilizers, the enforcement of anti-litter laws, the clean-up of sites contaminated by the Alameda County Flood Control and Water Conservation District.

***Policy CO-5.3:*** Employ a broad range of strategies, compatible with Alameda Countywide Clean Water Program, to: (a) reduce water pollution associated with stormwater runoff; (b) reduce water pollution associated with hazardous spills, runoff from hazardous material areas, improper disposal of household hazardous wastes, illicit dumping, and marina “live-aboards”; and (c) improve water quality in Lake Merritt to enhance the lake’s aesthetic, recreational, and ecological functions.

The *Safety Element* (Adopted 2004, Amended 2012) of the Oakland General Plan (City of Oakland, 2012) describes the following policies regarding flooding hazards that apply to the Project.

***Policy FL-1:*** Enforce and update local ordinances, and comply with regional orders, that would reduce the risk of storm-induced flooding.

*Action FL-1.2:* Continue to require that subdivisions be designed to minimize flood damage by, among other things, having lots and rights-of-way be laid out for the provision of approved sewer and drainage facilities, providing on-site detention facilities whenever practicable and having utility facilities be constructed in ways that reduce or eliminate flood damage.

### ***Oakland Municipal Code Chapter 13.16***

The City's Creek Protection, Stormwater Management, and Discharge Control Ordinance (Chapter 13.16 of the Oakland Municipal Code) prohibits activities that would result in the discharge of pollutants to Oakland's waterways or in damage to creeks, creek functions, or habitat. The ordinance requires the use of standard BMPs to prevent pollution or erosion to creeks and/or storm drains. Additionally, a creek protection permit is required for any construction work on creekside properties. The Ordinance establishes comprehensive guidelines for the regulation of discharges to the City's storm drain system and the protection of surface water quality. Under the Ordinance, the City of Oakland Public Works Agency issues permits for storm drainage facilities that would be connected to existing city drainage facilities. The Ordinance includes enforcement provisions to provide more effective methods to deter and reduce the discharge of pollutants to the storm drain system, local creeks, and San Francisco Bay.

### ***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City's SCAs relevant to reducing impacts on hydrology and water quality and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to hydrology and water quality. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

#### **SCA HYD-1: Erosion and Sedimentation Control Plan for Construction. (*Standard Condition of Approval 49*)**

##### ***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, 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: State Construction General Permit (Standard Condition of Approval 50)**

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.

**SCA HYD-3: NPDES C.3 Stormwater Requirements for Regulated Projects (Standard Condition of Approval 54)**

***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.

***c. Maintenance Agreement Required***

Requirement: The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following:

- i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and
- ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary.

The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.

### 2.10.3 Topics Considered and No Impact Determined

The Project would have no impact to the following topics based on the Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- **Flood Hazards** (Criteria 8, 9, and 10). The project site is not located in a designated 100-year or other flood zone, a floodplain, or a floodway and would not impede or otherwise redirect any flood flows to other areas (MTC and ABAG, 2021). Additionally, no housing is proposed as part of the Project. Therefore, the Project would not place housing or structures within a 100-year flood hazard area which would impede or redirect flood flows. The Project is also not located within the dam inundation area of the Temescal Lake Dam (DWR, 2021). Given the above, the risk of flooding on the project site is very low, and the Project would not expose people or structures to a substantial risk of loss, injury, or death involving flooding. Thus, no impact would occur.
- **Seiche, tsunami, and mudflow** (Criterion 11). The project site is not located next to an enclosed body of water subject to seiche, or downhill from exposed hillsides susceptible to mudflows. The project site is also not located within a tsunami evacuation zone (MTC and ABAG, 2021). Therefore, no impact would occur in this regard.

### 2.10.4 Project Impacts and Discussion

#### **Water Quality**

**Impact HYD-1: The Project would not violate water quality standards; substantially alter the existing drainage pattern of the site that would result in erosion, siltation, or flooding on- or offsite that could affect receiving water quality; otherwise substantially degrade water quality; or fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16). (Criteria 1, 3, 7, 12, and 13) (*Less than Significant with SCAs*)**

The project site is located in a densely developed, urban area and contains no lakes, creeks, or other surface waters on or adjacent to the site. Lake Merritt and the southern daylighted portion of Glen Echo Creek are the closest water bodies to the project site and are located approximately 0.32-mile southeast of the project site. Thus, the Project is not located directly adjacent to a

significant water body. The Project would result in a reduction of impervious area on the 24<sup>th</sup> and 25<sup>th</sup> Street site from 0.92 acres to 0.86 acres. The Project would replace approximately 37,477 square feet of existing impervious area and would create approximately 2,446 square feet of new pervious area on the 24<sup>th</sup> and 25<sup>th</sup> Street site. The impervious area on the Valley Street site would remain the same. The Project would include pervious pavers within the proposed paseo, flow through planters, and a stormfilter manhole to reduce peak stormwater runoff and treat stormwater before it is discharged into the City's storm drain system. Therefore, the Project would not increase existing area of impervious surface on the site and would not substantially alter existing drainage patterns.

Further, since the Project would require a grading permit, the Project would be required to comply with **SCA HYD-1, Erosion and Sedimentation Control Plan for Construction**, relating to water quality and stormwater runoff from construction. Since the total area of land disturbed by the Project including sidewalk and street improvements would be approximately 1.03 acres for the 24<sup>th</sup> and 25<sup>th</sup> Street site and an additional 0.03 acre for the Valley Street site, the Project would also be required to implement a Stormwater Pollution Prevention Plan (SWPPP) per **SCA HYD-2, State Construction General Permit**, which would include erosion and sediment control Best Management Practices (BMPs). The Project would also create or replace 10,000 square feet or more of new or existing impervious surface area, and the Project would be required to comply with **SCA HYD-3, NPDES C.3 Stormwater Requirements for Regulated Projects**, relating to water quality and stormwater runoff during operation. The Project would also be subject to SCA UTIL-6, Storm Drain System, which requires, to the maximum extent practicable, a peak stormwater runoff reduction from the project site by at least 25 percent compared to the pre-Project condition (see Section 2.18, *Utilities and Service Systems*). Therefore, the Project would not violate water quality standards, result in erosion, siltation, or flooding on- or offsite that could affect receiving water quality, or otherwise substantially degrade water quality. Since the Project would control stormwater on-site and would not include any non-stormwater discharges to the storm drain system, the Project would not fundamentally conflict with the City of Oakland Creek Protection Ordinance. Impacts would be less than significant.

**SCA HYD-1: Erosion and Sedimentation Control Plan for Construction.** See Section 2.10.2.

**SCA HYD-2: State Construction General Permit.** See Section 2.10.2.

**SCA HYD-3: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 2.10.2.

**SCA UTIL-6: Storm Drain System.** See Section 2.18.2.

**Mitigation:** None required.



### ***Groundwater Supplies and Recharge***

**Impact HYD-2: The Project would not result in substantially depleted groundwater supplies or interfere substantially with groundwater recharge that would result in a net deficit in aquifer volume or lowering the local groundwater table. (Criterion 2) (*Less than Significant*)**

Potable water is supplied by the EBMUD, and groundwater in Oakland is generally not considered potable and is not utilized in the public drinking water supply. The paved surface of the Valley Street site is proposed to remain in place and there would be no change in impervious surface on that site. Therefore, the Project would not substantially affect groundwater recharge on the Valley Street site.

Based on sampling at the 24<sup>th</sup> and 25<sup>th</sup> Street site, groundwater is assumed to be at a depth of approximately 8-10 feet below existing grade. Based on the recommendations from a Preliminary Geotechnical Report covering the 24<sup>th</sup> and 25<sup>th</sup> Street site, the proposed structure could be supported on a mat foundation with a depth of approximately 1 foot or shallow spread footing system with a depth of approximately 5 feet (ENGE0, 2015). Therefore, dewatering of the 24<sup>th</sup> and 25<sup>th</sup> Street site is not expected to occur. If groundwater is encountered and dewatering is necessary, water would be extracted in a limited quantity and would not substantially deplete groundwater. As noted above, the Project would not result in an increase in impervious surfaces and thus would not substantially affect groundwater recharge. The Project would also include pervious pavers within the proposed paseo on the 24<sup>th</sup> and 25<sup>th</sup> Street site, which would facilitate groundwater recharge. Therefore, the Project would not result in substantially depleted groundwater supplies or interfere substantially with groundwater recharge that would result in a net deficit in aquifer volume or lowering the local groundwater table and impacts would be less than significant.

**Mitigation:** None required.

### ***Flooding and Runoff***

**Impact HYD-3: The Project would not result in substantial flooding on- or off-site, create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems, or create or contribute substantial runoff which would be an additional source of polluted runoff. (Criteria 4, 5, and 6) (*Less than Significant with SCAs*)**

Construction of the Project would include earthmoving activities such as grading. The Project would be required to comply with SCA HYD-1, Erosion and Sedimentation Control Plan for Construction, relating to water quality and stormwater runoff from construction. The Project would also be required to implement a SWPPP per SCA HYD-2, State Construction General Permit. The SWPPP would describe BMPs for controlling site run-on and runoff of sediment from the project site. BMPs contained in the SWPPP would control the volume and velocity of runoff, thereby reducing the risk of substantial on- or off-site flooding during construction.

As discussed above, the project site is currently covered with impervious surfaces. The paved surface of the Valley Street site is proposed to remain in place and there would be no change in

impervious surface on that site. The Project would replace approximately 37,477 square feet of existing impervious area and would create approximately 2,446 square feet of new pervious area on the 24<sup>th</sup> and 25<sup>th</sup> Street site. The Project would include pervious pavers within the proposed paseo, flow through planters, and a stormfilter manhole to reduce peak stormwater runoff and treat stormwater before it is discharged into the City's stormwater drainage system. The Project would be designed to meet the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the NPDES and implement a Post-Construction Stormwater Management Plan to reduce pollutant load from the site into the stormwater drainage system and receiving waters, as required through SCA HYD-3, NPDES C.3 Stormwater Requirements for Regulated Projects. The Project would also be subject to SCA UTIL-6, Storm Drain System, which requires, to the maximum extent practicable, a peak stormwater runoff reduction from the project site by at least 25 percent compared to the pre-Project condition (see Section 2.18, *Utilities and Service Systems*). Implementation of these SCAs would also ensure that the Project would not contribute substantial runoff which would exceed the capacity of the City's stormwater drainage system. Therefore, the Project would provide reduction of stormwater runoff velocities, volume, and pollutant load compared with pre-Project conditions, thereby reducing the risk of substantial flooding on- or off-site and polluted runoff, and the impact would be less than significant.

**SCA HYD-1: Erosion and Sedimentation Control Plan for Construction.** See Section 2.10.2.

**SCA HYD-2: State Construction General Permit.** See Section 2.10.2.

**SCA HYD-3: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 2.10.2.

**SCA UTIL-6: Storm Drain System.** See Section 2.18.2.

**Mitigation:** None required.

### 2.10.5 Cumulative

**Impact HYD-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts on surface water or groundwater quality. (*Less than Significant with SCAs*)**

As analyzed above, the Project would not result in a significant impact related to flood hazards, seiche, tsunami, or mudflow. Because no impact would result, the Project could not cause or contribute to any cumulative effect in this regard. Therefore, this cumulative analysis focuses on the Project's less-than-significant impacts relating to water quality, groundwater, and flooding and runoff during construction and operation.

The geographic scope for cumulative impacts on water quality is the area managed by the RWQCB's Basin Plan that receives runoff from tributaries and discharges from industrial and urban sources into the Bay. The cumulative development for water quality includes all development within the Basin Plan. The cumulative context for groundwater is the East Bay

Basin Plan boundary. The cumulative context for the Project's stormwater runoff would be the development within the City's stormwater drainage collection area that includes the project site.

### **Cumulative Impact and Project Contribution**

#### **Water Quality**

The Project, in combination with other past, present, and future development in the Basin Plan watersheds would continue to contribute runoff and discharges to the Bay that contain constituents from agriculture, industrial, and urban land uses that would continue to potentially impact water quality in the Basin Plan area resulting in the need for continual updates to water quality control plans like the Basin Plan, and water quality regulations like those listed in the regulatory setting in this section. Likewise, these activities would continue to infiltrate and affect groundwater quality in the East Bay Basin. However, the Project would be required to comply with the current and future Basin Plan, applicable NPDES Permit requirements and ordinances, and other water quality and stormwater control regulations, including SCA HYD-1, HYD-2, HYD-3, and UTIL-6. These regulatory requirements and the design of the Project to capture on-site stormwater within a new on-site stormwater system meeting stormwater quality design specifications would reduce the Project's incremental contribution to a cumulative impact to water quality to a less-than-considerable level. Therefore, the Project would not have a cumulatively considerable contribution to the cumulative impact on water quality, and the impact would be less than significant.

#### **Groundwater**

Because the Project would not involve groundwater extraction or dewatering, and the Project would decrease the amount of impervious surface on the 24<sup>th</sup> and 25<sup>th</sup> Street site and there would be no change in impervious surface on the Valley Street site, the Project's impacts on groundwater would not combine with other areas of the City. Therefore, the Project would not have a cumulatively considerable contribution to a cumulative impact on groundwater.

#### **Flooding and Runoff**

The Project, in combination with other past, present, and future development in the City's stormwater drainage collection area that includes the project site would contribute to runoff that could cumulatively result in off-site flooding, exceedances of the capacity of the City's stormwater drainage system, and/or contribute substantial runoff which would be an additional source of polluted runoff. Similar to the Project, cumulative projects would be subject to the City's SCAs that would also ensure that they would not contribute substantial runoff which would exceed the capacity of the City's stormwater drainage system, and provide reduction of stormwater runoff velocities, volume, and pollutant load thereby reducing the risk of substantial flooding on- or off-site and polluted runoff. Applicable NPDES Permit requirements and ordinances, and other water quality and stormwater control regulations, including SCA HYD-1, HYD-2, HYD-3, and UTIL-6 would reduce the Project's incremental contribution to a cumulative impact to flooding and runoff to a less-than-considerable level. Therefore, the Project would not have a cumulatively considerable contribution to a cumulative impact with regard to flooding and runoff, and the impact would be less than significant.

**SCA HYD-1: Erosion and Sedimentation Control Plan for Construction.** See Section 2.10.2.

**SCA HYD-2: State Construction General Permit.** See Section 2.10.2.

**SCA HYD-3: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 2.10.2.

**SCA UTIL-6: Storm Drain System.** See Section 2.18.2.

## 2.10.6 References

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DWR, 2004. Bulletin 118 – Santa Clara Valley Groundwater Basin, East Bay Plain Subbasin.

ENGEO Incorporated, 2015. *Preliminary Geotechnical Report, 24<sup>th</sup> and Broadway, Oakland, CA*, July 28, 2015.

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Regional Water Quality Control Board (RWQCB), 2019. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan). California Regional Water Quality Control Board, San Francisco Bay Region. Amended November 5, 2019. Available at: [https://www.waterboards.ca.gov/sanfranciscobay/basin\\_planning.html](https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html), accessed February 12, 2021.

## 2.11 Land Use and Planning

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>XI. LAND USE AND PLANNING</b> — The project would have a significant impact on the environment if it would:				
1) Physically divide an established community;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Result in a fundamental conflict between adjacent or nearby land uses;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) 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; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.11.1 Environmental Setting

#### ***Surrounding Land Uses***

Existing uses in the project vicinity are primarily commercial (e.g., auto dealerships/service centers, retail, restaurants, and entertainment) and multi-family residential. For the 24<sup>th</sup> and 25<sup>th</sup> Street site, existing uses to the north include auto repair services, art galleries, and commercial uses. Existing uses to the east include the 2401 Broadway Hotel project, which is currently under construction, and which will include residential, retail, and hotel uses. Existing uses to the south include multifamily residences and the Hive mixed-use development. Existing uses to the west include a three-story multifamily residential building, the New Parkway Theater, auto services, and art galleries located in a single story warehouse. For the Valley Street site, existing uses to the north, south, and west include multi-family residential uses, and existing uses to the east include a parking tower and the Hive. As evidenced by the surrounding land uses, the area is transitioning from its auto-oriented service centers to a mixed-use community consisting of residential, office, and commercial uses.

#### ***Existing General Plan Designations and Zoning***

The General Plan land use designation for the 24<sup>th</sup> and 25<sup>th</sup> Street site is Community Commercial (CC) and the Valley Street site has a General Plan land use designation of Central Business District (CBD). The intent of the CC designation is to create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers. The CBD designation is intended to encourage, support, and enhance the downtown area as a high-density, mixed-use urban center of regional importance, and a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation.

The 24<sup>th</sup> and 25<sup>th</sup> Street site is located in the Community Commercial (CC-3) zone, and is also included in the yet to be adopted Downtown Oakland Specific Plan (DOSP), which is described below. The Valley Street site is located in the Broadway Valdez District Specific Plan (BVDSP), and specifically Subdistrict 1 of the Valdez Triangle Subarea, within the Broadway Valdez District Mixed Use - 4 Commercial Zone (D-BV-4) zone. The CC-3 zoning designation is intended to create, maintain, and enhance areas with a wide range of commercial and service activities. The D-BV-4 Zone is intended to create, maintain, and enhance areas that do not front Broadway, 27<sup>th</sup> Street, Piedmont Avenue, or Harrison Street, and allows the widest range of uses on the ground floor including both residential and commercial businesses.

## 2.11.2 Regulatory Setting

### ***City of Oakland General Plan***

The Oakland General Plan establishes comprehensive, long-term land use policies for the City and provides the primary policy direction for development throughout the City and therefore the project site. The General Plan consists of a series of “elements,” each of which deals with a particular topic, and includes policies, many of which guide development citywide.

The Oakland General Plan Land Use and Transportation Element (LUTE) contains the following land use policies that address issues related to land use and planning, and/or are particularly relevant to the Project (City of Oakland, 2007).

#### **Industry and Commerce Policies**

***Policy I/C1.8: Providing Support Amenities Near Employment Centers.*** Adequate cultural, social, and support amenities designed to serve the needs of workers in Oakland should be provided within close proximity of employment centers.

***Policy I/C.4.1: Protecting Existing Activities.*** Existing industrial, residential, and commercial activities and areas which are consistent with long term land use plans for the City should be protected from the intrusion of potentially incompatible land uses.

***Policy I/C4.2: Minimizing Nuisances.*** The potential for new or existing industrial or commercial uses, including seaport and airport activities, to create nuisance impacts on surrounding residential land uses should be minimized through appropriate siting and efficient implementation and enforcement of environmental and development controls.

#### **Transportation and Transit-Oriented Development Policies**

***Policy T2.1: Encouraging Transit-Oriented Development.*** Transit-oriented development should be encouraged at existing or proposed transit nodes, defined by the convergence of two or more modes of public transit such as BART, bus, shuttle service, light rail or electric trolley, ferry, and inter-city or commuter rail.

***Policy T2.2: Guiding Transit-Oriented Development.*** Transit-oriented developments should be pedestrian oriented, encourage night and day times use, provide the neighborhood with needed goods and services, contain a mix of land uses, and be designed to be compatible with the character of surrounding neighborhoods.

***Policy T4.1: Incorporating Design Features for Alternative Travel.*** The City will require new development, rebuilding, or retrofit to incorporate design features in their projects that encourage the use of alternative modes of transportation such as transit, bicycling, and walking.

***Policy T6.2: Improving Streetscapes.*** The City should make major efforts to improve the visual quality of streetscapes. Design of the streetscape, particularly in neighborhoods and commercial centers, should be pedestrian oriented, include lighting, directional signs, trees, benches, and other support facilities.

### **Neighborhood Policies**

***Policy N1.1: Concentrating Commercial Development.*** Commercial development in the neighborhoods should be concentrated in areas that are economically viable and provide opportunities for smaller scale, neighborhood-oriented retail.

***Policy N11.3: Requiring Strict Compliance with Variance Criteria.*** As variances are exceptions to the adopted regulations and undermine those regulations when approved in large numbers, they should not be granted lightly and without strict compliance with defined conditions, including evidence that hardship will be caused by unique physical or topographic constraints and the owner will be deprived privileges enjoyed by similar properties, as well as the fact that the variance will not adversely affect the surrounding area nor will it grant special privilege to the property. In those instances, where large numbers of variances are being requested, the City should review its policies and regulations and determine whether revisions are necessary.

### **Oakland Planning Code and Zoning Ordinance**

The Planning Code serves to implement General Plan policies and is found in the Oakland Municipal Code, Title 17. The Planning Code governs land uses and development standards, such as building height, bulk and setback, for specific zoning districts within Oakland.

### **Broadway Valdez District Specific Plan**

The BVDSP contains the following land use policies that address issues related to land use and planning, and/or are particularly relevant to the Project (City of Oakland, 2014). These policies are relevant to the Valley Street site, which is located within the BVDSP area.

***Policy LU-1.2:*** Enhance the identity and function of the Broadway Valdez District as a retail destination for Oakland and the East Bay.

***Policy LU-1.3:*** Balance retail uses with a mix of residential, office, and service uses that complement and support the economic viability of the commercial core, and contribute to the creation of a new “24-hour” neighborhood with around-the-clock vitality.

***Policy LU-2.1:*** Establish the Broadway Valdez District as an attractive pedestrian- and transit-oriented, mixed-use neighborhood with a core of retail and complementary commercial uses.

***Policy LU-3.1:*** Build on the strength of adjoining neighborhoods and uses, such as the Uptown, the “Art Murmur Gallery District,” the two medical centers, and the surrounding residential neighborhoods, by encouraging the introduction of complementary retail,

entertainment and cultural uses that will serve these areas while creating a distinct identity for the Plan Area.

**Policy LU-4.1:** Encourage the gradual transition of the Plan Area toward uses that will contribute to the creation of a vibrant, pedestrian-oriented, mixed-use district.

**Policy LU-4.2:** Encourage a more compact and higher density pattern of development that maximizes the development potential of the Plan Area and supports City objectives for economic viability and place-making.

**Policy LU-6.1:** Encourage land use and development patterns that will reduce automobile dependence and support alternative modes of transportation while minimizing impacts on existing community character.

**Policy LU-10.5:** Provide landowners and developers with flexibility to respond to market factors as they change over time.

### **Downtown Oakland Specific Plan**

The City of Oakland is preparing the DOSP to ensure continued growth and revitalization to benefit both Downtown residents and the larger community by providing policy guidance on development, linking land use, transportation, economic development, housing, public spaces, cultural arts, and social equity. The City released the Draft DOSP and Draft Environmental Impact Report for the Specific Plan on August 30, 2019. The proposed DOSP has not been adopted by the City and does not regulate the land use controls for the project site. The discussion of the DOSP is therefore included for informational purposes only.

The DOSP's future vision for the Koreatown/Northgate (KONO) neighborhood, which includes the project site, is that it continues to grow as an art, maker, and entertainment destination. Increased height and/or density along 24<sup>th</sup>, 26<sup>th</sup>, and 27<sup>th</sup> Streets, Telegraph Avenue, and West Grand Avenue is leveraged as part of downtown's incentive program to provide affordable arts, culture, and maker spaces, as well as much-needed public green areas in the neighborhood.

The proposed land use character of the 24<sup>th</sup> and 25<sup>th</sup> Street site is "Mixed-Use, Flex" fronting 24<sup>th</sup> Street and "Flex Industry" fronting 25<sup>th</sup> Street (see DOSP Figure LU-8a: Proposed Land Use Character Map). The "Flex Industry" character area would encourage a walkable, urban area of interconnected streetscapes with a variety of small-to-large footprint buildings that can accommodate light industrial or commercial uses and encourage investment and economic opportunity. The "Mixed Use, Flex" character area would encourage a walkable, urban area of interconnected mixed-use streetscapes with a variety of small to large footprint buildings that can accommodate a diverse range of uses to reinforce the existing pattern of diverse walkable neighborhoods and encourage investment and economic opportunity. This mixed-use zone allows flex uses at the ground floor, including manufacturing/maker space, artist studio, or production space.

The proposed general plan amendment for the 24<sup>th</sup> and 25<sup>th</sup> Street site as part of the DOSP would change the designation of the site from Community Commercial to Central Business District 1 (see DOSP Figure LU-13a: Proposed General Plan Land Use Designation Amendments). The DOSP also includes a "Proposed Shared Street or Paseo" on the 24<sup>th</sup> and 25<sup>th</sup> Street site (see



DOSP Figure LU-16: Proposed Streetscape and Connectivity Improvements). The proposed maximum height intensity of the site is Intensity Area 2 (65 feet max, 5.0 FAR) fronting 24<sup>th</sup> Street and Intensity Area 2 (45/55 feet max, 2.0/3.5 FAR) fronting 25<sup>th</sup> Street (see DOSP Figure LU-10a: Proposed Maximum Intensity Map). The portion of the site in Intensity Area 2 is also located in an area that could be subject to a Zoning Incentive Program. Proposed heights and FAR are preliminary and will be further refined based on community input and the results of an ongoing Zoning Incentive Feasibility Study.

If adopted in its Draft form, the following DOSP policies that address issues related to land use and planning would be relevant to the Project (City of Oakland, 2019).

***Policy LU-2.1:*** Encourage incremental development to fill in gaps in the existing urban fabric, while also identifying opportunities for larger and more transformative developments.

***Policy E-2.13:*** Pursue establishment of additional arts and culture districts in downtown, similar to the BAMB; potential districts could include a Chinatown Cultural Heritage District, KONO Art + Garage District, or Jack London Maker District. Districts should only be established when there is local support.

***Policy M-2.10:*** Develop a policy requiring downtown employers with more than 50 employees to develop and implement Transportation Demand Management plans and monitor and report on trip reduction.

***Policy M-3.1:*** Implement the City’s adopted Complete Streets Policies and focus on reconfiguring road space on public streets with excess capacity to other modes or uses, such as bicycles, pedestrians, transit, and loading/unloading.

***Policy C-1.6:*** Adopt regulations that help preserve and adapt historic buildings downtown, in order to help retain and create new spaces for arts and culture uses.

***Policy C-1.10:*** Adopt zoning, land use and building regulations to preserve existing and encourage more Production, Distribution and Repair (PDR, also known as “maker”), arts and culture spaces.

***Policy C-2.2:*** Invest in the creation of new and improved public spaces that can be used to host festivals and cultural gatherings, and that feature public art.

***Policy CH-1.6:*** Coordinate creation of and access to privately-owned public spaces in new and existing developments.

***Policy CH-1.7:*** Activate public spaces by encouraging vendors to sell in them.

### **2.11.3 Topics Considered and No Impact Determined**

The following topic is considered to have no impact caused by the Project based on the proposed Project characteristics, its geographical location, and underlying site conditions. Therefore, this topic is not addressed further in this document for the following reasons:

- ***Conflict with natural community conservation plans*** (Criterion 4). The project site is not located within or in proximity to an area guided by a Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, development of the Project would not conflict

with such plans and no impact would occur. This criterion is also discussed in Section 2.4, *Biological Resources*.

## 2.11.4 Project Impacts and Discussion

### ***Physical Division of an Established Community***

**Impact LUP-1: The Project would not physically divide an established community. (Criterion 1) (*Less than Significant*)**

For the purpose of this impact analysis, physically dividing an established community means the creation of barriers that prevent or hinder the existing flow of people or goods through an established community, or the placement of a development in such a manner that it physically separates one portion of an established community from the remainder of that community. The construction of a new major highway through an existing residential neighborhood would constitute a typical example of a physical division of an established community.

Existing uses in the project vicinity are primarily commercial (e.g., auto dealerships/service centers, retail, restaurants, and entertainment) and multi-family residential. The Project would construct a new mixed-use commercial development with ground level retail uses and upper story office uses. A portion of the 24<sup>th</sup> and 25<sup>th</sup> Street site is located within the 25<sup>th</sup> Street Garage District, which is identified as a historic district (Areas of Primary Importance [API]), as shown in Figure 3-2. However, the Project would not result in a division of the 25<sup>th</sup> Street Garage District API as the API boundary would remain connected outside of the site and the Project would largely preserve the facades and frontages the existing historic garages and create a 30-foot step back for any new massing on these portions of the site. The Project would also include a new paseo, which would facilitate the movement of pedestrians between 24<sup>th</sup> and 25<sup>th</sup> Streets. Therefore, the Project would not physically divide an established community and the impact would be less than significant.

**Mitigation:** None required.

### ***Land Use Compatibility***

**Impact LUP-2: The Project would not result in a fundamental conflict between adjacent or nearby land uses. (Criterion 2) (*Less than Significant*)**

For the purpose of this analysis, a fundamental conflict with adjacent or nearby land uses means that the character of activities associated with one land use is in fundamental conflict with the uses of adjacent land, or the characteristics of one land use disrupts or degrades adjacent land uses to such a degree that the functional use of the adjacent land for its existing or planned purpose is imperiled.

Existing uses in the project vicinity include multifamily residences, mixed-use commercial development, auto service centers, arts and cultural uses, and a future mixed-use hotel development currently under construction. As evidenced by the surrounding land uses, the area is transitioning from auto-oriented service centers to a mixed-use community consisting of

residential, office, arts, and commercial uses. The proposed office and retail land uses, and artist workspaces and craft stalls would be consistent and compatible with nearby commercial office, retail, and residential uses, as well as arts and entertainment uses. The Project would also be less intensive than the previous auto-service activities on the site. Therefore, the Project would not result in a fundamental conflict between adjacent or nearby land uses and the impact would be less than significant.

**Mitigation:** None required.

### ***Consistency with Land Use Plans and Policies***

**Impact LUP-3: The Project would not 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 result in a physical change in the environment. (Criterion 3) (*Less than Significant*)**

#### **Plan Bay Area 2040**

The Association of Bay Area Governments (ABAG) and Metropolitan Planning Commission's (MTC) *Plan Bay Area 2040* integrates transportation, land use, and housing to meet greenhouse gas reduction targets for the San Francisco Bay Area region. With regard to land use, *Plan Bay Area 2040* focuses growth and development in Priority Development Areas (PDAs) and Transit Priority Areas (TPAs), which are served by public transit and have been identified as appropriate for additional, compact development (ABAG and MTC, 2017a). The Project is located in a TPA, as it is within 0.5-mile of a major transit stop (19<sup>th</sup> Street BART station). The Project is located within the Oakland Downtown & Jack London Square PDA (MTC, 2020). The Oakland Downtown & Jack London Square PDA is characterized as a center of culture, night life, business, innovation, shipping, and civic life in Oakland (ABAG and MTC, 2017b). The Project would develop a mix of office, retail, and arts/craft uses that would directly support additional compact development that aligns with the character of the Oakland Downtown & Jack London Square PDA. Therefore, Project impacts related to conflicts with regional land use plans and policies adopted for the purpose of avoiding or mitigating an environmental effect would be less than significant.

#### **General Plan**

The General Plan land use designation for the 24<sup>th</sup> and 25<sup>th</sup> Street site is Community Commercial (CC). The intent of the CC classification is to create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers. The proposed mixed-use commercial building on the 24<sup>th</sup> and 25<sup>th</sup> Street site would thereby be consistent with the CC land use designation.

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

The proposed craft stalls on the Valley Street site would be consistent with the CBD land use designation as they would provide further intensification of development on the site and provide arts and retail space.

The Project would maintain commercial activities on the 24<sup>th</sup> and 25<sup>th</sup> Street site that would be compatible with the mixed-use residential and commercial uses in the project vicinity consistent with policies I/C.4.1 and I/C4.2. The Project would also constitute transit-oriented development consistent with General Plan policies T2.1, T2.2, and T4.1, as it would develop a mixed-use commercial building less than a half mile from the 19<sup>th</sup> Street BART station, and create a new pedestrian paseo that would link 24<sup>th</sup> and 25<sup>th</sup> Streets. The Project would also create three permanent bulb-outs, or curb extensions, along the project site frontage extending into 24<sup>th</sup> Street that would include seating, planters, and a bike corral, improving the streetscape consistent with Policy T6.2. The Project would also create a new paseo with space for showcasing public art, artist workspaces, and would include retail spaces in proximity to office uses designed to provide opportunities for smaller scale, neighborhood and arts-related retail consistent with policies I/C1.8 and N1.1. Therefore, the Project would not fundamentally conflict with the City's General Plan and the impact would be less than significant.

### **Planning Code and Zoning Map**

The Valley Street site is zoned Broadway Valdez District Mixed Use - 4 Commercial Zone (D-BV-4). The D-BV-4 Zone is intended to create, maintain, and enhance areas that do not front Broadway, 27<sup>th</sup> Street, Piedmont Avenue, or Harrison Street, and allows the widest range of uses on the ground floor including both residential and commercial businesses. The Project would redevelop a parking lot on the Valley Street site for ground-level art craft stall retail uses, and would be consistent with the D-BV-4 zoning designation.

The 24<sup>th</sup> and 25<sup>th</sup> Street site is located in the Community Commercial (CC-3) zone. The CC-3 zoning designation is intended to create, maintain, and enhance areas with a wide range of commercial and service activities. The Project would construct a mixed-use commercial development on the site that would be consistent with the intent of the zoning district. However, the site is located within Height Area 45. The Project Applicant is requesting a variance to exceed the allowable 45-foot height limit by 40 feet on the parcel outside the boundary of the API allowed on the site. The Project would be subject to all variance procedures and requirements in accord with the intent and purposes of the zoning regulations (Oakland Municipal Code Chapter 17.148). The requested variance would be part of the Project approvals, and the Project could not move forward without it. With the granting of this variance, the Project would not fundamentally conflict with the City's Planning Code and Zoning Map. Therefore, the impact would be less than significant.

### **Specific Plans**

#### **Broadway Valdez District Specific Plan**

The Valley Street site is located within the boundaries of the BVDSP. The proposed craft stalls on the Valley Street site would be consistent with the policies of the BVDSP, including all of the policies listed in Section 2.11.2 above, as it would redevelop an existing parking lot with

pedestrian-oriented arts and retail space that would link the BVDSP to existing arts and cultural uses to the north. Therefore, the Project would not fundamentally conflict with the BVDSP and the impact would be less than significant.

#### Downtown Oakland Specific Plan

The 24<sup>th</sup> and 25<sup>th</sup> Street site is not located within an adopted specific plan area but is located within the boundaries of the proposed DOSP. The DOSP has not yet been adopted by the City and specific proposed zoning-level detail is still under development. As such, the DOSP does not regulate the land use controls for the project site. However, this analysis is provided for informational purposes to ensure that the Project is consistent with the long-range neighborhood plan in the project vicinity. The Project would be consistent with the intent of the DOSP as it would develop a mixed-use commercial building less than a half mile from the 19<sup>th</sup> Street BART station. If adopted in its Draft form, the Project would be consistent with proposed DOSP policies, including LU-2.1 and C-1.6, as the Project would redevelop an existing site that includes vacant garage buildings and a surface parking lot, and preserve the facades and frontages the existing historic garages and create a 30-foot step back for any new massing on these portions of the site. The Project would also be consistent with policies E-2.13, M-3.1, C-1.10, C-2.2, CH-1.6, and CH-1.7, since it would include a new paseo with space for showcasing public art, artist workspaces, and retail that would provide a connection to the existing arts and cultural uses in the project vicinity.

**Mitigation:** None required.

### 2.11.5 Cumulative

**Impact LUP-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in or contribute to a significant cumulative impact to land use and planning. (*Less than Significant*)**

The cumulative geographic context for land use, plans and policy considerations for the development of the Project consists of the areas surrounding the project site and Citywide.

As discussed under Impacts LUP-2, LUP-2, and LUP-3, the Project would not result in a significant land use impact by potentially physically dividing an established community; or conflicting with adjacent or nearby land uses; or conflicting with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. All other cumulative development has been, or will be, subject to development guidance contained within the General Plan, prescribed by zoning, and other applicable land use plans to avoid conflicting with plans adopted to avoid or mitigate environmental effects including land use compatibility and physical division of established communities. Therefore, the Project contribution to cumulative impacts related to land use and planning would be less than significant.

**Mitigation:** None required.

### 2.11.6 References

Association of Bay Area Governments and Metropolitan Transportation Commission (ABAG and MTC), 2017a. *Plan Bay Area 2040*, Final, adopted July 26, 2017.

ABAG and MTC, 2017b. *Plan Bay Area 2040*, Housing and Jobs, PDAs, PCAs & Urban Boundaries in Alameda County, 2017.

City of Oakland, 2019. *The Downtown Oakland Specific Plan Public Review Draft Plan*, August 28, 2019. Available at: <https://www.oaklandca.gov/documents/draft-dosp-eir>, accessed February 14, 2021.

City of Oakland, 2014. *Broadway Valdez District Specific Plan*, June 2014. Available at: [oaklandca.gov/documents/broadway-valdez-district-specific-plan-documents](https://www.oaklandca.gov/documents/broadway-valdez-district-specific-plan-documents), accessed February 14, 2021.

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

Metropolitan Transportation Commission (MTC), 2020. Priority Development Areas (*Plan Bay Area 2040*), July 27, 2020. Available at: <https://opendata.mtc.ca.gov/datasets/priority-development-areas-plan-bay-area-2040?geometry=-122.324%2C37.795%2C-122.218%2C37.819>, accessed February 13, 2021.

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## 2.12 Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>XII. MINERAL RESOURCES</b> — The project would have a significant impact on the environment if it would:				
1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.12.1 Setting

The project site is located on land classified by the California Department of Conservation’s (DOC’s) Division of Mines and Geology as Mineral Resource Zone 1 (MRZ-1), or an area where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence (DOC, 1987; 2020). The project site is not zoned for, or immediately adjacent to, lands designated as a mineral resource zone by the City’s General Plan (City of Oakland, 2015; 2018).

### 2.12.2 Topics Considered and No Impact Determined

Since the project site is located on land with little likelihood for significant mineral deposits and is not zoned for, or immediately adjacent to, lands designated as a mineral resource zone by the City’s General Plan, the Project would not interfere with any mineral extraction operations, and would not result in the loss of land designated for mineral resources. As such, the Project would not result in the loss of availability of a known mineral resource and would not result in the loss of a locally important mineral resource recovery site. Therefore, no impact to mineral resources would occur.

### 2.12.3 Cumulative

Because the Project would have no impact to mineral resources, it would not cause or contribute to any cumulative impact to such resources.

### 2.12.4 References

California Department of Conservation (DOC), 2020. State Mining and Geology Board Guidelines, Guidelines for Classification and Designation of Mineral Lands, <https://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf>, accessed December 30, 2020.

DOC, 1987. Division of Mines and Geology, *Special Report 146, Part II, Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area*, 1987.

City of Oakland, 2018. *City of Oakland Zoning and Estuary Policy Plan Maps*. Bureau of Planning. December 11, 2018. [https://cao-94612.s3.amazonaws.com/documents/Zoning\\_EPP\\_Map\\_20181211.pdf](https://cao-94612.s3.amazonaws.com/documents/Zoning_EPP_Map_20181211.pdf), accessed December 30, 2020.

City of Oakland, 2015. Planning & Building Department, *General Plan Designations*, May 19, 2015. <https://cao-94612.s3.amazonaws.com/documents/General-Plan-Designations-20150519.pdf>, accessed December 30, 2020.

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## 2.13 Noise

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>XIII. NOISE</b> — The project would have a significant impact on the environment if it would:				
1) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Generate noise in violation of the City of Oakland nuisance standards (Oakland Municipal Code section 8.18.020) regarding persistent construction-related noise;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code section 17.120.050) regarding operational noise;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) 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); <sup>26</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) Expose persons to interior Ldn 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);	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7) 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]);	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8) 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);	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9) Be located within an airport land use plan and would expose people residing or working in the project area to excessive noise levels; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<sup>26</sup> **NOTE:** Outside of a laboratory, a 3 dBA change is considered a just-perceivable difference. Therefore, 3 dBA is used to determine if the project-related noise increases are cumulative considerable. Project-related noise should include both vehicle trips and project operations.

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
10) Be located within the vicinity of a private airstrip, and would expose people residing or working in the project area to excessive noise levels.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2.13.1 Setting

### *Sensitive Receptors in the Project Vicinity*

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication; physiological and psychological stress; and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. In general, residences, schools, hotels, hospitals, and nursing homes are considered to be the most sensitive to noise. Commercial and industrial uses are considered the least noise-sensitive. Sensitive uses, primarily in the form of residences, are located in the vicinity (i.e., within 65 feet) of the project site.

### *Existing Noise Environment*

To characterize the noise environment at the project site and surrounding area, short-term (15-minute) noise measurements were conducted on the morning of September 24, 2020 (ESA, 2020). Short-term noise measurements were conducted at three locations near the project site to record baseline noise levels at residential receptors closest to the project site. **Table 2.13-1** presents a summary of the noise data collected during the noise monitoring effort.

**TABLE 2.13-1  
EXISTING NOISE LEVELS IN THE PROJECT VICINITY**

Measurement Location	Leq (dBA)	Observed Noise Sources
ST-1: Across project site in front of 451 24 <sup>th</sup> Street	58.1	Traffic on 24 <sup>th</sup> Street and Broadway, construction noise from 2401 Broadway
ST-2: In the parking lot of Northgate Waverly Apartments south of 24 <sup>th</sup> Street	56.8	Traffic on 24 <sup>th</sup> Street and vehicles entering into the parking lot
ST-3: In front of the apartment building at 466 24 <sup>th</sup> Street adjacent to the project site	58.6	Traffic on 24 <sup>th</sup> Street, delivery truck idling at Koreana Plaza

SOURCE: ESA, 2020

## 2.13.2 Regulatory Setting

### *Federal Transit Administration Vibration Criteria*

The Federal Transit Administration (FTA) has published guidance for assessing noise and vibration impacts from transit projects involving rail or bus facilities, and includes noise impact criteria (FTA, 2018). This guidance also provides methodologies for assessing the potential noise impacts from construction. **Table 2.13-2** presents vibration impact criteria.

**TABLE 2.13-2  
 FTA GROUNDBORNE VIBRATION IMPACT CRITERIA**

Land Use Category	Frequent Events <sup>1</sup>	Occasional Events <sup>2</sup>	Infrequent Events <sup>3</sup>
Category I: Buildings where vibration would interfere with interior operations	65 VdB <sup>4</sup>	65 VdB <sup>4</sup>	65 VdB <sup>4</sup>
Category II: Residences and buildings where people normally sleep	72 VdB	75 VdB	80 VdB
Category III: Institutional land uses with primarily daytime use	75 VdB	78 VdB	83 VdB

NOTES:

- <sup>1</sup> More than 70 vibration events of the same source per day.
- <sup>2</sup> Between 30 and 70 vibration events of the same source per day.
- <sup>3</sup> Less than 30 vibration events of the same source per day.
- <sup>4</sup> This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration sensitive manufacturing or research should always require detailed evaluation to define the acceptable vibration levels.

SOURCE: FTA, 2018

### **City of Oakland General Plan**

The Oakland General Plan Noise Element contains guidelines for determining the compatibility of various land uses with different outdoor noise environments (City of Oakland, 2005). The Noise Element recognizes that some land uses are more sensitive to ambient noise levels than others, due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of typical activities. The City of Oakland uses State noise guidelines for judging the compatibility between various land uses and their noise environments, which are summarized in **Table 2.13-3**.

In this context, “normally acceptable” is defined as satisfactory for the specific land use, assuming that normal conventional construction is used in buildings. “Conditionally acceptable” means that new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh-air supply systems or air conditioning, will normally suffice. “Normally unacceptable” means that new construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

The Noise Element also contains the following applicable policies and actions:

**Policy 1:** Ensure the compatibility of existing and, especially, of proposed development projects not only with neighboring land uses but also with their surrounding noise environment.

*Action 1.1:* Use the noise-land use compatibility matrix in conjunction with the noise contour maps (especially for roadway traffic) to evaluate the acceptability of residential and other proposed land uses and also the need for any mitigation or abatement measures to achieve the desired degree of acceptability.

*Action 1.2:* Continue using the City’s zoning regulations and permit processes to limit the hours of operation of noise-producing activities which create conflicts with residential uses and to attach noise-abatement requirements to such activities.

**TABLE 2.13-3  
LAND USE NOISE COMPATIBILITY GUIDELINES – CITY OF OAKLAND**

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE (L <sub>DN</sub> OR C <sub>NEL</sub> , dB)					
	55	60	65	70	75	80
Residential	NA		CA	NU	CU	CU
Transient lodging – motels, hotels	NA		CA	NU	CU	CU
Schools, libraries, churches, hospitals, nursing homes	NA		CA	NU	CU	CU
Auditoriums, concert halls, amphitheaters	CA			CU	CU	CU
Sports arenas, outdoor spectator sports	CA			CU	CU	CU
Playgrounds, neighborhood parks	NA		NU	CU	CU	CU
Golf courses, riding stables, water recreation, cemeteries	NA			NU	CU	CU
Office buildings, business commercial and professional	NA		CA	NU	CU	CU
Industrial, manufacturing, utilities, agriculture	NA			CA	NU	CU
NA	NORMALLY ACCEPTABLE: Development may occur without an analysis of potential noise impacts <i>to the proposed development</i> (though it might still be necessary to analyze noise impacts that the project might have <i>on its surroundings</i> ).					
CA	CONDITIONALLY ACCEPTABLE: Development should be undertaken only after an analysis of noise-reduction requirements is conducted and if necessary noise-mitigating features are included.					
NU	NORMALLY UNACCEPTABLE: Development should generally be discouraged; it may be undertaken only if a detailed analysis of the noise-reduction requirements is conducted, and if highly effective noise mitigation features are included.					
CU	CLEARLY UNACCEPTABLE: Development should not be undertaken.					

SOURCE: Reproduced Figure 1 of the City of Oakland CEQA Thresholds/Criteria of Significance Guidelines, 2020, consistent with Figure 6 from the Oakland General Plan Noise Element 2005

**Policy 2:** Protect the noise environment by controlling the generation of noise by both stationary and mobile noise sources.

*Action 2.1:* Review the various noise prohibitions and restrictions under the City’s nuisance noise ordinance and revise the ordinance if necessary.

*Action 2.2:* As resources permit, increase enforcement of noise-related complaints and also of vehicle speed limits and of operational noise from cars, trucks, and motorcycles.

**Policy 3:** Reduce the community’s exposure to noise by minimizing the noise levels that are received by Oakland residents and others in the city. (This policy addresses the reception of noise whereas Policy 2 addresses the generation of noise.)

### **Oakland Municipal Code**

The City of Oakland regulates noise through enforcement of its noise ordinance, which can be found in Section 8.18.020 of the Health and Safety Code, Section 17.120 of the Planning Code, and Chapter 12.56 of the Municipal Code.

The noise ordinance within the Health and Safety Code qualitatively addresses persistent nuisance noise which it defines as persistent maintenance or emission of any noise or sound produced by human, animal, or mechanical means, between the hours of 9:00 p.m. and 7:00 a.m. next ensuing, which, by reason of its raucous or nerve-racking nature, shall disturb the peace or comfort, or be injurious to the health of any person. In addition, the Code states that failure to comply with the following requirements constitutes a nuisance:

- A. All construction equipment powered by internal combustion engines shall be properly muffled and maintained.
- B. Unnecessary idling of internal combustion engines is prohibited.
- C. All stationery noise-generating construction equipment such as tree grinders and air compressors are to be located as far as is practical from existing residences.
- D. Quiet construction equipment, particularly air compressors, are to be selected whenever possible.
- E. Use of pile drivers and jack hammers shall be prohibited on Sundays and holidays, except for emergencies and as approved in advance by the Building Official.

The noise ordinance within the Planning Code regulates construction noise and only operational noise from stationary sources, as cities and counties do not have regulatory authority to establish noise level limits over noise from mobile on-road sources (transportation noise). Transportation noise is regulated at the State and federal level by noise limits placed on vehicle manufacturers. **Table 2.13-4** presents maximum allowable receiving noise standards applicable to long-term exposure for residential and civic land uses, for noise from stationary noise sources (not transportation noise). Section 17.120.050 states that all activities shall be so operated that the noise level inherently and regularly generated by these activities across real property lines shall not exceed the applicable values indicated in Table 2.13-4, as modified where applicable by the adjustments indicated in footnote (a) of this table.

**TABLE 2.13-4  
MAXIMUM ALLOWABLE RECEIVING NOISE STANDARDS FOR SPECIFIED LAND USES  
(FROM STATIONARY SOURCES)<sup>a</sup>**

Receiving Land Use	Cumulative Number of Minutes in 1-Hour Time Period <sup>b</sup>	Maximum Allowable Noise Level Standards (dBA)	
		Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 p.m. to 7:00 a.m.
Residential, School, Child Care, Health Care, or Nursing Home, and Public Open Space	20 (L <sub>33</sub> )	60	45
	10 (L <sub>16.7</sub> )	65	50
	5 (L <sub>8.3</sub> )	70	55
	1 (L <sub>1.7</sub> )	75	60
	0 (L <sub>max</sub> )	80	65
<b>Anytime</b>			
Commercial	20 (L <sub>33</sub> )	65	
	10 (L <sub>16.7</sub> )	70	
	5 (L <sub>8.3</sub> )	75	
	1 (L <sub>1.7</sub> )	80	
	0 (L <sub>max</sub> )	85	
<b>Anytime</b>			
Manufacturing, Mining, and Quarrying	20 (L <sub>33</sub> )	70	
	10 (L <sub>16.7</sub> )	75	
	5 (L <sub>8.3</sub> )	80	
	1 (L <sub>1.7</sub> )	85	
	0 (L <sub>max</sub> )	90	

## NOTES:

<sup>a</sup> These standards are to be further reduced by 5-dBA for simple tone noise, noise consisting primarily of speech or music, or recurring impact noise. If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level.

<sup>b</sup> L<sub>x</sub> represents the noise level that is exceeded X percent of a given period. L<sub>max</sub> is the maximum instantaneous noise level.

SOURCE: Oakland Noise Ordinance No. 11895, 1996

Once a structure or facility is constructed, noise from a stationary source would be limited by the standards in Table 2.13-4 (for example, between 10:00 p.m. and 7:00 a.m., residential uses may only be exposed to noises up to 45 dBA for a cumulative period of 20 minutes in a 1-hour time period). The noise ordinance states that if the existing noise is measured to be louder than the maximum allowed (i.e., the “applicable noise level standard”), the existing noise level shall be considered the maximum allowed.

**Table 2.13-5** presents noise level standards from the noise ordinance that apply to temporary exposure to short- and long-term construction noise. In this context, short-term refers to construction activities lasting less than 10 days at a time while long-term refers to construction activities lasting greater than 10 days at a time. Given the Project’s 27-month construction schedule, the latter noise level standards would apply for daytime construction activities. Per Section 17.120.050 (G) of the Planning Code, the limits in Table 2.13-5 apply to residential and industrial/commercial land uses. In addition, active recreational areas are considered marginally sensitive to noise, with the standards for commercial and industrial land uses applied.

**TABLE 2.13-5  
 MAXIMUM ALLOWABLE RECEIVING NOISE STANDARDS FOR  
 TEMPORARY CONSTRUCTION OR DEMOLITION ACTIVITIES**

Operation/Receiving Land Use	Weekdays (dBA) 7:00 a.m. to 7:00 p.m.	Weekends (dBA) 9:00 a.m. to 8:00 p.m.
<b>Short-Term Operation (less than 10 days)</b>		
Residential	80	65
Commercial, Industrial	85	70
<b>Long-Term Operation (more than 10 days)</b>		
Residential	65	55
Commercial, Industrial	70	60

NOTES: During the hours of 7:00 p.m. to 7:00 a.m. on weekdays and 8:00 p.m. to 9:00 a.m. on weekends and federal holidays, noise levels received by any land use from construction or demolition shall not exceed the applicable nighttime operational noise level standard (see Table 2.13-4). If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level. Maximum allowable receiving standards are applied in this analysis as the maximum  $L_{eq}$ .

SOURCE: Oakland Noise Ordinance No. 11895, 1996

***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City’s SCAs relevant to reducing impacts on noise and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to noise. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA NOI-1: Construction Days/Hours.** *(Standard Condition of Approval 62)*

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.

**SCA NOI-2: Construction Noise.** (*Standard Condition of Approval 63*)

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.

**SCA NOI-3: Extreme Construction Noise** (*Standard Condition of Approval 64*)

**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 90 dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following:



- i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;
- ii. Implement “quiet” pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;
- iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;
- iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and
- v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.

**b. Public Notification Required**

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: Construction Noise Complaints** (*Standard Condition of Approval 66*)

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.

**SCA NOI-5: Operational Noise** (*Standard Condition of Approval 68*)

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.

### **SCA NOI-6: Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities** (Standard Condition of Approval 70)

Requirement: The project applicant shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located at 466 24th Street. The Vibration Analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction.

### **2.13.3 Topics Considered and No Impact Determined**

The Project would have no impact to the following topics based on the proposed Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- **California Noise Insulation Standards** (Criterion 5). The Project would not introduce any single-family or multi-family dwellings, hotels, motels, dormitories, or long-term care facilities that would be subject to California Noise Insulation Standards (CCR Part 2, Title 24). Therefore, this topic is not discussed further in this document.
- **Standards Established by a Regulatory Agency** (Criterion 7). The Project would not result in impacts with regard to 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]);. The Project does not propose development of heavy industrial land uses that might require operation of heavy duty equipment or other substantial noise sources for which worker hearing protection standards of OSHA would apply. Therefore, this topic is not addressed further in this document.
- **Operational Vibration** (part of Criterion 8). The Project would not introduce new operational vibration sources (e.g., impact equipment, streetcar, or railroad operations, or blasting activities). Therefore, there would be no operational vibration impacts, and operational vibration is not discussed further.
- **Airport-related Noise** (Criteria 9 and 10). The Project would not result in significant impacts related to airport-related noise impacts. The project site is not located within an airport influence area of either Oakland International Airport or San Francisco International Airport or in the vicinity of a private airstrip; therefore, the Project would not result in an impact related to exposure to excessive aircraft noise. Therefore, these topics are not addressed further in this document.

### **2.13.4 Project Impacts and Discussion**

#### **Construction Noise**

#### **Impact NOI-1: Construction of the Project would not generate noise in violation of the City of Oakland Noise Ordinance. (Criteria 1 and 2) (Less than Significant with SCAs)**

The Project would involve demolition of one existing building and portions of four other existing buildings on the project site and construction of an approximately 99,800 square foot mixed use

office and retail building on the 24<sup>th</sup> and 25<sup>th</sup> Street site and platform raised craft stalls on the Valley Street site. Construction of the Project is expected to commence in February 2022 and last over a period of 27 months.

Construction of the Project would intermittently generate high noise levels at and adjacent to the project site. Demolition of the existing buildings, grading and excavation, and building construction would involve the use of construction equipment that generate substantial noise. Noise impacts from construction activity would depend on the type of activity being undertaken and the distance to the receptor location. Construction noise impacts are most severe if construction activities take place during the noise sensitive hours (i.e., early morning, evening, or nighttime hours), in areas immediately adjoining noise-sensitive land uses, or when construction duration lasts over extended periods of time.

Demolition, grading, and site preparation would require equipment such as concrete saws, backhoes, bulldozers, front loaders, graders, and water trucks. These activities are anticipated to be the loudest construction phases of the Project, mainly due to the use of larger off-road equipment as compared to later construction phases. Construction activities known to generate extreme noise levels such as drilling, impact pile driving, and blasting would not be required for the Project; however, work involving concrete saws would be required which could generate noise levels upwards of 90 dBA as shown below.

The operation of each piece of off-road equipment on the project site would not be constant throughout the day, as equipment would be turned off when not in use. Over a typical work day, equipment would be operating at different locations within the project site and would not always be operating concurrently. However, for a conservative approximation of construction noise levels that the closest sensitive receptor would be exposed to, consistent with the methodology recommended by FTA, it is assumed for this analysis that the two loudest pieces of construction equipment would be operating at the same time at the center of the project site, approximately 65 feet from the nearest receptor.

**Table 2.13-6** shows typical maximum noise levels produced by various types of construction equipment that are expected to be used for Project construction.

Project construction activity would generate temporary noise impacts at nearest noise-sensitive receptors at the multi-family apartments at 466 24<sup>th</sup> Street adjacent to the 24<sup>th</sup> and 25<sup>th</sup> Street site and the lofts across 24<sup>th</sup> Street adjacent to the Valley Street site. Additional receptors located farther away would be affected to a lesser extent. Using the reference noise levels provided in Table 2.13-6 in the Roadway Construction Noise Model (RCNM), an excavator and a concrete saw could generate  $L_{max}$  noise levels of 81 dBA and 90 dBA, respectively, at a distance of 50 feet. The combined attenuated noise level from the simultaneous operation of these two pieces of equipment, taking into account their usage factors, would be 81 dBA at the nearest sensitive receptors 65 feet from the project site. This would exceed the Maximum Allowable Receiving Noise Standards for Temporary Construction or Demolition Activities in the City's noise ordinance for activities lasting longer than 10 days (shown in Table 2.13-5).

**TABLE 2.13-6  
TYPICAL MAXIMUM NOISE LEVELS FROM CONSTRUCTION EQUIPMENT**

Construction Equipment	Noise Level (dBA, L <sub>max</sub> at 50 feet)
Concrete Saw	90
Backhoe	78
Excavator	81
Air Compressor	78
Crane	81
Grader	85
Paver	77
Roller	80
Front End Loader	79
Trucks	76
Concrete Crusher	79

NOTE: These are maximum field measured values at 50 feet as reported from multiple samples. Concrete crusher processing noise level based on data from H.M. Pitt Labs, 2006.

SOURCE: FHWA, 2006.

Although construction noise would cause temporary impacts to nearby residents, adherence to the City’s SCAs would reduce this impact to a less-than-significant level. Required implementation of applicable City of Oakland SCAs would minimize construction noise by limiting hours of construction activities, requiring best available noise control technology and notification of any local residents of construction activities, and by tracking and responding to noise complaints. Specifically, Project construction would comply with the following SCAs: **SCA NOI-1, Construction Days/Hours**, which limits construction hours mirroring Noise Ordinance requirements; **SCA NOI-2, Construction Noise**, which requires projects to implement construction noise reduction measures; **SCA NOI-3, Extreme Construction Noise**, which requires the preparation of a Construction Noise Management Plan with site-specific noise attenuation measures to reduce impacts to specific receptors; and **SCA NOI-4, Construction Noise Complaints**, which sets a protocol for receiving and addressing construction noise complaints from the public. Consistent with SCA NOI-3, a Construction Noise Management Plan has been prepared for the Project and is included as **Appendix H**. Site-specific measures identified to attenuate noise include: (1) erecting temporary plywood noise barriers around the construction site, particularly along the western boundary adjacent to the apartment building; (2) utilizing noise control blankets on the building structure as the building is erected; (3) monitoring the effectiveness of noise attenuation measures by monitoring noise levels; (4) sequencing the noisiest activities to coincide with the noisiest ambient hours; (5) locating noisy equipment within the building structure once the exterior facade is installed; and (6) notifying adjacent property owners within 300 feet of the project site, at least 10 days prior to commencement of activities, among others. Therefore, with adherence to SCA NOI-1, NOI-2, NOI-3, and NOI-4, construction of the Project would not generate noise in violation of the City of Oakland Noise Ordinance and impacts would be less than significant.

**SCA NOI-1: Construction Days/Hours.** See Section 2.13.2.

**SCA NOI-2: Construction Noise.** See Section 2.13.2.

**SCA NOI-3: Extreme Construction Noise.** See Section 2.13.2.

**SCA NOI-4: Construction Noise Complaints.** See Section 2.13.2.

**Mitigation:** None required.

### ***Operational Noise from Stationary Sources***

**Impact NOI-2: Stationary sources associated with the operation of the Project would not generate noise in violation of the City of Oakland Noise Ordinance. (Criterion 3) (*Less than Significant with SCAs*)**

Once operational, the Project would include stationary sources such as heating, ventilating, and air conditioning (HVAC) mechanical equipment. Such equipment would be operated 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 Project would be required to comply with **SCA NOI-5, Operational Noise**, which ensures compliance with operational noise limits in the City's Noise Ordinance and would result in a less-than-significant impact with respect to noise from operational stationary sources on the project site.

**SCA NOI-5: Operational Noise.** See Section 2.13.2.

**Mitigation:** None required.

### ***Operational Traffic Noise***

**Impact NOI-3: The Project would not generate noise that would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project. (Criterion 4) (*Less than Significant*)**

In addition to operational noise from stationary sources discussed under Impact NOI-2, the Project would also generate operational noise impacts from an increase in Project-related traffic. The Project would generate additional vehicle trips to the project site resulting in an increase in traffic along the roadway network in and around the area. This would increase noise levels along roadway segments and intersections leading to the area as well as within the Project area.

Traffic noise levels along roadway segments most affected by Project traffic were determined using algorithms of the Federal Highway Administration (FHWA) Traffic Noise Prediction Model Technical Manual and evening peak hour turning movements for Existing and Existing plus Project conditions from the traffic analysis prepared for the Project. Intersections selected for analysis were based on the Project's contribution to traffic at the intersection and the presence of sensitive receptors in the vicinity. The segments analyzed and the modeled noise increases along these segments are shown in **Table 2.13-7**, below.

The City of Oakland considers a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project to be significant. As shown in Table 2.13-7, the increase in traffic noise from the Existing plus Project scenario compared to the Existing scenario would be less than 5 dBA at all analyzed roadway segments and would therefore result in a less-than-significant impact with respect to traffic noise along these roadway segments.

**Mitigation:** None required.

**TABLE 2.13-7  
PEAK-HOUR TRAFFIC NOISE LEVELS (DBA) NEAR THE PROJECT<sup>1,2</sup>**

Roadway Segment	Existing	Existing Plus Project	Difference between Existing Plus Project and Existing
<b>Broadway</b>			
N of 25 <sup>th</sup> Street	77.2	77.2	0.0
Between 24 <sup>th</sup> and 25 <sup>th</sup> Streets	76.2	76.3	+0.1
S of 24 <sup>th</sup> Street	76.4	76.5	+0.1
<b>Telegraph Avenue</b>			
N of 25 <sup>th</sup> Street	76.7	76.8	+0.1
Between 24 <sup>th</sup> and 25 <sup>th</sup> Streets	76.6	76.7	+0.1
S of 24 <sup>th</sup> Street	76.4	76.4	0.0
<b>25<sup>th</sup> Street</b>			
Between Broadway and Project	62.2	64.2	+2.0
Between Project and Telegraph Avenue	66.3	67.4	+1.1
<b>24<sup>th</sup> Street</b>			
Between Broadway and Valley Street	67.0	67.0	0.0
Between Valley Street and Telegraph Avenue	68.1	68.1	0.0

NOTES:

<sup>1</sup> Noise levels were determine using methodology described in FHWA Traffic Noise Model Technical Manual.

<sup>2</sup> Traffic noise increases greater than 5 dB is considered a significant increase in ambient noise levels according to the City of Oakland significance thresholds.

**Land Use Compatibility**

**Impact NOI-4: The Project would not be inconsistent with the land use compatibility guidelines of the Oakland General Plan for the proposed land uses. (Criterion 6) (*Less than Significant*)**

The City of Oakland’s land use compatibility guidelines specify the community ambient noise level that would be considered “normally acceptable,” “conditionally acceptable,” “normally unacceptable,” and “clearly unacceptable” for various uses. For office and commercial uses, an ambient noise environment of up to 70 dBA, L<sub>dn</sub> is considered “normally acceptable.” Based on noise monitoring conducted for the Project, the noise environment of 56.8 to 58.6 dBA measured at the project site would be considered normally acceptable for office and commercial uses. Therefore,

additional SCAs related to exposure to community noise would not be required and the impact would be considered less than significant.

**Mitigation:** None required.

### **Construction Vibration**

**Impact NOI-5: Project construction would not expose persons to or generate groundborne vibration that exceeds the criteria established by the Federal Transit Administration (FTA). (Criterion 8) (*Less than Significant with SCAs*)**

A portion of the project site is located within the 25<sup>th</sup> Street Garage District, which is identified as a historic district. In addition, the three buildings at 465 25<sup>th</sup> Street have also been identified as historic structures (refer to EIR Section 4.2, *Historic Architectural Resources*). The residential apartments at 466 24<sup>th</sup> Street are located adjacent to the western boundary of the project site, just 10 feet from the project site boundary. These structures could be affected by vibration generated by the Project during construction activities. The Project would be subject to **SCA NOI-6, Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities**, which would require a vibration analysis for the Project. With the required implementation of this measure, vibration impacts from Project construction to nearby historic and residential receptors would be reduced to a less-than-significant level.

**SCA NOI-6: Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities.** See Section 2.13.2.

**Mitigation:** None required.

## **2.13.5 Cumulative**

**Impact NOI-1.CU: Construction and operation of the Project, combined with cumulative development in the Project area, would not lead to significant cumulative noise and vibration impacts. (*Less than Significant with SCAs*)**

### **Construction Noise and Vibration**

The Project's impacts in combination with construction noise and vibration impacts from other projects in the vicinity of the project site could lead to cumulative increase in noise at the nearby receptors. However, all projects would be required to implement applicable SCAs to reduce their construction-related noise and vibration impacts to less-than-significant levels. Therefore, with implementation of SCAs NOI-1 through NOI-4 and NOI-6, the Project's contribution to the cumulative noise and vibration impacts in the Project vicinity would be less than significant.

### **Operation**

As with the proposed Project, all cumulative projects would be required to implement SCA NOI-5 to reduce noise from stationary sources. Therefore, once operational, the Project would contribute to the cumulative noise environment in the vicinity primarily through an increase in traffic to the

Project uses. Project traffic, in combination with traffic generated by other projects proposed in the area, would lead to a cumulative increase in roadside noise levels.

Cumulative increase in traffic noise levels along roadway segments most affected by Project traffic were estimated using algorithms of the FHWA Traffic Noise Prediction Model Technical Manual and evening peak hour turning movements for Cumulative and Cumulative plus Project conditions from the traffic analysis prepared for the Project. The results are shown in **Table 2.13-8**, below.

**TABLE 2.13-8  
PEAK-HOUR CUMULATIVE TRAFFIC NOISE LEVELS (DBA) NEAR THE PROJECT<sup>1,2</sup>**

Roadway Segment	Existing (A)	Cumulative (2040) No Project (B)	Cumulative (2040) Plus Project (C)	C-A
<b>Broadway</b>				
N of 25 <sup>th</sup> Street	77.2	78.5	78.5	+1.3
Between 24 <sup>th</sup> and 25 <sup>th</sup> Streets	76.2	77.5	77.6	+1.4
S of 24 <sup>th</sup> Street	76.4	77.7	77.7	+1.3
<b>Telegraph Avenue</b>				
N of 25 <sup>th</sup> Street	76.7	78.0	78.1	+1.4
Between 24 <sup>th</sup> and 25 <sup>th</sup> Streets	76.6	77.9	77.9	+1.3
S of 24 <sup>th</sup> Street	76.4	77.6	77.7	+1.3
<b>25<sup>th</sup> Street</b>				
Between Broadway and Project	62.2	63.4	65.0	+2.8
Between Project and Telegraph Avenue	66.3	67.5	68.4	+2.1
<b>24<sup>th</sup> Street</b>				
Between Broadway and Valley Street	67.0	68.4	68.4	+1.4
Between Valley Street and Telegraph Avenue	68.1	69.4	69.4	+1.3

NOTES:

- <sup>1</sup> Noise levels were determine using methodology described in FHWA Traffic Noise Model Technical Manual.
- <sup>2</sup> Traffic noise increases greater than 5 dB is considered a significant increase in ambient noise levels according to the City of Oakland significance thresholds.

The City of Oakland considers a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project to be significant. As shown in Table 2.13-8, the increase in cumulative traffic noise with the Project when compared to the existing traffic noise levels would be less than the City’s incremental threshold of 5 dBA along all analyzed intersections. Therefore, the cumulative impact of traffic noise would be less than significant.

**SCA NOI-1: Construction Days/Hours.** See Section 2.13.2.

**SCA NOI-2: Construction Noise.** See Section 2.13.2.

**SCA NOI-3: Extreme Construction Noise.** See Section 2.13.2.

**SCA NOI-4: Construction Noise Complaints.** See Section 2.13.2.



**SCA NOI-5: Operational Noise.** See Section 2.13.2.

**SCA NOI-6: Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities.** See Section 2.13.2.

**Mitigation:** None required.

### **2.13.6 References**

City of Oakland, 2005. *General Plan, Noise Element*, June 21, 2005.

Environmental Science Associates (ESA), 2020. Ambient noise measurement survey conducted for the 460 24th Street Project, September 24, 2020.

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## 2.14 Population and Housing

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>XIV. POPULATION AND HOUSING</b> — The project would have a significant impact on the environment if it would:				
1) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.14.1 Environmental Setting

#### ***Employment***

In 2019, the City of Oakland had approximately 207,800 jobs (EDD, 2020). According to the Association of Bay Area Governments (ABAG) and Metropolitan Planning Commission's (MTC) *Plan Bay Area 2040*, Oakland's employment is projected to grow by 93,700 jobs from 179,100 jobs in 2010 to 272,800 jobs in 2040 (ABAG, 2017).

### 2.14.2 Regulatory Setting

#### ***Oakland Municipal Code***

Chapter 15.68 of the Oakland Municipal Code establishes a Jobs/Housing Impact Fee in the City of Oakland to assure that certain commercial development projects compensate and mitigate for the increased demand for affordable housing generated by such development projects within the City of Oakland.

#### ***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City's SCAs relevant to reducing impacts on population and housing and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to population and housing. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

### **SCA POP-1: Jobs/Housing Impact Fee** (*Standard Condition of Approval 71*)

**Requirement:** The project applicant shall comply with the requirements of the City of Oakland Jobs/Housing Impact Fee Ordinance (chapter 15.68 of the Oakland Municipal Code).

### **2.14.3 Topics Considered and No Impact Determined**

The following topic is considered to have no impact caused by the Project based on the proposed Project characteristics, its geographical location, and underlying site conditions. Therefore, this topic is not addressed further in this document for the following reasons:

- **Displacement** (Criteria 2 and 3). The project site is currently occupied by a surface parking lot, four vacant garage buildings, and an auto service and parts center. Therefore, construction of the Project would not displace any existing housing units or substantial numbers of people necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element, and no impact would occur.

### **2.14.4 Project Impacts and Discussion**

#### ***Population Growth***

**Impact POP-1: The Project would not induce substantial population growth in a manner not contemplated in the General Plan, either directly or indirectly, such that additional infrastructure is required. (Criterion 1) (*Less than Significant*)**

The Project would generate approximately 413 new jobs at the project site.<sup>27</sup> The proposed office and retail uses at the 24<sup>th</sup> and 25<sup>th</sup> Street site would generate approximately 407 jobs (383 office and 24 retail).<sup>28</sup> The proposed craft retail uses at the Valley Street site would generate approximately 6 jobs.<sup>29</sup> Construction of the Project also would involve temporary employees. However, the additional 413 employees, plus the temporary construction employees, would not result in a significant population increase. According to the *Plan Bay Area 2040*, the City is projected to have an increase of approximately 93,700 jobs between 2010 and 2040. The approximately 413 jobs added by the Project would, therefore, represent a marginal fraction of this projected and planned growth. Additionally, the General Plan land use designation for the 24<sup>th</sup> and 25<sup>th</sup> Street site is Community Commercial (CC) and the Valley Street site has a General Plan land use designation of Central Business District (CBD), consistent with the uses proposed. The Project would redevelop sites within a highly urbanized area, and would not require the extension of

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<sup>27</sup> To provide a conservative analysis, existing employees from the Kia service and parts center in operation at the time the NOP was released (January 2020) were not discounted. The Kia service and parts center is no longer a tenant, and the Project site is fully vacant as of March 2022..

<sup>28</sup> For the purposes of a conservative analysis, this analysis assumes a density of 1 employee per 225 square feet of office space, and 1 employee per 500 square feet of retail space, as established in the Downtown Oakland Specific Plan EIR—an EIR currently in progress with a Plan Area boundary that includes the 24<sup>th</sup> and 25<sup>th</sup> Street site (City of Oakland, 2019).

<sup>29</sup> This analysis assumes 2 employees per craft retail space, as the employment rate of 500 square feet of retail space would not be appropriate for the craft stall space and would likely underestimate actual employment of the three craft stalls proposed at the Valley Street site.

roads or infrastructure. Therefore, the Project would not directly or indirectly induce substantial population growth and the impact would be less than significant.

While not required to reduce any significant effects related to population and housing, **SCA POP-1, Jobs/Housing Impact Fee**, is applicable to the Project and would require the Project Applicant to comply with the City of Oakland Jobs/Housing Impact Fee Ordinance.

**Mitigation:** None required.

### 2.14.5 Cumulative

**Impact POP-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in or contribute to a significant cumulative impact to population and housing. (Less than Significant)**

The geographic context for cumulative impacts to population and housing includes the City of Oakland. The Project in combination with past, present, and reasonably foreseeable future development in the City would lead to an increase in employment growth. However, as described under Impact POP-1 above, the approximately 413 jobs added by the Project would represent a marginal fraction of the City's projected and planned employment growth. Thus, the Project would not contribute to cumulative substantial unplanned employment growth in the City or the region and the impact would be less than significant.

**Mitigation:** None required.

### 2.14.6 References

Association of Bay Area Governments and Metropolitan Planning Commission (ABAG and MTC), 2017. *Plan Bay Area 2040, Land Use Modeling Report*, July 2017. Available at: [http://2040.planbayarea.org/files/2020-02/Land\\_Use\\_Modeling\\_PBA2040\\_Supplemental%20Report\\_7-2017.pdf](http://2040.planbayarea.org/files/2020-02/Land_Use_Modeling_PBA2040_Supplemental%20Report_7-2017.pdf), accessed February 12, 2021.

California Employment Development Department (EDD), 2020. *Monthly Labor Force Data for Cities and Census Designated Places (CDP), Annual Average 2019 – Revised*, March 27, 2020. Available at: <https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html>, accessed February 12, 2021.

City of Oakland, 2019. *Downtown Oakland Specific Plan Draft Environmental Impact Report*, August 2019. Available at: <https://www.oaklandca.gov/documents/draft-dosp-eir>, accessed February 12, 2021.

## 2.15 Public Services

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>XV. PUBLIC SERVICES</b> — The project would have a significant impact on the environment if it would:				
1) 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:				
a) Fire protection;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Other public facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 2.15.1 Environmental Setting

#### ***Fire Protection and Emergency Medical Response***

The Oakland Fire Department (OFD) provides fire protection services and emergency medical services for the project site and throughout the City of Oakland. Fire Station 15 (455 27<sup>th</sup> Street) is the closest station to the project site, located approximately 400 feet north of the 24<sup>th</sup> and 25<sup>th</sup> Street site. OFD aims to provide emergency service within 7 minutes of notification 90 percent of the time. Generally, service can be provided in that time-frame to areas located within 1.5 miles of a fire station (City of Oakland, 2012). In 2018, OFD generally met its service goal within the vicinity of the project site (City of Oakland, 2019).

#### ***Police Protection***

The Oakland Police Department (OPD) provides police services for the project site and throughout the City of Oakland. The project site is located in Patrol Area 2, traditionally known as North Oakland/Uptown, and Police Beat 8X which includes the Koreatown Northgate, Pill Hill, and Mosswood neighborhoods of the City (OPD, 2021). Incoming calls for police services are ranked as follows: Priority 1 refers to imminent danger, death, serious injury, felonies in progress, or serious public health hazards; Priority 2 refers to disputes with potential for violence, misdemeanor crimes in progress, stolen vehicle reports, and similar matters; and Priority 3 refers to reports of incidents that do not present danger to life or property. In 2018 in Patrol Area 2, the median response time for Priority 1 calls (imminent danger) was 8 minutes 11 seconds while Priority 2 response times averaged to be 1 hour and 6 minutes. The median response time for Priority 3 calls ranges widely due to the nature of responding to non-emergency calls and lack of available staffing (City of Oakland, 2019).

### **Public Schools**

The project site is served by the Oakland Unified School District (OUSD). Across Oakland, the OUSD operates 87 schools, including 49 elementary schools, 5 grade K–8 schools, 14 middle schools, 1 alternative middle school, 3 grade 6-through-12 schools, 7 high schools, 7 alternative or continued-education schools, and 1 independent study school. There are also 34 OUSD-authorized charter schools.

### **Other Public Facilities**

Other public facilities in the City include public libraries. The Oakland Public Library system consists of a downtown Main Library, 16 neighborhood branches, and 3 special collection libraries – the African American Museum and Library at Oakland, the Oakland History Room, and the Temescal Tool Lending Library.

## **2.15.2 Regulatory Setting**

### **Senate Bill 50**

The Leroy F. Greene School Facilities Act of 1998, or Senate Bill 50 (SB 50), authorizes school districts to levy developer fees to finance the construction or reconstruction of school facilities, and restricts the ability of local agencies to deny project approvals on the basis that public school facilities (classrooms, auditoriums, etc.) are inadequate. School impact fees are collected at the time when building permits are issued. Payment of school fees is required by SB 50 for all new residential development projects and is considered full and complete mitigation of any school impacts. School impact fees are payments to offset capital cost impacts associated with new developments, which result primarily from costs of additional school facilities, related furnishings and equipment, and projected capital maintenance requirements. As such, agencies cannot require additional mitigation for any impacts on school facilities or due to the inadequacy of school facilities.

### **City of Oakland General Plan**

The City of Oakland General Plan Land Use and Transportation Element (LUTE) and Safety Element contain objectives, policies, and actions to ensure public facilities and services are adequately available and accessible in a timely fashion to serve new development (City of Oakland, 2007 & 2012).

The following objectives and policies within the Neighborhoods section of the LUTE, apply Citywide and are relevant to the Project:

**Objective N.12:** Provide adequate infrastructure to meet the needs of Oakland’s growing community.

**Policy N.12.1:** The development of public facilities and staffing of safety-related services, such as fire stations, should be sequenced and timed to provide a balance between land use and population growth, and public services at all times.

**Policy N.12.2:** Adequate public school capacity should be available to meet the needs of Oakland’s growing community. The City and the Oakland Unified School District (OUSD) should work together to establish a continuing procedure for coordinating residential and commercial development and exploring the imposition of mutually agreed upon reasonable and feasible strategies to provide for adequate school capacity. The City and OUSD should jointly consider, where feasible and appropriate, funding mechanisms such as assessment districts, redevelopment Agency funding (AB 1290), uses of surplus City-owned land, bond issues, and adjacent or shared use of land or school facilities with recreation, libraries, child care and other public uses.

The following policies and actions within the Public Safety and Fire Hazards sections of the Safety Element of the General Plan apply Citywide and are relevant to the Project:

**Policy PS-1:** Maintain and enhance the City’s capacity to prepare for, mitigate, respond to and recover from disasters and emergencies.

**Policy FI-1:** Maintain and enhance the City’s capacity for emergency response, fire prevention and fire-fighting.

*Action FI-1.1:* Periodically assess the need for new or relocated fire stations and other facilities, changes in staffing levels, and additional or updated supplies, equipment, technologies and in-service training classes.

*Action FI-1.2:* Strive to meet a goal of responding to fires and other emergencies within seven minutes of notification 90 percent of the time.

**Policy FI-2:** Continue, enhance or implement programs that seek to reduce the risk of structural fires.

*Action FI-2.2:* Continue to enforce provisions under the local housing code requiring the use of fire-resistant construction and the provision of smoke detectors and fire-extinguishing systems.

*Action FI-2.3:* Continue to review development proposals to ensure that they incorporate required and appropriate fire-mitigation measures, including adequate provisions for occupant evacuation and access by fire-fighting personnel and equipment.

### **Oakland Municipal Code**

Oakland Municipal Code, Chapter 15.74, Transportation and Capital Improvement Fees, establishes Citywide transportation and capital improvements impact fees in the City of Oakland to assure that development projects pay their fair share to compensate for the increased demand for transportation and capital improvements infrastructure generated by development projects within the City. Funds deposited into the Capital Improvements Impact Fee Fund are used to pay for projects that are required for fire, police, library, parks and recreation, or storm drain services.

Oakland Municipal Code, Chapter 15.12 contains the Oakland Fire Code. The Oakland Fire Code was updated in 2016 to adopt the most recent California Fire Code, and includes amendments to the California Fire Code specific to the City of Oakland in response to local climatic, geological, or topographical conditions. The Fire Prevention Bureau within the OFD assists the Fire Chief in the administration and enforcement of the provisions of the Oakland Fire Code. The Fire

Prevention Bureau provides plan checking services that assure the incorporation of proper life safety standards, as well as code compliance, in all new construction in the City, and oversees inspection services related to compliance with the State and local fire codes.

### ***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City's SCAs relevant to reducing impacts on public services and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to public services. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

#### **SCA PUB-1: Capital Improvements Impact Fee. (*Standard Condition of Approval 73*)**

Requirement: The project applicant shall comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).

## **2.15.3 Project Impacts and Discussion**

### ***Fire Protection and Emergency Medical Response***

**Impact PUB-1: The Project would not result in an increase in demand for fire protection and emergency medical response services that would require new or physically altered fire protection facilities in order to maintain acceptable service ratios, response times, or other performance objectives, construction of which could have significant physical environmental impacts. (Criterion 1.a) (*Less than Significant with SCAs*)**

The Project would increase the demand for fire protection and emergency medical response services due to the introduction of approximately 413 new employees on the project site (see Section 2.14, *Population and Housing*). The associated increase in the demand for fire protection services would not be substantial, and would be typical for the surrounding mixed-used neighborhood. As discussed in Section 2.15.3, *Environmental Setting*, above, Fire Station 15 is located within 400 feet of the project site, and OFD is generally meeting its service goals within the vicinity of the project site. Therefore, the Project would not generate an unusual or substantial increased demand for fire services that would require new or physically altered fire facilities to serve the Project's demand.

The Project would be designed to comply with the most up-to-date building and fire codes and include fire safety measures and equipment, including but not limited to, use of fire retardant building materials, inclusion of emergency water infrastructure (fire hydrants and sprinkler systems), installation of smoke detectors and fire extinguishers, installation of emergency response notification systems, and provision of adequate emergency access to the project site for emergency vehicles and personnel. Project fire safety plans would be subject to review and approval by the OFD.

The Project would also generate a net increase in property taxes and other fees providing additional funds for the City's General Fund to cover costs associated with any increased operational costs



such as additional fire personnel. The Project would comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code) by incorporating City of Oakland **SCA PUB-1, Capital Improvements Impact Fee**, that would assist in funding new, expanded, or improved fire facilities needed to provide expanded services in the City. Therefore, the Project's impact on fire protection would be less than significant.

**SCA PUB-1: Capital Improvements Impact Fee.** See Section 2.15.2.

**Mitigation:** None required.

### ***Police Protection***

**Impact PUB-2: The Project would not result in an increase in demand for police services that would require new or physically altered police facilities in order to maintain acceptable service ratios, response times, or other performance objectives, construction of which could have significant physical environmental impacts. (Criterion 1.b) (*Less than Significant with SCAs*)**

The Project would result in approximately 413 new employees on the project site (see Section 2.14, *Population and Housing*). The associated increase in the demand for police services would not be substantial, and would be typical of the demand for the surrounding mixed-used neighborhood. Because the project site is an infill site, nearby services and patrols are already available, thus, the Project would not generate an unusual or substantial increased demand for police services or require new or physically altered police facilities to serve the Project's demand.

The Project would also generate a net increase in property taxes and other fees providing additional funds for the City's General Fund to cover costs associated with any increase operational costs such as additional police personnel. The Project would comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code) by incorporating City of Oakland SCA PUB-1, Capital Improvements Impact Fee, that would assist in funding new, expanded, or improved police facilities needed to provide expanded services. The Project's impact on police protection would be less than significant.

**SCA PUB-1: Capital Improvements Impact Fee.** See Section 2.15.2.

**Mitigation:** None required.

### ***Public Schools***

**Impact PUB-3: The Project would not result in an increase in new students for public schools at a level that would require new or physically altered school facilities in order to maintain acceptable service ratios or other performance objectives, construction of which would have significant physical environmental impacts. (Criterion 1.c) (*Less than Significant*)**

No residential units are proposed as part of the Project. Therefore, the Project would not directly generate new students. The Project's new employment could indirectly generate new students in OUSD's service area from potential new employed-residents; however, pursuant to SB 50, the

Project would be required to pay school impact fees established to offset potential impacts from new development on school facilities. Therefore, although the Project could indirectly increase potential student enrollment in OUSD's service area, payment of fees mandated under SB 50 is the mitigation measure prescribed by the statute, and payment of such fees is deemed full and complete mitigation of Project impacts on school facilities. Therefore, Project impacts to public schools would be less than significant.

**Mitigation:** None required.

### ***Other Public Facilities***

**Impact PUB-4: The Project would not result in an increase in demand for other public facilities, including libraries, at a level that would require new or physically altered library facilities in order to maintain acceptable service ratios or other performance objectives, construction of which would have significant physical environmental impacts. (Criterion 1.d) (*Less than Significant with SCAs*)**

The Project would result in approximately 413 new employees on the project site (see Section 2.14, *Population and Housing*). No residential units are proposed as part of the Project, and no residential population increase would occur. Thus, the Project would result in limited demand for other City services such as libraries, and no new or physically altered library or other public facilities would be required to serve the Project's demand.

The Project would also generate a net increase in property taxes and other fees providing additional funds for the City's General Fund to cover costs associated with increased operational costs such as additional library staff. The Project would comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code) by incorporating City of Oakland SCA PUB-1, Capital Improvements Impact Fee, that would assist in funding new, expanded, or improved library facilities needed to provide expanded services in the City. The Project's impact on libraries and other public facilities would be less than significant.

**SCA PUB-1: Capital Improvements Impact Fee.** See Section 2.15.2.

**Mitigation:** None required.

### **2.15.4 Cumulative**

**Impact PUB-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in an adverse cumulative increase in demand for public services that would require new or physically altered governmental facilities, construction of which could have significant physical environmental impacts. (*Less than Significant with SCAs*)**

The geographic context for cumulative impacts to public services is Citywide, including the service areas for OFD, OPD, OUSD, and the Oakland Public Library. Cumulative development in the project vicinity and Citywide would generate a need for additional fire, police, public school, and library facilities. These public services are subject to annual budgeting processes during

which service priorities are established and service levels are monitored, allowing for adjustments where needed. Changes in demand for all these services are expected to occur incrementally, allowing for carefully planned expansions of existing facilities. Any expansions would be likely to occur on sites already occupied by existing service providers.

Similar to the Project, cumulative projects would be subject to the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code) and SCA PUB-1, Capital Improvements Impact Fee, that would assist in funding new, expanded, or improved public service facilities needed to provide expanded services in the City. However, even if a facility were required to service the increased population or employees resulting from cumulative development, the new facility would likely be developed on an infill parcel. Given the location of such a facility (in an infill area), environmental documents for construction or expansion are typically categorical exemptions or negative declarations, and would not result in a significant physical environmental impact.

Regarding public schools, cumulative projects would be required to pay school impact fees, pursuant to Senate Bill 50, which would offset potential impacts of increased student enrollment on school facilities.

Therefore, the Project, combined with cumulative development in the Project vicinity and Citywide, would not have a considerable contribution to a significant cumulative impact with regard to public services and impacts would be less than significant.

**SCA PUB-1: Capital Improvements Impact Fee.** See Section 2.15.2.

**Mitigation:** None required.

### 2.15.5 References

City of Oakland, 2019. *Downtown Oakland Specific Plan Draft Environmental Impact Report*, August 2019. Available at: <https://www.oaklandca.gov/documents/draft-dosp-eir>, accessed February 12, 2021.

City of Oakland, 2012. *General Plan, Safety Element*. Adopted 2004, Amended 2012.

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

Oakland Police Department (OPD), 2021. Police District Locator. Available at: <http://gisapps1.mapoakland.com/policedistricts/>, accessed February 13, 2021.

## 2.16 Recreation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>XVI. RECREATION</b> — The project would have a significant impact on the environment if it would:				
1) 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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Include recreational facilities or require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 2.16.1 Environmental Setting

There are several public parks owned and managed by the Oakland Department of Parks, Recreation, and Youth Development in the vicinity of the project site. Franklin Plaza (418 22<sup>nd</sup> Street), a plaza with moveable tables and seating, and vegetated planters, is located approximately 0.18-mile southeast of the project site. The 25<sup>th</sup> Street Mini Park (25<sup>th</sup> Street & Martin Luther King Jr Way), a mini park with landscaping and children’s play structures, is located approximately 0.29-mile west of the project site and Lake Merritt is located approximately 0.32-mile southeast of the project site. The closest operating recreation center is Lincoln Recreation Center located approximately 0.96-mile to the southeast of the project site. The closest athletic fields are located at Lowell Park approximately 0.96-mile southwest of the project site containing lit baseball and softball fields and a soccer field.

### 2.16.2 Regulatory Setting

#### ***City of Oakland General Plan***

The OSCAR Element of the Oakland General Plan contains the following principles relevant to the Project (City of Oakland, 1996):

- Recreation needs created by new development should be offset by resources contributed by that growth. In other words, new development should pay its fair share to meet the increased demand for parks resulting from that development.

#### ***Oakland Municipal Code***

Oakland Municipal Code, Chapter 15.74, Transportation and Capital Improvement Fees, establishes Citywide transportation and capital improvements impact fees in the City of Oakland to assure that development projects pay their fair share to compensate for the increased demand for transportation and capital improvements infrastructure generated by development projects within the City. Funds deposited into the Capital Improvements Impact Fee Fund are used to pay for projects that are required for fire, police, library, parks and recreation, or storm drain services.

### ***City of Oakland Parks and Homeless Services Measure (Measure Q)***

In March 2020, City of Oakland voters passed an ordinance that authorizes a 20-year special annual parcel tax to fund parks and recreational facilities, services for unhoused and unsheltered persons, and maintenance of stormwater trash collection systems. Approximately 64 percent of tax revenue could be used for parks, landscape maintenance, and recreational services, and no more than 55 percent can be used to preserve current parks and operational services. Non-residential parcels are taxed based on parcel frontages and square footage.

### ***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City's SCAs relevant to reducing impacts on recreation and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to recreation. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

#### **SCA PUB-1: Capital Improvements Impact Fee. (Standard Condition of Approval 73)**

Requirement: The project applicant shall comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).

## **2.16.3 Project Impacts and Discussion**

### **Impact REC-1: The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. (Criterion 1) (Less than Significant)**

The Project would result in approximately 413 new employees on the project site (see Section 2.14, *Population and Housing*). The associated increase in the demand for existing parks and recreational facilities by employees and visitors to the project site would not be substantial, and would be typical of the demand associated with commercial development. The Project would also be subject to the Measure Q annual parcel tax to fund parks and recreational facilities, including landscape maintenance and preserving existing parks and operational services. Therefore, the Project would not increase the use of existing parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be substantially accelerated, and the impact would be less than significant.

**Mitigation:** None required.

**Impact REC-2: The Project would not require the construction or expansion of recreational facilities which could have a substantial adverse physical effect on the environment. (Criterion 2) (*Less than Significant with SCAs*)**

The Project would result in approximately 413 new employees on the project site (see Section 2.14, *Population and Housing*). No residential units are proposed as part of the Project, and no residential population increase would occur. Thus, the Project would result in limited demand for new parks and recreational facilities, and the construction or expansion of parks and recreational facilities would not be required to serve the Project's demand. The Project would also include a paseo extending from 25<sup>th</sup> Street along the western edge of the 24<sup>th</sup> and 25<sup>th</sup> Street site to a dining courtyard adjacent to retail space fronting 24<sup>th</sup> Street. Construction of the new paseo is proposed as part of the Project and is analyzed within this Initial Study and Draft EIR, and would not individually cause significant environmental effects.

The Project would also be subject to the Measure Q annual parcel tax to fund parks and recreational facilities, and would generate a net increase in property taxes and other fees providing additional funds for the City's General Fund to cover costs associated with increased operational costs associated with parks and recreation. The Project also would comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code) by incorporating City of Oakland SCA PUB-1, Capital Improvements Impact Fee, that would assist in funding new, expanded, or improved parks and recreation facilities needed to provide expanded services in the City. Therefore, the Project's impact on parks and recreation facilities would be less than significant.

**SCA PUB-1: Capital Improvements Impact Fee.** See Section 2.15.2.

**Mitigation:** None required.

## **2.16.4 Cumulative**

**Impact REC-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts to recreation. (*Less than Significant with SCAs*)**

The geographic context for cumulative impacts to public services is Citywide, as parks and recreation facilities are provided Citywide. Cumulative development in the project vicinity and Citywide would generate a need for additional parks and recreation facilities. Cumulative projects would also be subject to the Measure Q annual parcel tax to fund parks and recreational facilities, and would generate a net increase in property taxes and other fees providing additional funds for the City's General Fund to cover costs associated with increased operational costs associated with parks and recreation. Similar to the Project, cumulative projects would be subject to the requirements of the City of Oakland Capital Improvements Fee Ordinance (Chapter 15.74 of the Oakland Municipal Code) compliance with which is required through SCA PUB-1, that would assist in funding new, expanded, or improved parks and recreation facilities needed to provide expanded services in the City. Therefore, the Project, combined with cumulative development in the Project vicinity and Citywide, would not have a considerable contribution to a significant cumulative impact with regard to parks and recreation and impacts would be less than significant.

**SCA PUB-1: Capital Improvements Impact Fee.** See Section 2.15.2.

**Mitigation:** None required.

### **2.16.5 References**

City of Oakland, 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*, adopted June 11, 1996.

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## 2.17 Transportation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>XVII. TRANSPORTATION</b> — The project would have a significant impact on the environment if it would: <sup>30</sup>				
1) Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle and pedestrian facilities (except for automobile level of service or other measures of vehicle delay);	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Cause substantial additional vehicle miles traveled (per capita, per service population, or other appropriate efficiency measure); or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas or by adding new roadways to the network.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.17.1 Setting

The 24<sup>th</sup> and 25<sup>th</sup> Street site is located midblock on 24<sup>th</sup> and 25<sup>th</sup> Streets, which are two-lane east-west local streets; and between Broadway and Telegraph Avenue, which are north-south major roadways. The site is in the Uptown area of Oakland--a high-density, mixed-use, transit-rich, pedestrian-friendly area with limited parking supply. The Valley Street site is located near the intersection of 24<sup>th</sup> Street and Valley Street--a two-lane north-south local street also between Broadway and Telegraph Avenue. The pedestrian, bicycle, and transit access between the sites and throughout the nearby areas is good. Continuous sidewalks are provided on both sides of all streets throughout the area, and bikeways, including separated bicycle lanes on Telegraph Avenue, connect the project site to nearby commercial, residential, and employment areas. The project site is about 0.4 miles north of the 19<sup>th</sup> Street Oakland BART Station and about 0.1 miles from AC Transit’s trunk Route 6 on Telegraph Avenue and trunk Route 51A on Broadway. The Oakland Free Broadway shuttle (“Free B”) also operates along Broadway, with the nearest stop at 25<sup>th</sup> Street. Vehicular access to the Project would be provided through a driveway on 25<sup>th</sup> Street.

#### **City of Oakland General Plan**

The Oakland General Plan includes the Land Use and Transportation Element (LUTE) (adopted March 24, 1998), including the 2019 Oakland Bike Plan (July 2019) and the Pedestrian Master Plan (December 2007, updated June 2017), which are adopted as part of the LUTE.

#### **Land Use and Transportation Element (LUTE)**

##### Relevant General Plan LUTE Policies

The LUTE of the Oakland General Plan contains the following land use policies that address issues related to land use and planning, and/or are particularly relevant to the Project (City of Oakland, 2007).

<sup>30</sup> **NOTE:** See the Hazards and Hazardous Materials thresholds for additional thresholds related to transportation.



## **Transportation and Transit-Oriented Development Policies**

**Policy T2.1: Encouraging Transit-Oriented Development.** Transit-oriented development should be encouraged at existing or proposed transit nodes, defined by the convergence of two or more modes of public transit such as BART, bus, shuttle service, light rail or electric trolley, ferry, and inter-city or commuter rail.

**Policy T2.2: Guiding Transit-Oriented Development.** Transit-oriented developments should be pedestrian oriented, encourage night and day times use, provide the neighborhood with needed goods and services, contain a mix of land uses, and be designed to be compatible with the character of surrounding neighborhoods.

**Policy T3.3: Allowing Congestion Downtown.** For intersections within Downtown and for those that provide direct access to downtown locations, the City should accept a lower level of service and a higher level of traffic congestion than is accepted in other parts of Oakland. The desired pedestrian oriented nature of downtown activity and the positive effect of traffic congestion in promoting the use of transit or other methods of travel should be recognized.

**Policy T4.1: Incorporating Design Features for Alternative Travel.** The City will require new development, rebuilding, or retrofit to incorporate design features in their projects that encourage the use of alternative modes of transportation such as transit, bicycling, and walking.

**Policy T6.2: Improving Streetscapes.** The City should make major efforts to improve the visual quality of streetscapes. Design of the streetscape, particularly in neighborhoods and commercial centers, should be pedestrian oriented, include lighting, directional signs, trees, benches, and other support facilities.

## **2019 Oakland Bike Plan**

On July 9, 2019, the Oakland City Council adopted the Let's Bike Oakland Plan (2019 Oakland Bike Plan) as part of the City's General Plan. The 2019 Oakland Bike Plan is organized around the four goals of access, health and safety, affordability, and collaboration. The 2019 Oakland Bike Plan contains the following policies related to land use and planning that were adopted to avoid or mitigate an environmental effect, and that are particularly relevant to the Project (City of Oakland, 2019).

**Access Goal, Objective A:** Increase access to jobs, education, retail, park and libraries, schools, recreational centers, transit, and other neighborhood destinations.

*Action A1:* Build low-stress facilities that provide access to local destinations in every neighborhood in Oakland.

*Action A2:* Increase the supply of bicycle parking at neighborhood destinations like schools, medical centers, grocery stores, and government offices.

**Access Goal, Objective C:** Support public transit service.

*Action C1:* Design bikeways that provide first and last mile connections to transit.

**Health & Safety Goal, Objective C:** Reduce air pollution, asthma rates and greenhouse gas emissions.

*Action C1:* Build a bicycle network that encourages Oaklanders to choose modes of transportation other than driving by providing low-stress facilities and integrating bikes with transit.

*Action C2:* Achieve a 20% reduction in vehicle miles traveled annually as residents, workers and visitors meet daily needs by walking, bicycling and using transit, consistent with the City's Energy and Climate Action Plan (2018).

### 2017 Pedestrian Master Plan

In November 2002, the City Council adopted the Pedestrian Master Plan as part of the LUTE. The Pedestrian Master Plan identifies policies and implementation measures for achieving LUTE policies that promote a walkable city. The Pedestrian Master Plan identifies types of pedestrian routes and minimum design guidelines for each type of route. The Pedestrian Master Plan was updated in 2017 to reflect the City's changing conditions, needs, and priorities (City of Oakland, 2018).

The *Oakland Walks! 2017 Pedestrian Plan Update* (2017 Pedestrian Master Plan) establishes the following goals and outcomes for pedestrians in the City relevant to the Project, bulleted below.

- **Outcome 2: Create Streets and Places that Promote Walking.** To achieve this objective, the City will integrate safety into the design of new streets, incorporate art into pedestrian infrastructure, plant more street trees, repair sidewalks, install accessible curb ramps, and provide public open space in underutilized roadways. The City will also pursue citywide programs and partnerships with nonprofits and community groups to promote walking.
- **Outcome 3: Improve Walkability to Key Destinations.** Oaklanders should be able to walk safely to transit, schools, jobs, and other major destinations. To achieve this objective, the City will, where possible, improve sidewalk connections and wayfinding signage to these destinations.

### City of Oakland Equitable Climate Action Plan

The City of Oakland adopted the Oakland 2030 Equitable Climate Action Plan (ECAP) in July 2020 (City Council Resolution 87397 C.M.S.), a comprehensive equity-focused plan to achieve the 2030 GHG reduction target and increase Oakland's resilience to the impacts of the climate crisis. Since cars and trucks account for two-thirds of local emissions in Oakland, the ECAP has a focus on transportation and land use policies. The following actions are applicable to the project:

- **Action TLU-1: Align All Planning Policies & Regulations with ECAP Goals and Priorities**
  - Remove parking minimums and establish parking maximums where feasible, ensuring public safety and accessibility.
  - Require transit passes bundled with all new major developments.
- **Action TLU-2: Align Permit and Project Approvals with ECAP Priorities.** Amend Standard Conditions of Approval (SCAs), as well as mitigation measures and other permit conditions, to align with the City's GHG reduction priorities stated in this ECAP. Explore, through the Planning Commission, adoption of a threshold of significance for GHG impacts to align with this ECAP. In applying conditions on permits and project approvals, ensure that all cost-effective strategies to reduce GHG emissions from buildings and transportation are

required or otherwise included in project designs, including infrastructure improvements like bicycle corridor enhancements, wider sidewalks, crossing improvements, public transit improvements, street trees and urban greening, and green stormwater infrastructure. Where onsite project GHG reductions are not cost-effective, prioritize local projects benefiting frontline communities.

- **Action TLU-4: Abundant, Affordable, and Accessible Public Transit.** The City will work with public transit agencies to replace autos with public transit as a primary transportation mode for trips beyond walking distance, ensuring convenient, safe, and affordable public transit access within Oakland and to neighboring cities for all Oaklanders.
- **Action TLU-5: Create a Zero Emission Vehicle (ZEV) Action Plan.** By 2021, develop a ZEV Action Plan to increase adoption of electric vehicles and e-mobility while addressing equity concerns and prioritizing investment in frontline communities. The plan must set ambitious targets for ZEV infrastructure and must be coordinated with other land use and mobility options so that ZEV ownership is not necessary for access to ZEV trips, and ZEVs increase as a percentage of all vehicles while overall vehicle miles traveled decreases. The plan must address the following sectors: medium and heavy-duty vehicle electrification, including trucks and delivery vehicles; personal vehicle charging infrastructure in multifamily buildings, including affordable buildings; curbside charging; school and transit buses; and coordination with private and public fleet operators.
- **Action TLU-8: Expand and Strengthen Transportation Demand Management (TDM) Requirements.** Increase TDM performance requirements for new developments where feasible to support the mode shifts necessary to achieve a low carbon transportation system. Expand the TDM program to include requirements for existing employers. Fund ongoing monitoring and enforcement of TDM requirements.

### **City of Oakland Public Transit and Alternative Modes Policy**

The City of Oakland adopted the Public Transit and Alternative Modes Policy, also known as the “Transit-First Policy,” in October 2006 (City Council Resolution 73036 C.M.S.). This resolution supports public transit and other alternatives to single occupant vehicles and directs the LUTE to incorporate “various methods of expediting transit services on designated streets and encouraging greater transit use.” The resolution also directs the City, in constructing and maintaining its transportation infrastructure, to resolve any conflicts between public transit and single occupant vehicles on City streets in favor of the transportation mode that provides the greatest mobility for people rather than vehicles giving due consideration to the environment, public safety, economic development, health, and social equity impacts.

### **City of Oakland Complete Street Policy**

The City of Oakland adopted the Complete Street Policy to Further Ensure that Oakland Streets Provide Safe and Convenient Travel Options for all Users in January 2013 (City Council Resolution 84204 C.M.S.). This resolution, consistent with the California Complete Streets Act of 2008, directs the City of Oakland to plan, design, construct, operate, and maintain the street network in the City to accommodate safe, convenient, comfortable travel for all modes, including pedestrians, bicyclists, transit users, motorists, trucks, and emergency vehicles.

## 2.17.2 Approach to Analysis

### Project Trip Generation

**Table 2.17-1** summarizes the automobile trip generation for the Project based on the methodology recommended in the City of Oakland’s *Transportation Impact Review Guidelines* (TIRG). The Transportation Impact Review Memorandum in **Appendix I** provides details on the trip generation calculation. The Project is estimated to generate 740 daily, 63 AM peak hour, and 78 PM peak hour automobile trips.<sup>31</sup>

### VMT Analysis Overview

Vehicle miles traveled (VMT) refers to the amount and distance of automobile travel attributable to a project. In 2013, Governor Brown signed Senate Bill (SB) 743 (Steinberg 2013), which added Public Resources Code Section 21099 to CEQA, to change the way that transportation impacts are analyzed under CEQA to better align local environmental review with statewide objectives to reduce greenhouse gas (GHG) emissions, encourage infill mixed-use development in designated priority development areas, reduce regional sprawl development, and reduce VMT in California.

**TABLE 2.17-1  
AUTOMOBILE TRIP GENERATION**

Land Use	Units <sup>a</sup>	ITE Code	Daily	Weekday AM Peak Hour			Weekday PM Peak Hour		
				In	Out	Total	In	Out	Total
Office	86.1 KSF	710 <sup>b</sup>	920	92	15	107	16	83	99
Retail	12.6 KSF	820 <sup>c</sup>	480	7	5	12	23	25	48
Subtotal			1,400	99	20	119	39	108	147
Non-Auto Adjustment (-46.9%) <sup>d</sup>			-660	-46	-10	-56	-18	-51	-69
<b>Net New Project Trips</b>			<b>740</b>	<b>53</b>	<b>10</b>	<b>63</b>	<b>21</b>	<b>57</b>	<b>78</b>

NOTES:

<sup>a</sup> DU = Dwelling Units, KSF = 1,000 square feet

<sup>b</sup> ITE Trip Generation (10th Edition) land use category 710 (General Office Building):

Daily:  $T = 9.74 * X$

AM Peak Hour:  $T = 1.16 * X$  (86% in, 14% out)

PM Peak Hour:  $T = 1.15 * X$  (16% in, 84% out)

<sup>c</sup> ITE Trip Generation (10th Edition) land use category 820 (Shopping Center):

Daily:  $T = 37.75 * X$

AM Peak Hour:  $T = 0.94 * X$  (62% in, 38% out)

PM Peak Hour:  $T = 3.81 * X$  (48% in, 52% out)

<sup>d</sup> 46.9% reduction is based on the City of Oakland’s Transportation Impact Review Guidelines for developments within 0.5 miles of a BART Station.

SOURCE: Fehr & Peers, 2021.

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 SB 743 to

<sup>31</sup> To provide a conservative analysis, existing vehicle trips from the Kia service and parts center in operation at the time the NOP was released (January 2020) were not discounted. The Kia service and parts center is no longer a tenant, and the Project site is fully vacant as of March 2022..

modify local environmental review processes by removing automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, as a significant impact on the environment pursuant to CEQA. The Planning Commission's direction aligns with the final guidance from the Governor's Office of Planning and Research and the City's approach to transportation impact analysis, and with adopted plans and policies related to transportation, which promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. This section describes the potential impacts of the Project on the transportation system. It includes a discussion of significant topics under CEQA and uses VMT standards, instead of LOS standards, as discussed above.

### ***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City's SCAs relevant to reducing impacts on transportation and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to transportation. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

#### ***SCA TRA-1: Construction Activity in the Public Right-of-Way. (Standard Condition of Approval 75)***

##### ***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, sidewalks, bicycle facilities, and bus stops.

##### ***b. Traffic Control Plan Required***

Requirement: In the event of obstructions to vehicle or bicycle travel lanes, bus stops, or sidewalks, 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 accommodations (or Detours, if accommodations are not feasible), including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The Traffic Control Plan shall be in conformance with the City's Supplemental Design Guidance for Accommodating Pedestrians, Bicyclists, and Bus Facilities in Construction Zones. 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.

**SCA TRA-2: Bicycle Parking.** *(Standard Condition of Approval 76)*

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.

**SCA TRA-3: Transportation Improvements.** *(Standard Condition of Approval 77)*

Requirement: The project applicant shall implement the recommended on- and off-site transportation-related improvements contained within the Transportation Impact Review for the project (e.g., signal timing adjustments, restriping, signalization, traffic control devices, roadway reconfigurations, transportation demand management measures, and transit, pedestrian, and bicyclist amenities). The project applicant is responsible for funding and installing the improvements, and shall obtain all necessary permits and approvals from the City and/or other applicable regulatory agencies such as, but not limited to, Caltrans (for improvements related to Caltrans facilities) and the California Public Utilities Commission (for improvements related to railroad crossings), prior to installing the improvements. To implement this measure for intersection modifications, the project applicant shall submit Plans, Specifications, and Estimates (PS&E) to the City for review and approval. All elements shall be designed to applicable City standards in effect at the time of construction and all new or upgraded signals shall include these enhancements as required by the City. All other facilities supporting vehicle travel and alternative modes through the intersection shall be brought up to both City standards and ADA standards (according to Federal and State Access Board guidelines) at the time of construction. Current City Standards call for, among other items, the elements listed below:

- a. 2070L Type Controller with cabinet accessory
- b. GPS communication (clock)
- c. Accessible pedestrian crosswalks according to Federal and State Access Board guidelines with signals (audible and tactile)
- d. Countdown pedestrian head module switch out
- e. City Standard ADA wheelchair ramps
- f. Video detection on existing (or new, if required)
- g. Mast arm poles, full activation (where applicable)
- h. Polara Push buttons (full activation)
- i. Bicycle detection (full activation)
- j. Pull boxes
- k. Signal interconnect and communication with trenching (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
- q. Bi-directional curb ramps (where feasible, and if project is on a street corner)
- r. Upgrade ramps on receiving curb (where feasible, and if project is on a street corner)

**SCA TRA-4: Transportation and Parking Demand Management.** *(Standard Condition of Approval 78)*

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.
  - 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. The TDM Plan should include the following:
  - Baseline existing conditions of parking and curbside regulations within the surrounding neighborhood that could affect the effectiveness of TDM strategies, including inventory of parking spaces and occupancy if applicable.
  - Proposed TDM strategies to achieve VTR goals (see below).
- iii. For employers with 100 or more employees at the subject site, the TDM Plan shall also comply with the requirements of Oakland Municipal Code Chapter 10.68 Employer-Based Trip Reduction Program.

The following TDM strategies **must** be incorporated into a TDM Plan based on a project location or other characteristics. When required, these mandatory strategies should be identified as a credit toward a project’s VTR.

Improvement	Required by code or when...
<b>Bus boarding bulbs or islands</b>	<ul style="list-style-type: none"> <li>• A bus boarding bulb or island does not already exist and a bus stop is located along the project frontage; and/or</li> <li>• A bus stop along the project frontage serves a route with 15 minutes or better peak hour service and has a shared bus-bike lane curb</li> </ul>

Improvement	Required by code or when...
<b>Bus shelter</b>	<ul style="list-style-type: none"> <li>• A stop with no shelter is located within the project frontage, or</li> <li>• The project is located within 0.10 miles of a flag stop with 25 or more boardings per day</li> </ul>
<b>Concrete bus pad</b>	<ul style="list-style-type: none"> <li>• A bus stop is located along the project frontage and a concrete bus pad does not already exist</li> </ul>
<b>Curb extensions or bulb-outs</b>	<ul style="list-style-type: none"> <li>• Identified as an improvement within site analysis</li> </ul>
<b>Implementation of a corridor-level bikeway improvement</b>	<ul style="list-style-type: none"> <li>• A buffered Class II or Class IV bikeway facility is in a local or county adopted plan within 0.10 miles of the project location; and</li> <li>• The project would generate 500 or more daily bicycle trips</li> </ul>
<b>Implementation of a corridor-level transit capital improvement</b>	<ul style="list-style-type: none"> <li>• A high-quality transit facility is in a local or county adopted plan within 0.25 miles of the project location; and</li> <li>• The project would generate 400 or more peak period transit trips</li> </ul>
<b>Installation of amenities such as lighting; pedestrian-oriented green infrastructure, trees, or other greening landscape; and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan.</b>	<ul style="list-style-type: none"> <li>• Always required</li> </ul>
<b>In-street bicycle corral</b>	<ul style="list-style-type: none"> <li>• A project includes more than 10,000 square feet of ground floor retail, is located along a Tier 1 bikeway, and on-street vehicle parking is provided along the project frontages.</li> </ul>
<b>Intersection improvements<sup>32</sup></b>	<ul style="list-style-type: none"> <li>• Identified as an improvement within site analysis</li> </ul>
<b>New sidewalk, curb ramps, curb and gutter meeting current City and ADA standards</b>	<ul style="list-style-type: none"> <li>• Always required</li> </ul>
<b>No monthly permits and establish minimum price floor for public parking<sup>33</sup></b>	<ul style="list-style-type: none"> <li>• If proposed parking ratio exceeds 1:1000 sf. (commercial)</li> </ul>
<b>Parking garage is designed with retrofit capability</b>	<ul style="list-style-type: none"> <li>• Optional if proposed parking ratio exceeds 1:1.25 (residential) or 1:1000 sf. (commercial)</li> </ul>
<b>Parking space reserved for car share</b>	<ul style="list-style-type: none"> <li>• If a project is providing parking and a project is located within downtown. One car share space reserved for buildings between 50 – 200 units, then one car share space per 200 units.</li> </ul>
<b>Paving, lane striping or restriping (vehicle and bicycle), and signs to midpoint of street section</b>	<ul style="list-style-type: none"> <li>• Typically required</li> </ul>
<b>Pedestrian crossing improvements</b>	<ul style="list-style-type: none"> <li>• Identified as an improvement within site analysis</li> </ul>
<b>Pedestrian-supportive signal changes<sup>34</sup></b>	<ul style="list-style-type: none"> <li>• Identified as an improvement within operations analysis</li> </ul>
<b>Real-time transit information system</b>	<ul style="list-style-type: none"> <li>• A project frontage block includes a bus stop or BART station and is along a Tier 1 transit route with 2 or more routes or peak period frequency of 15 minutes or better</li> </ul>
<b>Relocating bus stops to far side</b>	<ul style="list-style-type: none"> <li>• A project is located within 0.10 mile of any active bus stop that is currently near-side</li> </ul>

<sup>32</sup> Including but not limited to visibility improvements, shortening corner radii, pedestrian safety islands, accounting for pedestrian desire lines.

<sup>33</sup> May also provide a cash incentive or transit pass alternative to a free parking space in commercial properties.

<sup>34</sup> Including but not limited to reducing signal cycle lengths to less than 90 seconds to avoid pedestrian crossings against the signal, providing a leading pedestrian interval, provide a “scramble” signal phase where appropriate.



Improvement	Required by code or when...
<b>Signal upgrades<sup>35</sup></b>	<ul style="list-style-type: none"> <li>• Project size exceeds 100 residential units, 80,000 sf. of retail, or 100,000 sf. of commercial; and</li> <li>• Project frontage abuts an intersection with signal infrastructure older than 15 years</li> </ul>
<b>Transit queue jumps</b>	<ul style="list-style-type: none"> <li>• Identified as a needed improvement within operations analysis of a project with frontage along a Tier 1 transit route with 2 or more routes or peak period frequency of 15 minutes or better</li> </ul>
<b>Trenching and placement of conduit for providing traffic signal interconnect</b>	<ul style="list-style-type: none"> <li>• Project size exceeds 100 units, 80,000 sf. of retail, or 100,000 sf. of commercial; and</li> <li>• Project frontage block is identified for signal interconnect improvements as part of a planned ITS improvement; and</li> <li>• A major transit improvement is identified within operations analysis requiring traffic signal interconnect</li> </ul>
<b>Unbundled parking</b>	<ul style="list-style-type: none"> <li>• If proposed parking ratio exceeds 1:1.25 (residential)</li> </ul>

iv. Other TDM strategies to consider include, but are not limited to, the following:

- Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement.
- Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority bikeways, on-site signage and bike lane striping.
- Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project.
- Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan, the Master Street Tree List, Tree Planting Guidelines (which can be viewed at <http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak042662.pdf> and <http://www2.oaklandnet.com/oakca1/groups/pwa/documents/form/oak025595.pdf>, respectively), 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

<sup>35</sup> Including typical traffic lights, pedestrian signals, bike actuated signals, transit-only signals

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.

**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.

**SCA TRA-5: Transportation Impact Fee.** (*Standard Condition of Approval 79*)

Requirement: The project applicant shall comply with the requirements of the City of Oakland Transportation Impact Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).

**SCA TRA-6: Plug-In Electric Vehicle (PEV) Charging Infrastructure.** (*Standard Condition of Approval 81*)

**b. PEV-Capable Parking Spaces**

Requirement: The applicant shall submit, for review and approval of the Building Official, plans that show the location of inaccessible conduit to supply PEV-capable parking spaces per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-capable parking spaces.

**c. ADA-Accessible Spaces**

Requirement: The applicant shall submit, for review and approval of the Building Official, plans that show the location of future accessible EV parking spaces as required under Title 24 Chapter 11B Table 11B-228.3.2.1, and specify plans to construct all future accessible EV parking spaces with appropriate grade, vertical clearance, and accessible path of travel to allow installation of accessible EV charging station(s).

### 2.17.3 Topics Considered and No Impact Determined

The Project would have no impact to the following topic based on the proposed Project characteristics, its geographical location, and underlying site conditions. Therefore, this topic is not addressed further in this document for the following reasons:

- **Induced Automobile Travel** (Criterion 3). The Project would not modify the roadway network surrounding the project site. Therefore, the Project would not substantially induce additional automobile travel by increasing the physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) and would not add new roadways to the network. Therefore, the Project would have no impact on inducing additional automobile traffic.

## 2.17.4 Project Impacts and Discussion

**Impact TRA-1: The Project would not conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle and pedestrian facilities. (Criterion 1) (*Less than Significant with SCAs*)**

In accordance with **SCA TRA-1, Construction Activity in the Public Right-of-Way**, the Project would: (1) obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets, sidewalks, bicycle facilities, and bus stops; (2) submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit; and (3) repair any damage to the public right-of-way, including streets and sidewalks, caused by Project construction. **SCA TRA-5, Transportation Impact Fee**, would ensure compliance with the requirements of the City of Oakland Transportation Impact Fee Ordinance (Chapter 15.74 of the Oakland Municipal Code). **SCA TRA-6, Plug-In Electric Vehicle (PEV) Charging Infrastructure**, would also be applicable to the Project and would require that PEV-ready and PEV-capable parking spaces per the requirements of Chapter 15.04 of the Oakland Municipal Code are included in Project plans, and that the plans show the location of future accessible EV parking spaces as required under Title 24, Chapter 11B, Table 11B-228.3.2.1.

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 Project would encourage the use of non-automobile transportation modes by providing office use in a dense, walkable urban environment that is well-served by local and regional transit.

The Project is consistent with both the City's 2017 Pedestrian Master Plan and the 2019 Bicycle Master Plan as it would not make major modifications to existing pedestrian or bicycle facilities in the surrounding areas and would not adversely affect installation of future facilities. In addition, **SCA TRA-2, Bicycle Parking**, would be applicable to the Project and would ensure that the Project complies with the City of Oakland Bicycle Parking Requirements (Chapter 17.118 of the Oakland Planning Code).

The Project would also implement **SCA TRA-3, Transportation Improvements**, which would include the recommended on- and off-site transportation-related improvements contained within the Transportation Impact Review for the Project (see Appendix I). These improvements would not only benefit the Project employees and visitors, but also residents, employees, and visitors in the areas surrounding the project site. In addition, these improvements are also consistent with the City's adopted plans, ordinances, and policies relating to safety and performance of the circulation system because they improve the pedestrian, and bicycle environment in the vicinity of the Project.

Further, because the Project would generate more than 50 peak hour trips, it is required to prepare and implement a Transportation and Parking Demand Management Plan (TDM Plan) that satisfies **SCA TRA-4, Transportation and Parking Demand Management**. The TDM Plan includes on-going operational strategies, as well as infrastructure improvements that encourage the use of non-automobile travel modes (see **Appendix J**).

Overall, the Project is consistent with applicable plans, ordinances, and policies addressing the safety and performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile LOS or other measures of vehicle delay). For these reasons, the Project would not conflict with adopted plans, ordinances, or policies resulting in a less-than-significant impact.

**SCA TRA-1: Construction Activity in the Public Right-of-Way.** See Section 2.17.2.

**SCA TRA-2: Bicycle Parking.** See Section 2.17.2.

**SCA TRA-3: Transportation Improvements.** See Section 2.17.2.

**SCA TRA-4: Transportation and Parking Demand Management.** See Section 2.17.2.

**SCA TRA-5: Transportation Impact Fee.** See Section 2.17.2.

**SCA TRA-6: PEV Charging Infrastructure.** See Section 2.17.2.

**Mitigation:** None required.

**Impact TRA-2: The Project would not cause substantial additional vehicle miles traveled. (Criterion 2) (*Less than Significant with SCAs*)**

### **VMT Background**

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

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

The Governor's Office of Planning and Research established that the VMT metric is the appropriate metric to fully account for the many factors that affect travel behavior and specifically indicated that VMT should be reported on a per employee basis for office uses, an approach which is also reflected in the City of Oakland's TIRG.

### **Estimating VMT**

Estimating VMT requires the use of travel demand models to fully capture the length of trips on the transportation network, as well as the changes in VMT behavior that may occur with the introduction of the Project. This analysis presents use of the Metropolitan Transportation Commission (MTC) Travel Model to fully analyze the VMT impacts of the Project.

Neighborhoods within Oakland are expressed geographically in transportation analysis zones, or TAZs. The 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 neighborhoods in the hills. TAZs are used in transportation planning models for transportation analysis and other planning purposes.

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

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, and
- Observed vehicle counts and transit boardings.

The daily VMT output from the MTC Travel Model for 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 employee is included, not just trips into and out of the person's home or workplace. For example, an employee leaves their apartment in the morning, stops for coffee, and then goes to the office. In the afternoon, the employee heads out to lunch, and then returns to the office, with a stop at the drycleaners on the way. After work, the employee goes to the gym and then joins friends at a restaurant for dinner before returning home. All the stops and trips within the employee's day form their "tour." The tour-based approach would add up the total number of miles driven over the course of her tour and assign it as her daily VMT.

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

### **Thresholds of Significance**

According to the *City of Oakland TIRG*, the following are thresholds of significance related to substantial additional VMT:

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

- For retail projects, a project would cause substantial additional VMT if it exceeds the existing regional VMT per employee minus 15 percent.

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

1. **Small Projects:** The project generates fewer than 100 vehicle trips per day.
2. **Low-VMT Areas:** The project meets map-based screening criteria by being located in an area that exhibits below threshold VMT, or 15 percent or more below the regional average.
3. **Near Transit Stations:** The project is located in a Transit Priority Area or within a one-half mile of a Major Transit Corridor or Stop and satisfies the following:<sup>36</sup>
  - Has a Floor Area Ratio (FAR) of more than 0.75;
  - Includes less parking for use by residents, customers, or employees of the project than other typical nearby uses, or no 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).

### VMT Screening Analysis

The Project would consist of about 86,100 square feet of office, and 12,620 square feet of retail space (including the Valley Street craft stalls). Per direction provided in the TIRG, the regional VMT per employee minus 15-percent is used as the threshold of significance for the office use.

According to the TIRG, retail spaces less than 80,000 square feet are considered local serving and are not expected to contribute to an increase in VMT. Therefore, it is presumed that the retail component of the Project would not result in substantial additional VMT and impacts of the retail component of the Project with respect to VMT would be less than significant.

The Project satisfies the Low-VMT Area (#2) screening criterion, as detailed below.

#### Criterion #1: Small Projects

The Project would generate more than 100 vehicle trips per day and therefore does not meet Criterion #1.

#### Criterion #2: Low-VMT Area

**Table TRA-2** shows the estimated 2020 and 2040 VMT per employee for TAZ 979, the TAZ in which the Project is located, as well as the applicable VMT thresholds of 15 percent below the regional average. As shown in Table TRA-2, the 2020 and 2040 average daily VMT per employee

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<sup>36</sup> 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.

in the Project TAZ is not more than 15 percent below the regional averages. Therefore, the Project meets Criterion #2, and Project impacts with respect to VMT would be less than significant.

**TABLE TRA-2  
DAILY VEHICLE MILES TRAVELED SUMMARY**

Land Use	Bay Area				TAZ 979	
	2020		2040		2020	2040
	Regional Average	Regional Average minus 15%	Regional Average	Regional Average minus 15%		
Office (VMT per Worker) <sup>a</sup>	21.8	18.5	20.3	17.3	17.0	14.9

NOTE:

a. MTC Model results at [analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerWorker](https://analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerWorker) and accessed in January 2021.

SOURCE: Fehr & Peers, 2021

### Criterion #3: Near Transit Stations

The Project would be located about 0.4 miles from the 19<sup>th</sup> Street BART Station and is served by several frequent bus routes. The Project is adjacent to frequent bus service along Broadway (Route 51A with 10-minute peak headways), about 0.2 miles from Telegraph Avenue (Route 6 with 10-minute peak headways), and about 0.5 miles from 20th Street (Routes 72, 72M, and 72R, with 10- to 12-minute peak headways). However, the Project would not satisfy Criterion #3 because it would only meet two of the following three conditions for this criterion:

- The Project has an FAR of 2.5, which is greater than 0.75.
- According to the City of Oakland Municipal Code Section 17.116.080, the Project is required to provide a minimum of 106 parking spaces (one space per 600 square feet of ground level space and one space per 1,000 square feet of space on other floors), and no maximum parking applies to the project site. The Project would provide 132 parking spaces, which would exceed the minimum requirement. Therefore, the Project would provide more parking than required by the Code.
- The Project is located within the Downtown & Jack London Priority Development Area (PDA) as defined by *Plan Bay Area 2040*, and is therefore consistent with the region’s Sustainable Communities Strategy.

### VMT Screening Conclusion

The Project would satisfy the Low-VMT Area (#2) criterion as described above. Furthermore, implementation of SCA TRA-4, which requires the Project to develop and implement a TDM Plan, would further reduce the VMT effects of the Project.

As described above, the Project would not cause substantial additional VMT by exceeding the existing regional VMT per employee minus 15 percent and the retail component of the Project is considered local serving. Therefore, the Project would have a less-than-significant impact on VMT.

**SCA TRA-4: Transportation and Parking Demand Management.** See Section 2.17.2.



**Mitigation:** None required.

### 2.17.5 Cumulative

**Impact TRA-1.CU: Development of the Project, in combination with past, present, existing, approved, pending and reasonably foreseeable future projects within and in the vicinity of the project site, would not result in significant cumulative impacts to transportation and circulation. (Less than Significant with SCAs)**

The geographic context for cumulative impacts to traffic is Citywide. Impact TRA-1 (Conflicts with Plans, Ordinances, or Policies Relating to Safety, or Performance of the Circulation System) under Cumulative Conditions would be the same as the Project conditions discussed above. Impact TRA-2 (VMT Assessment) would be less than significant under Cumulative Conditions because as shown in Table TRA-2, the Project would satisfy the Low VMT Area Screening Criterion (#2) under 2040 conditions which accounts for the past, present, existing, approved, pending and reasonably foreseeable future projects within and in the vicinity of the project site. Cumulative projects in the City would be subject to similar transportation-related requirements as the Project including the City's SCAs. Therefore, the Project would have a less than significant cumulative impact.

**SCA TRA-1: Construction Activity in the Public Right-of-Way.** See Section 2.17.2.

**SCA TRA-2: Bicycle Parking.** See Section 2.17.2.

**SCA TRA-3: Transportation Improvements.** See Section 2.17.2.

**SCA TRA-4: Transportation and Parking Demand Management.** See Section 2.17.2.

**SCA TRA-5: Transportation Impact Fee.** See Section 2.17.2.

**SCA TRA-6: PEV Charging Infrastructure.** See Section 2.17.2.

**Mitigation:** None required.

### 2.17.6 References

City of Oakland, 2019. *Let's Bike Oakland 2019 Oakland Bike Plan, Part of the Land Use and Transportation Element of the Oakland General Plan*, adopted July 9, 2019.

City of Oakland, 2018. *Oakland Walks! 2017 Pedestrian Plan Update*, September 2018.

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

City of Oakland, 2017. *Transportation Impact Review Guidelines*.

Institute of Transportation Engineers (ITE), 2017. *Trip Generation Manual, 10th Edition*.

## 2.18 Utilities and Service Systems

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>XIX. UTILITIES AND SERVICE SYSTEMS</b> — The project would have a significant impact on the environment if it would:				
1) Exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) 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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6) Violate applicable federal, state, and local statutes and regulations related to solid waste;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 2.18.1 Environmental Setting

#### **Wastewater**

East Bay Municipal Utilities District (EBMUD) provides sanitary sewer treatment services to the City of Oakland. Capacity for the EBMUD system is provided by: (1) the interceptor system, (2) pump stations, and (3) Wet Weather Facilities (WWFs). WWFs provide a way to convey flows through EBMUD's system during system overload from stormwater entering the wastewater conveyance system requiring discharging wastewater into the East Bay. EBMUD's main wastewater treatment plant (MWWTP) is located southwest of the I-580/I-80 interchange in Oakland. Wastewater is collected by 29 miles of interceptor lines that move wastewater from local sewer collection systems to the MWWTP. Currently, the MWWTP is designed to provide primary treatment for a flow of up to 320 mgd and secondary treatment for a maximum flow of 168 mgd. The average daily dry weather flow (ADWF) is 63 mgd. The treated effluent is disinfected and dechlorinated before being discharged into San Francisco Bay, approximately one mile off the East Bay shore (EBMUD, 2021).

### **Stormwater**

The City of Oakland is part of the Alameda County Flood Control District (ACFCD) Zone 12. The storm drainage system in the City consists of more than 300 miles of storm drainpipes, over 100 miles of open creeks, and 15,000 structures (mostly inlets, manholes, and catch basins). City-owned storm drainage facilities are typically located within easements and rights-of-way. Privately owned facilities in the City's jurisdiction typically occur within private properties and include above-ground drainage systems, creeks, and watercourses. Most of the privately owned facilities are not maintained by the City. City-maintained drainage facilities include structures that are constructed through the permit process and dedicated to the City for maintenance.

### **Water Supply**

EBMUD is a publicly owned utility that owns, operates, and maintains the water distribution system within the City of Oakland. The 2015 Urban Water Management Plan (UWMP), adopted on June 28, 2016 by EBMUD's Board of Directors under Resolution No. 34092-16, is a long-range planning document used to assess current and projected water usage, water supply planning, and conservation and recycling efforts (EBMUD, 2016).

### **Solid Waste**

Non-hazardous waste in the City of Oakland is collected by Waste Management of Alameda County (WMAC), which provides curbside pickup for residential, commercial, and industrial non-hazardous waste, and transports it to WMAC's Davis Street Transfer Station in San Leandro. Transfer trucks haul most of the waste to the Altamont Landfill and Resource Facility, located approximately 35 miles east of Oakland near Livermore. The permitted capacity at Altamont is 87 million cubic yards, and 11,150 tons per day. As of 2018, the estimated remaining refuse capacity for the Altamont Landfill was 65.4 million cubic yards (60 million tons). At the average rate of fill from 2014-2018, and adjusting for projections for waste declines through 2023 (held steady after 2023 due to uncertainty), the facility has more than 30 years of capacity remaining and an estimated closure date of 2049. The ACWMA has also acquired land in the Altamont Hills area suitable for development of a public multi-purpose waste management facility. Depending upon need, the facility could include various diversion facilities in conjunction with a landfill with sufficient capacity to provide additional reserve disposal capacity. The chosen site contains 98 million cubic yards of landfill capacity (ACWMA, 2020).

## **2.18.2 Regulatory Setting**

### **Wastewater and Stormwater Drainage**

See Section 2.10, *Hydrology and Water Quality*, for a description of the City of Oakland's NPDES permits and other water quality regulations.

### **AB 939**

AB 939, enacted in 1989, requires Source Reduction and Recycling Element of each city and county to include an implementation schedule to divert a percentage of its solid waste from landfill disposal through source reduction, recycling, and composting activities. AB 939 specifies a required

diversion rate of at least 50 percent of wastes by the year 2000. The California Department of Resources Recycling and Recovery (CalRecycle) indicates that the City of Oakland's diversion rate was 59 percent in 2006. Beginning with the 2007 jurisdiction annual reports, diversion rates were no longer measured. With the passage of Senate Bill (SB)1016 in 2006, the Per Capita Disposal Measurement System, only per capita disposal rates are measured to determine if a jurisdiction's efforts are meeting the intent of AB 939. In 2019, the City reported a waste disposal rate of 9.40 pounds/person/day for employees, meeting its per employee disposal target rate of 15.3 pounds/person/day (CalRecycle, 2021).

### **City of Oakland General Plan**

The *Open Space, Conservation, and Recreation Element* and *Public Safety Element* of the Oakland General Plan describe the following policies regarding drainage, adopted for the purpose of avoiding or mitigating an environmental effect, and that apply to the Project (City of Oakland, 1996).

**Policy CO-5.3:** Employ a broad range of strategies, compatible with the Alameda Countywide Clean Water Project to: (a) reduce water pollution associated with stormwater runoff; (b) reduced water pollution associated with hazardous spills, runoff from hazardous material areas, improper disposal of household hazardous wastes, illicit dumping, and marina "live-aboards;" and (c) improve water quality in Lake Merritt to enhance the lake's aesthetic, recreational, and ecological functions.

**Policy FL-1:** Enforce and update local ordinances, and comply with regional orders, that would reduce the risk of storm-induced flooding.

**Policy FL-2:** Continue or strengthen city programs that seek to minimize the storm-induced flooding hazard.

**Policy FL-3:** Seek the cooperation and assistance of other government agencies in managing the risk of storm-induced flooding.

### **Oakland Municipal Code**

Title 15, Buildings and Construction, Chapter 15.34 - Construction and Demolition (C&D) Ordinance

The City of Oakland's C&D Ordinance is intended to further the goals of AB 939. Building permit applicants must complete a Waste Reduction and Recycling Plan as part of the Building Permit Application process to detail the plan for salvaging and recycling C&D debris generated during the course of the project. Standards call for salvage and/or recycling 100 percent of asphalt and concrete, and at least 65 percent of all remaining debris.

Title 17, Planning Code, Chapter 17.118 – Recycling Space Allocation Ordinance

Project applicants are required to submit project drawings for construction-related permits that contain recycling collection and storage areas in compliance with this ordinance. 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 10 cubic feet.

### ***City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval***

The City's SCAs relevant to reducing impacts on utilities and service systems and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to utilities. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

#### **SCA UTIL-1: Construction and Demolition Waste Reduction and Recycling.** *(Standard Condition of Approval 82)*

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](http://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.

#### **SCA UTIL-2: Underground Utilities** *(Standard Condition of Approval 83)*

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.

#### **SCA UTIL-3: Recycling Collection and Storage Space** *(Standard Condition of Approval 84)*

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 (2) cubic feet of storage and collection space per residential unit is required, with a minimum of ten (10) cubic feet. For nonresidential projects, at least two (2) cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten (10) cubic feet.

**SCA UTIL-4: Green Building Requirements** (*Standard Condition of Approval 85*)

**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.
  - At least LEED Silver per the appropriate checklist approved during the Planning entitlement process.
  - All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted.
  - The required green building point minimums in the appropriate credit categories.

**b. Compliance with Green Building Requirements During Construction**

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: Prior to the finalizing the Building Permit, the Green Building Certifier shall submit the appropriate documentation to City staff and attain the minimum required point level.

**SCA UTIL-5: Sanitary Sewer System** (*Standard Condition of Approval 87*)

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.

**SCA UTIL-6: Storm Drain System** (*Standard Condition of Approval 88*)

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.

## 2.18.3 Project Impacts and Discussion

### ***Wastewater***

**Impact UTIL-1: The Project would not result in exceedance of EBMUD's wastewater discharge limitations or exceed the capacity of the existing wastewater treatment system, and would not result in a significant environmental effect related to the construction of new wastewater treatment facilities or expansion of existing facilities. (Criteria 1 and 4) (*Less than Significant with SCAs*)**

The Project would result in an increase in wastewater discharge to the EBMUD MWWTP system compared to current conditions, based on an increase in population on the project site. However, the Project would not change stormwater flows substantially due to the existing developed nature of the project area, and the additional wastewater generated by the Project would be adequately handled by the existing sanitary sewer system. Implementation of **SCA UTIL-5, Sanitary Sewer System**, would require that the Project Applicant prepare a Sanitary Sewer Impact Analysis that includes an estimate of pre-Project and post-Project wastewater flow from the project site. In the event that the

Sanitary Sewer 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 would be required to pay a Sanitary Sewer Impact Fee for funding improvements to the sanitary sewer system. The Project would also be required to implement **SCA UTIL-4, Green Building Requirements**, which would reduce the generation of wastewater through required standards for plumbing fixtures and fittings. Therefore, with implementation of SCAs, the Project would not exceed EBMUD's wastewater discharge limitations or the capacity of the existing wastewater conveyance or treatment system and impacts would be less than significant.

As the Project is located in an already built out urban area, no new major sanitary sewer infrastructure would be required for the Project. For the proposed building at the 24<sup>th</sup> and 25<sup>th</sup> Street site, the Project would construct new sewer laterals that would connect to existing sanitary sewer lines in 24<sup>th</sup> Street. The proposed restroom space on the Valley Street site would also tie in to the existing sanitary sewer system adjacent to the Valley Street site. Construction of utility connections and laterals are included in Project construction estimates, analyzed within this Initial Study and Draft EIR, and individually would not cause significant environmental effects. Therefore, the Project would not result in a significant environmental effect related to the construction of new wastewater treatment facilities or expansion of existing facilities. This impact would be less than significant.

While not required to reduce any significant effects related to wastewater, **SCA UTIL-2, Underground Utilities**, is applicable to the Project and would also require the Project Applicant to underground all new utilities serving the Project (see Section 2.18.2, above).

**SCA UTIL-2: Underground Utilities.** See Section 2.18.2.

**SCA UTIL-4: Green Building Requirements.** See Section 2.18.2.

**SCA UTIL-5: Sanitary Sewer System.** See Section 2.18.2.

**Mitigation:** None required.

## **Stormwater**

**Impact UTIL-2: The Project would not require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects. (Criterion 2) (*Less than Significant with SCAs*)**

The Project would result in a reduction of impervious area on the 24<sup>th</sup> and 25<sup>th</sup> Street site from 0.92 acres to 0.86 acres. The Project would replace approximately 37,477 square feet of existing impervious area and would create approximately 2,446 square feet of new pervious area on the 24<sup>th</sup> and 25<sup>th</sup> Street site. The impervious area on the Valley Street site would remain the same. The Project would include pervious pavers within the proposed paseo, flow through planters, and a stormfilter manhole to reduce peak stormwater runoff and treat stormwater before it is discharged into the City's storm drain system. **SCA UTIL-6, Storm Drain System**, requires that the Project storm drainage system be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines, and that peak stormwater runoff from the project site be reduced by



at least 25 percent compared to the pre-project condition and to the maximum extent practicable. In addition, implementation of SCA HYD-1, Erosion and Sedimentation Control Plan for Construction; SCA HYD-2, State Construction General Permit; and SCA HYD-3, NPDES C.3 Stormwater Requirements for Regulated Projects would ensure potential impacts from stormwater runoff velocities and volumes would be controlled during and after construction (see Section 2.10, *Hydrology and Water Quality*).

For the 24<sup>th</sup> and 25<sup>th</sup> Street site, stormwater would be collected and treated on-site, and routed to an existing storm drain line in Valley Street that crosses 24<sup>th</sup> Street. No storm drain improvements are proposed on the Valley Street site, as the platform for the craft stall space would be constructed above a paved surface. Construction of utility connections and laterals are included in Project construction estimates, are analyzed within this Initial Study and Draft EIR, and would not individually cause significant environmental effects. Therefore, the Project would not result in a significant environmental effect related to the construction of new storm water drainage facilities or expansion of existing facilities. This impact would be less than significant.

While not required to reduce any significant effects related to stormwater, SCA UTIL-2, Underground Utilities, is applicable to the Project and would also require the Project Applicant to underground all new utilities serving the Project.

**SCA UTIL-2: Underground Utilities.** See Section 2.18.2.

**SCA UTIL-6: Storm Drain System.** See Section 2.18.2.

**SCA HYD-1: Erosion and Sedimentation Control Plan for Construction.** See Section 2.10.2.

**SCA HYD-2: Construction General Permit.** See Section 2.10.2.

**SCA HYD-3: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 2.10.2.

**Mitigation:** None required.

## ***Water Supply***

**Impact UTIL-3: The Project would not 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. (Criterion 3) (*Less than Significant with SCAs*)**

The Project would result in an increase in water use compared to current conditions, based on an increase in population on the project site. However, the Project would not substantially increase water use due to the existing developed nature of the project area. The water demand for the Project is accounted for in EBMUD's water demand projections, as published in EBMUD's 2015 UWMP. EBMUD's water demand projections account for anticipated future water demands within EBMUD's service boundaries and for variations in demand-attributed changes in development patterns (EBMUD, 2016). The Project would also be required to implement SCA

UTIL-4, Green Building Requirements, which would reduce the use of water on-site through required standards for plumbing fixtures and fittings. Therefore, with implementation of SCAs, the Project would not exceed water supplies available to serve the Project and impacts would be less than significant.

As the Project is located in an already built out urban area, no new major water supply infrastructure would be required for the Project. For the proposed building at the 24<sup>th</sup> and 25<sup>th</sup> Street site, the Project would construct new water laterals that would connect to existing water lines in 24<sup>th</sup> Street. The proposed restroom space on the Valley Street site would also tie in to existing water lines adjacent to the Valley Street site. Construction of utility connections and laterals are included in Project construction estimates, are analyzed within this Initial Study and Draft EIR, and would not individually cause significant environmental effects. Therefore, the Project would not result in a significant environmental effect related to the construction of new water supply facilities or expansion of existing facilities. This impact would be less than significant.

While not required to reduce any significant effects related to water supply, SCA UTIL-2, Underground Utilities, is applicable to the Project and would also require the Project Applicant to underground all new utilities serving the Project.

**SCA UTIL-2: Underground Utilities.** See Section 2.18.2 above.

**SCA UTIL-4: Green Building Requirements.** See Section 2.18.2 above.

**Mitigation:** None required.

### **Solid Waste**

**Impact UTIL-4: The Project would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs and would not require or result in construction of landfill facilities or expansion of existing facilities, and would not violate applicable federal, State, and local statutes or regulations related to solid waste. (Criteria 5 and 6) (*Less than Significant with SCAs*)**

### **Construction**

The project site would be served by the Altamont Landfill described in Section 2.18.1, *Setting*, which has the capacity to handle solid wastes generated by the demolition and construction phases of the Project. The Project Applicant would be required to comply with the City's construction and demolition debris recycling ordinance (Municipal Code Chapter 15.34), which requires submittal of a plan to divert at least 50 percent of the construction waste generated by the Project from landfill disposal. The California Green Building Standards Code (CALGreen) also requires recycling and/or salvaging for reuse of a minimum of 65 percent of non-hazardous construction and demolition waste as a mandatory measure. SCA UTIL-4, Green Building Requirements would ensure implementation of all mandatory CALGreen measures. In addition, implementation of **SCA UTIL-1, Construction and Demolition Waste Reduction and**

**Recycling**, would ensure that solid waste during construction is minimized. Therefore, construction of the Project would result in less-than-significant impacts to solid waste.

### **Operation**

Based on the City's 2019 waste disposal rate of 9.40 pounds/person/day for employees and the estimated 413 employees generated by the Project (see Section 2.14, *Population and Housing*), the Project would generate approximately 1,417,003 pounds (708.5 tons) of solid waste per year. As discussed in Section 2.18.1, *Setting*, the ACWMA has enough capacity to serve the Project solid waste stream projected until the projected closure of the Altamont Landfill around 2049 (ACWMA, 2020). The Project's estimated annual solid waste generation would represent approximately 6 percent of the Altamont Landfill's current daily permitted capacity. Additionally, the ACWMA has acquired land in the Altamont Hills area suitable for development of a public multi-purpose waste management facility containing 98 million cubic yards of landfill capacity, enough to serve the Project for the foreseeable future (ACWMA, 2020). Therefore, the Project would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs and would not require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects, and impacts would be less than significant.

**SCA UTIL-3, Recycling Collection and Storage Space**, would require that the Project comply with the Recycling Space Allocation Ordinance (OMC Chapter 17.118). The Ordinance requires the Project Applicant to submit a plan that shows adequate space and access to recycling collection and storage areas, in addition to capacity calculations, and specify the methods by which the development will meet the City's current solid waste diversion requirements. The required plan would be implemented and maintained for the lifetime of the Project, including any future updated requirements by the City. Any incentive programs would be required to remain fully operational as long as businesses exist at the project site.

The Project Applicant would be required to comply with existing policies and regulations, including the City of Oakland's CALGreen Building requirements, and the Project would not cause the City to violate other applicable federal, State, and local statutes and regulations related to solid waste. The impact would be less than significant.

**SCA UTIL-1: Construction and Demolition Waste Reduction and Recycling.** See Section 2.18.2.

**SCA UTIL-3: Recycling Collection and Storage Space.** See Section 2.18.2.

**SCA UTIL-4: Green Building Requirements.** See Section 2.18.2.

**Mitigation:** None required.

## 2.18.4 Cumulative

**Impact UTIL-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in or contribute to a significant cumulative impact on the capacity of EBMUD's wastewater systems or the City's stormwater drainage system; water supplies; or generation of solid waste. (*Less than Significant with SCAs*)**

The geographic scope for cumulative impacts on wastewater treatment is EBMUD's service area. The cumulative context for stormwater facilities includes the cumulative development within the City's stormwater drainage collection area that includes the project site. For water supply, the geographic scope for cumulative impacts on water supply is EBMUD's service area. Cumulative development includes all development considered in the 2015 UWMP, as described previously. The geographic scope for cumulative impacts on solid waste capacity is Alameda County, which is governed by the ACWMA.

### Wastewater

The Project, in combination with past, present, and reasonably foreseeable future development in EBMUD's service area would result in an increase in wastewater generation. However, SCA UTIL-5, Sanitary Sewer System, requires that the project applicants prepare a Sanitary Sewer Impact Analysis that includes an estimate of pre-Project and post-Project wastewater flow from the project site. In the event that the Sanitary Sewer 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 would be required to pay a Sanitary Sewer Impact Fee for funding improvements to the sanitary sewer system. With implementation of SCA UTIL-4 and UTIL-5, the Project would not exceed EBMUD's wastewater discharge limitations or the capacity of the existing wastewater conveyance or treatment system, and the Project would not contribute considerably to a significant cumulative impact to wastewater.

### Stormwater

The Project, in combination with past, present, and reasonably foreseeable future development in the Project's stormwater drainage collection area could result in the need for the construction of new storm water drainage facilities or expansion of existing facilities due to the City's aging stormwater collection system. The potential construction or expansion of stormwater drainage infrastructure would be installed primarily in existing roadways and utility rights-of-way, and would be subject to the City's SCAs, which would reduce potential impacts to a less than significant level. The Project would include its own on-site stormwater management system and stormwater infrastructure improvements, but construction would not result in significant impacts as studied throughout this document; therefore, the Project would not contribute considerably to a significant cumulative impact in this regard.

### Water Supply

The Project, in combination with past, present, and reasonably foreseeable future development in EBMUD's service area would result in an increase in water supply demand. As described above, EBMUD's water demand projections account for anticipated future water demands within EBMUD's service boundaries and for variations in demand-attributed changes in development

patterns (EBMUD, 2016). The Project, with implementation of SCA UTIL-4, would not exceed water supplies available to serve the Project. Therefore, the Project would not contribute considerably to a significant cumulative impacts related to water supply.

### **Solid Waste**

The Project, in combination with past, present, and reasonably foreseeable future development in Alameda County governed by the ACWMA would result in an increase in solid waste generation collected and deposited in the Altamont Landfill. As of 2018, the Altamont Landfill had an estimated remaining refuse capacity of approximately 75 percent. The Altamont Landfill is projected to have more than 30 years of capacity remaining and an estimated closure date of 2049. The ACWMA has also acquired land in the Altamont Hills area suitable for development of a public multi-purpose waste management facility. Depending upon need, the facility could include various diversion facilities in conjunction with a landfill with sufficient capacity to provide additional reserve disposal capacity. The chosen site contains 98 million cubic yards of landfill capacity. The ACWMA determined not to proceed with permitting and development of a landfill and hold the landfill site property as a potential reserve, as needed in the future (ACWMA, 2020). Based on the existing landfill capacities and closure date, along with ACWMA projections, planning, and waste reductions within the service area of the ACWMA, and compliance with City of Oakland waste reduction ordinances and green building requirements, including SCAs UTIL-1, UTIL-3, and UTIL-4 required for the Project, cumulative impacts on landfill capacity would be less than significant.

**SCA UTIL-1: Construction and Demolition Waste Reduction and Recycling.** See Section 2.18.2.

**SCA UTIL-2: Underground Utilities.** See Section 2.18.2.

**SCA UTIL-3: Recycling Collection and Storage Space.** See Section 2.18.2.

**SCA UTIL-4: Green Building Requirements.** See Section 2.18.2.

**SCA UTIL-5: Sanitary Sewer System.** See Section 2.18.2.

**SCA UTIL-6: Storm Drain System.** See Section 2.18.2.

**SCA HYD-1: Erosion and Sedimentation Control Plan for Construction.** See Section 2.10.2.

**SCA HYD-2: Construction General Permit.** See Section 2.10.2.

**SCA HYD-3: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 2.10.2.

### **2.18.5 References**

Alameda County Waste Management Authority (ACWMA), 2020. *Integrated Waste Management Plan Countywide Element, Countywide Siting Element, Countywide Summary Plan*. Adopted April 22, 2020, Amended October 28, 2020. Available at:

<https://www.stopwaste.org/sites/default/files/CoIWMP-Final-20201215.1.pdf>, accessed February 9, 2021.

California Department of Resources Recycling and Recovery (CalRecycle), 2021. Jurisdiction Diversion/Disposal Rate Summary. Available at: <https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006>, accessed February 9, 2021.

City of Oakland, 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*, adopted June 11, 1996.

East Bay Municipal Utilities District (EBMUD), 2021. Wastewater Treatment. Available at: <https://www.ebmud.com/wastewater/collection-treatment/wastewater-treatment>, accessed February 10, 2021.

EBMUD, 2016. Urban Water Management Plan 2015, adopted June 28, 2016. Available at: <https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan/>, accessed February 10, 2021.

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## 2.19 Wildfire

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>XX. WILDFIRE</b> — If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, the project would have a significant impact on the environment if it would:				
1) Substantially impair an adopted emergency response plan or emergency evacuation plan;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.19.1 Setting

The project site is not located in or near a State Responsibility Areas (SRA) or lands classified as very high fire hazard severity zones by the California Department of Forestry and Fire Protection (CAL FIRE) (CAL FIRE, 2008). The project site is also not located within the boundaries of an area that is considered to be a Wildland-Urban Interface (WUI) of a fire-threatened community (ABAG and MTC, 2020). Within the City of Oakland, SRAs, very high fire hazard severity zones, and WUI zones are located primarily in the Oakland hills.

The project site is not located within the boundaries of the fire prevention and assessment district boundary identified in the Safety Element of the City’s General Plan or the now-defunct Wildfire Prevention Assessment District boundary located within the geographic confines of the Oakland Hills, designated by CAL FIRE as a very high fire hazard severity zone (City of Oakland, 2012; WPAD, 2017).

### 2.19.2 Topics Considered and No Impact Determined

Factors that contribute to the risk of wildland fire include dense and fire-prone vegetation, poor access to firefighting equipment because of slopes or inadequate roads, and lack of adequate water pressure and service in fire-prone locations. The project site is currently developed within a highly urbanized area of the flat lands of Oakland that does not contain dense vegetation, and is surrounded by other developed properties and roadways. Wildfire was added in the update to the State CEQA Guidelines as an environmental topic for consideration with regard to impacts that could occur in areas in or near SRAs or lands classified as very high fire hazard severity zones. As discussed in Section 2.19.1, *Environmental Setting*, the project site is not located in or near an

SRA or lands classified as very high fire severity zones. Therefore, no impact would occur with regard to wildfire.

### 2.19.3 Cumulative

Because the Project would have no impact with regard to wildfire, it would not cause or contribute to any cumulative impact to such resources.

### 2.19.4 References

- Association of Bay Area Governments and Metropolitan Transportation Commission (ABAG and MTC), 2020. *Wildland-Urban Interface fire threat for the San Francisco Bay Region. Source data produced by the California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP)*, updated August 27, 2020. <https://mtc.maps.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=d45bf08448354073a26675776f2d09cb>, accessed December 30, 2020.
- California Department of Forestry and Fire Protection (CAL FIRE), 2008. *Oakland Very High Fire Hazard Zones in LRA, As Recommended by CAL FIRE*. September 3, 2008. <https://osfm.fire.ca.gov/media/5606/oakland.pdf>, accessed December 30, 2020.
- City of Oakland, 2012. *Safety Element of the General Plan*. Adopted March 20, 2012.
- City of Oakland Wildfire Prevention Assessment District (WPAD), 2017. *Final Report on the Wildfire Prevention Assessment District*. City of Oakland, Public Safety Committee, and Oakland City Council. June 2017. <https://www.oaklandca.gov/resources/wildfire-district-agendas-and-minutes>, accessed August 3, 2019.
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## 2.20 Mandatory Findings of Significance

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>XXI. MANDATORY FINDINGS OF SIGNIFICANCE —</b>				
1) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 2.20.1 Project Impacts and Discussion

As discussed in the various topics in this Initial Study, the Project is anticipated to have less-than-significant impacts on most of the environmental topics discussed. Where necessary, Standard Conditions of Approval (SCAs) have been identified to reduce impacts to less-than-significant levels. No mitigation measures have been identified as necessary to reduce impacts to less than significant levels in this Initial Study. However, the Project could have potentially significant impacts related to historic architectural resources; therefore, this topic is further discussed and analyzed in Section 4.2, *Historic Architectural Resources*, of the EIR.

The Project, in combination with the past, present and foreseeable projects, as described in Section 2, would not result in significant cumulative impacts on aesthetics, shadow, wind, agricultural and forestry resources, air quality, biological resources, cultural and tribal cultural resources (except historic architectural resources), energy, geology and soils, paleontological resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, utilities and service systems, or wildfire with implementation of identified SCAs, if required. However, the Project, in combination with the past, present and foreseeable projects, could result in cumulative impacts related to historic architectural resources. These cumulative impacts will be discussed and analyzed further in Section 4.2, *Historic Architectural Resources*, of the EIR.

Potential adverse effects on human beings have been considered as a part of the analysis of individual environmental topics in this Initial Study. As discussed above, the Project has the potential to result in significant impacts with respect to historic architectural resources, which

could adversely affect human beings. The EIR assesses this topic and identifies mitigation measures where applicable.

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# Appendix C

## **Cumulative Projects List**

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**CITY OF OAKLAND / PLANNING BUREAU/MAJOR PROJECTS LIST (GENERALLY 325+ DWELLING UNITS OR 100,000 SF DOWNTOWN/OR 125 UNITS ELSEWHERE), MARCH 2020**

Project Name	PROJECT ADDRESS	APPLICANT					APPLICATION NUMBER	SPECIFIC PLAN AREA or DISTRICT	BUILDING STORIES	RESIDENTIAL					OFFICE SQUARE FOOTAGE	RETAIL SQUARE FOOTAGE	INDUSTRIAL SQUARE FOOTAGE	OTHER NON-RESIDENTIAL SQUARE FOOTAGE	STAFF PLANNER			APPLICATION DATE	APPLICATION APPROVAL DATE
		COMPANY	CONTACT	PHONE	EMAIL					Market	Moderate	Low	Very Low	Extremely Low					NAME	EMAIL	PHONE		
San Pablo Ave	5300 San Pablo Ave	Dogtown	Francesca Boyd	(510) 301-9630	fboyd@dogtowndev.com	CDV13267		4											Mike Rivera	mriviera@oaklandca.gov	(510) 238-6417	9/19/2013	2/5/2014
2538 Telegraph		SB Architects		(415)673-8990		CMD05511		18	20										Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2005	2016
Key System Building	1100 Broadway	Ellis Parners	Matt Weber	(415)391-9800	mweber@ellispartners.com	CMD07390-R01	Downtown	4						309890	10000				Mike Rivera	mriviera@oaklandca.gov	(510) 238-6417	4/5/2017	10/4/2017
Seminary Point	5803 Foothill Blvd.	Sunfield Development	Sid Afshar	(510) 452-5555	sidafshar@sunfielddevelopment.com	CMDV11076		1							27000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	4/14/2011	10/19/2011
Shops on Broadway	3001 Broadway	Portfolio Development Properties, LLC	Jeff Nuestadt	(925) 939-3010	jeff@portfoliodevco.com	CMDV13194	Broadway-Valdez	1							36000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	6/20/2012	12/19/2013
MacArthur BART PUD		MTCP	Marie Debors	(415)989-1111	mdebors@bridgehousing.com	DA12004, PUD06058			729			146							Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2006	
Jack London Square PUD	Water St(between Clay & Alice Sts	CIM Group	Sean Buran	(323)860-1811	sburan@cimgroup.com	DA13171, PUD13170																	
Prosperity Place	188 11th Street / 1110 Jackson Street	EBALDC	Everett Cleveland	(510) 287-5353 ext 339	ecleveland@ebaldc.org	DR10243-R01	Lake Merritt	5	1	0	30	40			2000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	3/3/2014	6/13/2014
Kapor Center	2134-2148 Broadway	Fougeron Architects	Anne Fougeron	(415) 641-5744		DR13227	Downtown	4	0					40000			4000		Mike Rivera	mriviera@oaklandca.gov	(510) 238-6417	10/25/2013	
Merrill Gardens	5238 Coronado Ave	SRM Development	Ryan Leong	(509)944-4557	ryan@srmdevelopment.com	DR13320	Rockridge	5	127						5550				Mike Rivera	mriviera@oaklandca.gov	(510)238-6417	11/13/2013	6/18/2014
Merrill Gardens	5238 Coronado Ave	SRM Development	Ryan Leong	(509)944-4557	ryan@srmdevelopment.com	DR13320	Rockridge	5	127						5550				Mike Rivera	mriviera@oaklandca.gov	(510)238-6417	11/13/2013	6/18/2014
Oakland Global 1	25 Admiral Toney Way/ 2420 W 21st Street	Prologis	Cory Chung	(510) 661-4002	cchung@prologis.com	DRX15-1553		1								256000			Pete Vollmann	pvollmann@oaklandca.gov	(510)238-6167	7/15/2015	12/16/2015
Oakland Global 2	2000 Maritime Rd.	Prologis	Cory Chung	(510) 661-4002	cchung@prologis.com	DRX17-1420		1								232000			Pete Vollmann	pvollmann@oaklandca.gov	(510)238-6167	8/2/2017	9/20/2017
Oakland Global 3	2001 Maritime	Prologis	Cory Chung	(510)661-4002	cchung@prologis.com	DRX182246		1								189000			Pete Vollmann	pvollmann@oaklandca.gov	(510)238-6167	11/6/2018	12/28/2018
Acts Cyrene Apartments	9400 International Blvd	Related California	Colby Northridge	(949) 660-7272	cnorthridge@related.com	DV11008		5	1		34	24			3500				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	1/14/2011	2/1/2012
2850 Hannah	2850 Hannah Street	RIAZ Capital	Jonathan Law	(650) 380-1799	jlaw@riazinc.com	DV13236-R01	West Oakland	5	90						2500				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	12/19/2016	2/21/2017
GE Redevelopment	5441 International Blvd	Bridge Development Partners	Tom Ashcraft	(213)805-6350	tashcraft@bridgegdev.com	ER18013		1								540000			Pete Vollmann	pvollmann@oaklandca.gov	(510)238-6167	11/9/2018	
Waterfront Ballpark Dist	1 Market St	Oakland Athletics	Noah Rosen	(510)746-4406	nrosen@athletics.com	ER18016		Pending	See Notes	See Notes	See Notes	See Notes			2000000		1500000		Pete Vollmann	pvollmann@oaklandca.gov	(510)238-6167	11/28/2018	
522 20th Street	522 20th Street		Tony Pantaleoni	(415) 495-4051		PLN14182	Downtown	5	24						1500				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	6/9/2014	8/15/2014
Temescal Muse	364 40th St	John Malik & Associates	John Malik	(510) 595-8042	john@jmalick.com	PLN14246	Temescal	6	24						2999				Mike Rivera	mriviera@oaklandca.gov	(510) 238-6417	7/31/2014	5/28/2015
Baxter Apts	4901 Broadway	SRM Development	Ryan Leong	(509)944-4557	ryan@srmdevelopment.com	PLN14248	Temescal	6	126						7400				Mike Rivera	mriviera@oaklandca.gov	(510)238-6417	8/1/2014	3/18/2015
Baxter Apts	4901 Broadway	SRM Development	Ryan Leong	(509)944-4557	ryan@srmdevelopment.com	PLN14248	Temescal	6	126						7400				Mike Rivera	mriviera@oaklandca.gov	(510)238-6417	8/1/2014	3/18/2015
Coliseum BART TOD - Phase 1	805 71st Ave	Turner Development	Ronnie Turner	(510) 395-2766	rtdevelops@comcast.net	PLN14269	Coliseum	6							1000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	2014	2015
The Broadway	3073-3093 Broadway	Cityview	Stephen Siri	(925) 766-5522	ssiri@cityview.com	PLN14272	Broadway-Valdez	7	423	110					21000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	9/2/2014	12/2/2014
459 8th Street	459 8th Street	Signature Development	Frank Flores	(510) 817-2729	fflores@signaturedevelopment.com	PLN14308	Downtown	6	50						4000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	10/22/2014	2/3/2015
Alta Waverly	2302 Valdez Street	Wood Partners	Brian Pianca	(415) 888-8537	bap@woodpartners.com	PLN14340	Broadway-Valdez	7	196						31500				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	11/21/2014	4/15/2015
2270 Broadway	2270 Broadway	Hines	John Chen	(415) 399-6269	john.chen@hines.com	PLN14363	Broadway-Valdez	24	223						5000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	12/19/2014	4/7/2015
500 Grand	500 Grand Avenue		Patrick Ellwood	(510) 238-9111	patrick@ellwoodcommercial.com	PLN15015		5	40						3000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	1/21/2015	2/21/2017
The Webster	2315 Valdez Street / 2330 Webster Street	Thompson-Dorfman / Trammell Crow	Stephanie Hill	(415) 381-3001	sh@thompsondorfman.com	PLN15040	Broadway-Valdez	7	234						16000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	2/23/2015	7/20/2015
1550 Jackson	1550 Jackson Street		Wing Lee	(415) 297-6493	wing@learchitect.com	PLN15061	Downtown	5	20										Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	3/10/2015	7/15/2015
Nautilus Group	5110 Telegraph Ave	RAD	Randy Miller	(510) 398-0888	rmiller@radurban.com	PLN15074	Temescal	6	188			17			33800				Mike Rivera	mriviera@oaklandca.gov	(510) 238-6417		
4045 Broadway	4045 Broadway	Broadway Green, LLC	Matt Branagh	(925) 743-9500	matb@branagh.net	PLN15084	Temescal	5	39			4			2999				Mike Rivera	mriviera@oaklandca.gov	(510) 238-6417	3/31/2015	5/2/2016
Downtown Hampton Inn	378 11th Street	Ridgmont Hospitality	Dhruv Patel	(510) 407-0308	dhruv@ridgmont.com	PLN15096	Lake Merritt	7								61593			Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	4/7/2015	5/4/2016
459 23rd Street	459 23rd Street	Signature Development	Frank Flores	(510) 817-2729	fflores@signaturedevelopment.com	PLN15119-R01	Downtown	6	65						3700				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	2/2/2017	3/3/2017
1700 Webster	1700 Webster Street / 330 17th Street	Gerding Edlen	Brent Gaulke	(415) 395-0891	brgaulke@gerdingedlen.com	PLN15138-R01	Downtown	23	206						3000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	11/5/2015	2/19/2016
4th & Madison	150 & 155 4th Street	Carmel Partners	Greg Pasquali	(415) 231-0221	gpasquali@carmelpartners.com	PLN15172		7	330						5000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	5/27/2015	8/8/2016
Hanover Uptown	325 27th Street / 2640 Broadway	The Hanover Company	Scott Youdall	(925) 277-3445	syoudall@hanoverco.com	PLN15241	Broadway-Valdez	7	255						37000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	7/21/2015	4/6/2016
17th & Broadway	447 17th Street	Lennar Multifamily Communities / LMC	Tyler Wood	(415) 975-4991	tyler.wood@lmc.com	PLN15281	Downtown	33	254						11000	5000			Mike Rivera	mriviera@oaklandnet.com	(510) 238-6417	7/4/2015	1/20/2016
International Senior Housing	10500 International Blvd	Riverside Charitable Corporation	Amanda Locke	(818) 380-2600	arlocke15@gmail.com	PLN15292		6	529										Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	9/15/2015	6/30/2017
250 14th Street	250 14th Street	The Martin Group	Justin Osler	(415) 429-6044	justin@themartingroup.com	PLN15306-R01	Lake Merritt	7	79						3500				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	9/8/2015	7/17/2017
226 13th Street	226 13th Street	Holland Partners	Ray Connell	(510) 227-6686	rconnell@hollandpartnergroup.com	PLN15320	Lake Merritt	7	261						15000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	10/7/2015	6/22/2016
Hanover Waverly	2400 Valdez Street / 2450 Valdez Street	The Hanover Company	Scott Youdall	(925) 277-3445	syoudall@hanoverco.com	PLN15336	Broadway-Valdez	7	225						23000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	10/16/2015	6/21/2016
Oak Knoll Redevelopment	8750 Mountain Blvd	Oak Knoll Venture Acquisitions, LLC	Sam Veltri	(949)705-8786	svelttri@suncal.com	PLN15378/ER15004		varies	918						72000		10000		Dara O'Byrne	dobyrne@oaklandca.gov	(510)238-6983	11/25/2015	11/7/2017
Mountain View Cemetery	0484700200305	MVC	Jeff Lindeman	(510)658-2588	jeff@mountainviewcemetery.org	PLN15408											8 acres		Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2015	2017
Claremont Hotel	41 Tunnel Rd	Signature Development	Eric Harrison	(510)251-9280	eharrison@signaturedevelopment.com	PLN16053		4	43									7000	Rebecca Lind	rlind@oaklandca.gov	(510)238-3472	11/21/2016	
19th & Harrison	301 19th Street / 1889 Harrison Street	Lennar Corp	Tyler Wood	(415) 975-4991	tyler.wood@lmc.com	PLN16071	Downtown	7	224						3500				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	3/17/2016	8/26/2016
24th & Harrison	277 27th Street	Holland Partners	Ray Connell	(510) 227-6686	rconnell@hollandpartnergroup.com	PLN16080	Broadway-Valdez	18	437						65000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	3/24/2016	8/17/2016
Broadstone on Broadway	2800, 2820, & 2855 Broadway	Alliance Residential	Peter Solar	(415) 773-6150	psolar@allresco.com	PLN16110	Broadway-Valdez	7	218						18000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	4/29/2016	8/17/2016
1433 Webster	1433 Webster Street	RAD Urban	Lih Chiu Loh	(415) 425-9023	lloh@radurban.com	PLN16117-R01	Downtown	15	168			7			2000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	4/22/2016	11/28/2018
3000 Broadway	3000 Broadway	Lowe Enterprises	Alan Chamorro	(415) 758-0990	achamorro@loweenterprises.com	PLN16122	Broadway-Valdez	7	127						8000				Pete Vollmann	pvollmann@oaklandca.gov	(510) 238-6167	4/26/2016	8/17/2016
1518 ML King Jr Way	1518 ML King Jr Way / 625 16th Street	Wood Partners	Julia Wilk																				

Parcel F	018 046500220	MidPen Housing	Polo Munoz	(510)426-5660	amunoz@midpen-housing.org	PUD06010-PUDF06		6			211							Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2017	2017	
Gateway and South Parks	018 046000404	Signature Development Group	Patrick Van Ness	(510)251-9272	pvanness@signaturedevelopment.com	PUD06010-PUDF07												parcs (10 acres)	Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2017	2017
Channel Park	018 043000112	Signature Development Group	Patrick Van Ness	(510)251-9272	pvanness@signaturedevelopment.com	PUD06010-PUDF08												parcs (10 acres)	Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2017	2017
Brooklyn Basin Parcel H	845 Embarcadero	Zarsion-OHP I, LLC	Patrick VanNess	(510)251-9270	pvanness@signaturedevelopment.com	PUD06010-PUDF10	Brooklyn Basin	8	380					16598					Dara O'Byrne	dobyne@oaklandca.gov	(510)238-6983	3/20/2019	
Brooklyn Basin Parcel J	845 Embarcadero	Oakland Waterfront Parcel J, LLC	Anh Le	(310)566-8700	ale@cityview.com	PUD06010-PUDF11	Brooklyn Basin	8	378					2700					Dara O'Byrne	dobyne@oaklandca.gov	(510)238-6983	6/17/2019	12/18/2019
Brooklyn Basin Parcel A	101 Ninth Ave	MidPen Housing	Jennifer Liu	(510)426-5672	jilliu@midpen-housing.org	PUD06010-PUDF12	Brooklyn Basin	6			254						120864		Dara O'Byrne	dobyne@oaklandca.gov	(510)238-6983	11/19/2018	6/5/2019
Site B	012 102501100, 012 102501200	Boston Properties	Aaron Fenton	(415)772-0714	afenton@bostonproperties.com	PUD06058-R01-PUDF01		24	357	45									Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2016	2017
Fruitvale Phase IIA	0 30th Ave	EBALDC/Unity Council	Everett Cleveland	(510)287-5353	ecleveland@ebaldc.com	PUD08186-PUDF01	Fruitvale	4			94								Rebecca Lind	rlind@oaklandca.gov	(510)238-3472	2/13/2015	5/6/2015
Fruitvale Phase IIB	0 35th Ave	Bridge Housing/Unity Council	Ethan Warsh	(415)485-3591	ewarsh@bridgehousing.com	PUD08186-PUDF02		7	2	10	94	66		6000					Rebecca Lind	rlind@oaklandca.gov	(510)238-3472	8/27/2018	11/28/2018
Kaiser Center Office - PUD REV	300 Lakeside	Swig Company	Tomas Schoenberg	(415)291-1100	tschoenberg@swigco.com	PUD103-R01	Downtown	15-40	580						1360500				Pete Vollmann	pvollmann@oaklandca.gov	(510)238-6167	10/5/2018	10/16/2019
Site C	018 041000105 (10 Clay)	Ellis Partners	Dean Rubinson	(415)391-9800	dean@ellispartners.com	PUD13170		2						15000	15000				Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2006	2007
Site F1	018 04200402	CIM Group	Sean Buran	(323)860-1811	sburan@cimgroup.com	PUD13170								250000					Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2008	2008
Site G	001 015105200	CIM Group	Sean Buran	(323)860-1811	sburan@cimgroup.com	PUD13170		7							30000			PUD parking	Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2007	2009
Site D	018 041500101	CIM Group	Sean Buran	(323)860-1811	sburan@cimgroup.com	PUD13170-PUDF01		8	135										Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2017	2017
Site F2	018 04200401	CIM Group	Sean Buran	(323)860-1811	sburan@cimgroup.com	PUD13170-PUDF02		8	338										Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2017	2017
Site F3	018 04200402	CIM Group	Sean Buran	(323)860-1811	sburan@cimgroup.com	PUD13170-PUDF03												155-key hotel	Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2017	
T5/6	002 009704000	Strada	William Goodman	(314)276-0707	wgoodman@stradasf.com	PUD99215		14	262						5000				Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2014	2015
Site A1	012 102501001	Hines	Kevin Chow	(415)399-6221	kevin.chow@hines.com	PUDF08		8	278		8				22000				Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2014	2015
Site C	012 102501300	Hines	Kevin Chow	(415)399-6221	kevin.chow@hines.com	PUDF08		8	89		4								Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2014	2015
T12	002 002700700	Shorenstein	Todd Sklar	(415)772-7069	tsklar@shorenstein.com	PUDF10		24						600000	10000				Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2015	2016
BART Garage	012 102500600	MTCP	Marie Debers	(415)989-1111	mdebor@bridgehousing.com	PUDF10097		6										480 pkg	Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2010	2011
Site D Affordable	012 102500500	MTCP	Marie Debers	(415)989-1111	mdebor@bridgehousing.com	PUDF10322		5			90								Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2010	2011
2 Kaiser Plaza	325 22nd Street	CIM Group	Sean Buran	(323)860-1811	sburan@cimgroup.com	ZP160061		33						800000	11000				Catherine Payne	cpayne@oaklandca.gov	(510)238-6168	2015	2018
Pigozzi	460 24th St	Signature Development	Jamie Choy	(510)251-9276	jchoy@signaturedevelopment.com	ZP180025	25th Street Garage District API	6						86100	11980				Rebecca Lind	rlind@oaklandca.gov	(510)238-3472	3/5/2018	
California College of the Arts	5215 Broadway	Arts Campus Holdings, LLC	Marc Babson	(415)723-9561	marcb@emeraldfund.com	ZP180116	California College District API	4-8	534		35							34280	Rebecca Lind	rlind@oaklandca.gov	(510)238-3472	11/30/2018	
Oakland Museum of CA	1000 Oak St	OMCA	Lori Fogarty	(510)318-8420	lfogarty@museumca.org	ZP180120	Lake Merritt	2											Mike Rivera	mriviera@oaklandca.gov	(510)238-6417	12/10/2018	12/21/2018
Oakland Museum of CA	1000 Oak St	OMCA	Lori Fogarty	(510)318-8420	lfogarty@museumca.org	ZP180120	Lake Merritt	2											Mike Rivera	mriviera@oaklandca.gov	(510)238-6417	12/10/2018	12/21/2018
600 Castro	600 Castro St	Frank Yang	Frank Yang	(510)648-4906	frankyang@gmail.com	ZP190058	Downtown	8	373	TBD	TBD	TBD		11,500					Rebecca Lind	rlind@oaklandca.gov	(510)238-3472	5/23/2019	
415 20th St	415 20th St	Hines	Kevin Chow	(415) 399-6800	kevin.chow@hines.com	ZP190087	Downtown	41						903100					Rebecca Lind	rlind@oaklandca.gov	(510)238-3472	7/31/2019	
1515 Market St	1515 Market St	Pytock Architects	Peter Waller	(510)465-7010	pwaller@pytock.com	ZP190102		TBD	TBD	TBD	TBD	TBD							Rebecca Lind	rlind@oaklandca.gov	(510)238-3472	9/26/2019	
1431 Franklin	1431 Franklin	Tidewater Capital	Kyle Winkler	(510) 290-9901	kwinkler@tidewatercap.com	ZP190117	Downtown	29	314	TBD	TBD	TBD							Rebecca Lind	rlind@oaklandca.gov	(510)238-3472	11/4/2019	

# Appendix D

## **Peer Review of Historic Resource Evaluation and Supporting Information**





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# memorandum

date March 2, 2021

to Rebecca Lind, Planner III

cc File

from Jill Feyk-Miney, ESA

subject Appendix D: ESA Peer Review of Historic Resources Evaluation and Supporting Information (460 24th Street Project)

In March 2020, a Historic Resources Evaluation was submitted on behalf of Signature Development for review by the City of Oakland Bureau of Planning in the context of the CEQA environmental review of the 460 24<sup>th</sup> Street Project (Project). Left Coast Architectural History prepared the report, which is dated March 23, 2020. At your request, ESA has completed its review of the assessment in the technical memorandum titled, *FINAL DRAFT: Peer Review of Historic Status Verification and Secretary of the Interior's Standards Analysis for 442 and 450 24th Street, 459-461 and 465 25th Street*, dated February 17, 2021.

We find that it is suitable for reliance in combination with the information in ESA's technical memorandum, and other sources of data informing the analysis of potential environmental impacts of the 460 24<sup>th</sup> Street Project. We have no questions and no requests for additional data or clarification at this time.

## Attachments:

1. FINAL DRAFT: Peer Review of Historic Status Verification and Secretary of the Interior's Standards Analysis for 442 and 450 24th Street, 459-461 and 465 25th Street, dated February 17, 2021.
2. Left Coast Architectural History. *Historic Status Verification and Secretary of the Interior's Standards Analysis for 442 and 450 24th Street, 459-461 and 465 25th Street*. Prepared for Northgate 8 Investors, LLC, dated March 23, 2020.

# technical memorandum

date February 17, 2021

to Rebecca Lind, City of Oakland

cc Jill Feyk-Miney, ESA; File

from Becky Urbano and Johanna Kahn, ESA

subject FINAL DRAFT: ESA Peer Review of Historic Status Verification and Secretary of the Interior's Standards Analysis for 442 and 450 24th Street, 459-461 and 465 25th Street

## Introduction

As part of the CEQA environmental review of the 460 24th Street Mixed-Use Project, ESA has conducted a peer review of the *Historic Status Verification and Secretary of the Interior's Standards Analysis for 442 and 450 24th Street, 459-461 and 465 25th Street* prepared by Left Coast Architectural History in March 2020 (referred to in the scope of work as the HRE; referred to herein as the Left Coast report). The Left Coast report presents the following conclusion:

It does not appear that the proposed project will affect the continued eligibility of the 25th Street Garage District API. The District currently retains integrity; of the 24 contributing resources that were present at designation, 22 remain, which is more than 91% and represents an adequately high concentration of contributing properties. The proposed project will affect 4 contributing properties, but will retain and rehabilitate them for the most part, making some alterations to serve adaptive reuse and making vertical additions that are respectful in setback and character to minimize visual impact. By rehabilitating the front facades and maintaining the front 30 [feet] of the contributing buildings, where all character defining features are located and typical scale and massing is well represented, the proposed project preserves the visual character of the District as seen from the Street. Infill and additions are neutral and differentiated in design aesthetics. They are concentrated toward the center of the block and the new tower at the southwest corner of the project site, locating them close to or outside of the District boundaries. This keeps visual intrusion to the edge of the District and avoids degrading the historic feel at the heart of the District. The preservation of the front sections of the contributing buildings does not appear to interfere with the current significance or integrity of the District, which retains strong character throughout its area and still conveys its historic significance in a high concentration of contributing properties. [As designed, the proposed project conforms with all 10 Secretary of the Interior's Standards for Rehabilitation.]<sup>1</sup>

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<sup>1</sup> Left Coast Architectural History. *Historic Status Verification and Secretary of the Interior's Standards Analysis for 442 and 450 24th Street, 459-461 and 465 25th Street*, p. 15. Prepared for Northgate 8 Investors, LLC, March 23, 2020.

Overall, ESA concurs that, following the completion of the proposed project, the 25th Street Garage District would retain the majority of its character-defining features (CDFs) and, thus, its ability to convey its historical significance as a “concentrated, intact, and homogeneous group of buildings of a distinctive type, dating from a specific period of Oakland’s economic development.”<sup>2</sup> District contributors primarily date to the 1920s and functioned as auto repair and mechanical shops. Notable prominent views include the 25th Street corridor, which is the geographic center of the district.<sup>3</sup> The proposed project would maintain the overall architectural character of the district as a concentration of auto garages from the first half of the 20th century and is primarily located along the southern district boundary. Therefore, the proposed project would have a less-than-significant impact on the 25th Street Garage District.

However, ESA disagrees that the two subject buildings with frontage on 25th Street would continue to contribute to the significance of the district because the extent of alterations is tantamount to demolition. As designed, the project would reduce the number of contributing properties from 24 (as originally documented in 1985) to 22 (as currently exist at this writing) to 20 (as a result of the proposed near-complete demolition of 459-461 and 465 25th Street), which represents a 13.8% reduction in the concentration of contributing buildings. Additionally, we believe that further analysis is required in order to demonstrate compliance with all 10 Secretary of the Interior’s Standards for Rehabilitation.

## Description of the 25th Street Garage District API

The 25th Street Garage District was first documented in 1985 as part of the Oakland Cultural Heritage Survey as a concentration of service and industrial buildings, the majority of which have historically functioned as automotive garages. Constructed between 1905 and 1929, these buildings represent the growing popularity of the nascent automobile industry and the proliferation of automobile-related businesses. While dealerships were located on Broadway, automobile service garages were located on the side streets.<sup>4</sup> The boundaries of the 25th Street Garage District are somewhat irregular and generally encompass the area between 26th Street on the north, 24th Street on the south, Broadway on the east, and Telegraph Avenue on the west. More specifically, the district includes some buildings on the south side of 26th Street, on the north and south sides of 25th Street, and on the north side of 24th Street, as well as the buildings at the intersection of 24th Street and Broadway. A map of the district is included on page 11 of the 1985 district inventory form.

“Significant as a concentrated, intact, and homogeneous group of buildings of a distinctive type, dating from a specific period of Oakland’s economic development,” the 25th Street Garage District was found to be eligible for listing in the National Register of Historic Places (National Register); as such, it is automatically also eligible for listing in the California Register of Historical Resources (California Register).<sup>5</sup> The City of Oakland has designated the 25th Street Garage District as an area of primary interest (API), meaning that it is considered to be eligible for listing in the National Register and California Register. Although the original documentation does not identify the significant criteria, based on the statement of significance quoted above, it can be reasonably concluded that the district is eligible under Criteria A/1 (Events) related to “a specific period of Oakland’s

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<sup>2</sup> Oakland Cultural Heritage Survey. California Department of Parks and Recreation (DPR) 523 District Record for the 25th Street Garage District. June 30, 1985, p. 2.

<sup>3</sup> Ibid., pp. 2-9.

<sup>4</sup> Ibid., pp. 1-5.

<sup>5</sup> Ibid., p. 2.

economic development,” and C/3 (Architecture) as a “concentrated, intact, and homogeneous group of buildings of a distinctive type.”

As originally documented, the district included a total of 29 properties; of these, 24 were identified as contributors, and five were identified as non-contributors. The author of the Left Coast report explains that, while the 1985 documentation does not identify a period of significance, the contributors date from 1905 to 1929.<sup>6</sup> Included in the Left Coast report is a table with addresses of all 29 properties, their contributory status as documented in 1985, and their updated contributory status based on conditions in March 2020. It is important to note that two contributors have been demolished since 1985, reducing the number of contributors to 22.<sup>7</sup>

## Character-Defining Features

Although the original documentation does not explicitly identify character-defining features (CDF) of the 25th Street Garage District API, the Left Coast report lists the following CDFs:

- Service or industrial uses, not retail, the majority functioning as automotive garages;
- One-story, though often double-height, sometimes incorporating mezzanine levels;
- Standard lot sizes measuring 50 feet by 118 feet;
- No setbacks from lot lines (front, sides, or rear);
- Brick construction, often integrating hollow clay tile and concrete or wood support posts;
- Wood truss roofs with stepped or peaked parapets at the front;
- Pressed brick facades, often incorporating polychrome brick or decorative bonds;
- Ornament and decorative features confined to front façades only;
- Large multi-lite metal-sash windows; and
- Glazed and paneled wood folding vehicles doors, though often replaced with metal roll-up doors.<sup>8</sup>

ESA confirms the presence of the above CDFs and has identified the following additional CDFs of the 25th Street Garage District API:

- Openings generally flush with the exterior façade;
- Combination of pedestrian and vehicular openings on the primary facades; and
- Narrow streets with a general lack of trees, especially through the center of the district along 25th Street.

## Changes Within the API Since 1985

The Left Coast report identifies four projects constructed (or currently under construction) within the district since it was documented in 1985:

- 2401 Broadway Project (under construction): a six-story hotel will be constructed on four parcels that include a two-story auto showroom and garage (2401-2411 Broadway/400 24th Street), a one-story body shop (431-439 25th Street), and two surface parking lots.<sup>9</sup> The auto showroom and garage, which was originally identified as a contingency district contributor, was determined to be a non-contributor in a 2017 historic resource evaluation (HRE). The body shop was originally identified as a district contributor

<sup>6</sup> Left Coast Architectural History. *Historic Status Verification*, p. 4.

<sup>7</sup> Left Coast Architectural History. *Historic Status Verification*, pp. 5-6.

<sup>8</sup> Left Coast Architectural History. *Historic Status Verification*, p. 11.

<sup>9</sup> City of Oakland, *2401 Broadway Project CEQA Analysis IPLN16-246*, September 2017.

and determined to be a contributor in the 2017 HRE. The project originally called for retention and restoration of portions of the façades on Broadway and 24th Street. As of December 2020, the project has been modified to demolish all portions of the building at 2401-2011 Broadway/400 24th Street.

The project also includes adaptive reuse and rehabilitation of 431-439 25th Street (district contributor) with an addition above. The building would remain a district contributor.<sup>10</sup>

- 469 25th Street: a one-story industrial building replaced a one-story brick garage building (originally a district contributor). Upon inspection, the garage does not appear to have been replaced; rather, the façade was reconstructed. However, it no longer resembles the original building. According to the City of Oakland Zoning Map the building is currently rated “Dc1+,” meaning that it remains a contingency contributor to the API despite being altered.<sup>11</sup>
- 448 25th Street (non-contributor): a one-story metal warehouse was constructed on part of a previously vacant lot
- 385 26th Street (non-contributor): a one-story concrete block industrial building was constructed on a previously vacant lot

ESA has identified the following additional changes:

- 447 25th Street (district contributor): a one-story rooftop addition was constructed above a one-story-plus-mezzanine building
- 426-20 25th Street (district contributor): façade has been remodeled including infill of large windows, infill and enclosure of vehicular door, and the addition of stucco over the entire façade
- 426 25th Street (district contributor): the façade has been modified with infill with new brick masonry of the large windows flanking the central vehicular entrance. A new pedestrian door is located in the western infilled bay
- 450-454 25th Street (district contributor): Demolished
- 478 25th Street (district contributor): the building footprint has been reduced to accommodate a new building at the rear of the lot. On the 25th Street façade, all openings have been altered. The former asymmetrically placed vehicular entry (west) and large window opening with pedestrian door (east) have been replaced with two industrial window units, with an integrated pedestrian door (west). The new openings are symmetrically placed, smaller in width, and cover less of the front façade than the former arrangement. The intervening space has been filled with brick masonry and the entire building painted. Along the east elevation, four large new openings have been cut into the wall.

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<sup>10</sup> Carey & Co., *Historic Resource & Project Evaluation for 2401 Broadway, Oakland, California*, August 29, 2017.

<sup>11</sup> It is more likely that this rating was not updated after completion of the current work. It remains similar in scale and footprint but bears no resemblance to the prior building.

- 489-92 25th Street (non-contributor): east window opening has been modified for a recessed pedestrian door and flanking sidelines.
- 365-67 26th Street (district contributor): bays 1, 3, and 5 are noted as filled with concrete block on the 1985 OCHS form. They are now filled with windows covered by custom perforated metal panels.
- 379-81 26th Street (district contributor): western window and pedestrian door bays have been slightly modified. The window bay now extends to grade and is filled with modern industrial steel windows. The original pedestrian door has been replaced with modern industrial steel windows and a solid panel pedestrian door.
- 401-03 26th Street (district contributor): pedestrian door has been infilled with brick masonry. Original header course remains, and infill matches the rest of the façade in brick color and size.

In total, it appears that two district contributors have been demolished and/or substantially altered since 1985 (469 25th Street and 450-454 25th Street). Moderate modifications have been made to 478 25th Street, including a reduction in the original footprint of the building. A number of modifications have occurred related to altering façade fenestration patterns through infill, reduction or increase in the size of openings, removal of vehicular entrances, and relocation of entrances. Within the district there have been four new buildings constructed (385 26th Street, 440 25th Street, 469 25th Street, and 2401-2411 Broadway/400 24th Street) that range in height from one to seven stories.

Surrounding the district is a range of building types that include light industrial garages and warehouses, multi-family residential buildings, and mixed-use commercial/residential buildings. Those properties that are immediately adjacent to, and share a property boundary with, the district range in height from one to seven stories. It should be noted that only three parcels are four or more stories (437 26th Street, 498 25th Street, and 2401-2411 Broadway/400 24th Street) and are located near the northwest and southeast corners of the district. All remaining adjacent parcels are occupied by buildings ranging from one to three stories.

## Peer Review

### Characterization of the Proposed Project as a Rehabilitation

The Left Coast report characterizes the proposed project as one that “will retain and rehabilitate...for the most part” four contributing buildings to the National Register-eligible 25th Street Garage District that is also an Area of Primary Importance (API). After careful consideration, ESA respectfully disagrees that the proposed project can rightly be considered a rehabilitation, as defined by *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*.

With regard to the two contributing buildings with frontage on 25th Street (i.e., 459-461 and 465 25th Street, the former of which was identified in the 1985 district record as “a good example of 1920s decorative brickwork and storefront design” and the latter as “one of the more intact buildings in the district, and as one of four by the same

builder and developer, it helps establish a recurring theme”<sup>12</sup>), ESA conservatively estimates that more than 80 percent of the conjoined building envelopes would be removed as part of the proposed project.<sup>13</sup> Not only would proposed alterations be tantamount to the demolition of two district contributors and a clear example of facadism (i.e., retaining only the façade), it would demolish some CDFs of the district, namely “brick construction, often integrating hollow clay tile,” “wood truss roofs,” “large multi-lite metal sash windows,” and “glazed and paneled wood folding vehicle doors.”

The Left Coast report misrepresents the extent of these alterations by describing them as follows: “The proposed project seeks to retain the four extant buildings, which are District contributors. It will retain the exterior walls of each building, while reinforcing the original masonry structural systems. It will install new roofs [...]”<sup>14</sup> Additionally, ESA feels that the Left Coast report reduces the architectural significance of the district contributors by characterizing “portions of the contributing buildings [as] not considered significant nor bear character-defining features; namely, side and rear façades and the rear portions of roofs.”<sup>15</sup> So much of the buildings would be removed, that only portion of the original material would remain and that portion would be largely a decorative treatment to the new construction behind it.

With regard to the two contributing buildings with frontage on 24th Street (i.e., 442 and 450 24th Street, the former of which was identified in the 1985 district record as a “primary or possible primary [resource]” that possesses “outstanding design quality” and the latter as “somewhat unusual”), ESA estimates that approximately 20 percent of the conjoined building envelopes would be removed as part of the proposed project.<sup>16</sup> Although the proposed project would retain the majority of original exterior materials of these two buildings and they would continue to qualify as district contributors, the proposed project would demolish some CDFs of the district, namely “brick construction” (in limited areas) and “wood truss roofs.”

ESA asserts that if the proposed project as designed is indeed subject to the Standards for Rehabilitation, it would not comply with Standards 2 and 5, as a result of the extensive removal of historic materials that characterize the 25th Street Garage District from four district contributors.

## **Massing Within 25th Street Garage District**

ESA feels that the Left Coast report provides insufficient analysis of the massing of new/recent and proposed construction within the 25th Street Garage District relative to the characteristic massing of the district itself.

As listed above, the Left Coast report identifies four buildings constructed (or currently under construction) within the district since it was documented in 1985. With the exception of the newly constructed building on

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<sup>12</sup> Oakland Cultural Heritage Survey. California Department of Parks and Recreation (DPR) 523 Form-sets for 459-461 and 465 25th Street. Compiled as part of the DPR 523 District Record for the 25th Street Garage District. June 30, 1985.

<sup>13</sup> This estimate is based on the complete removal of both side walls and the shared rear wall, the nearly complete removal of the two roof structures and coverings, and the retention of the floor/foundation and primary façade. It does not include the complete removal of the shared interior wall, partial removal of the primary façade, or the potential removal and replacement-in-kind of original doors and windows. It also does not include the demolition of the non-historic rear addition or the removal of other non-historic materials.

<sup>14</sup> Left Coast Architectural History, p. 9.

<sup>15</sup> *Ibid.*, p. 14.

<sup>16</sup> This estimate is based on the complete removal of the two roof structures and coverings, the partial removal of the west wall, and the retention of the floor/foundation and the primary façades. It does not include the partial removal of the shared interior wall or removal of non-historic materials.

Broadway (2401-2411 Broadway/400 24th Street), which is a relatively heavily trafficked and wide thoroughfare compared to the numbered side streets, none of this recent construction appears to be in conflict with the height and massing that characterizes the 25th Street Garage District. The Left Coast report does not sufficiently justify why the proposed project, which would construct 45-foot-tall additions to four one-story district contributors and a 85-foot-tall addition adjacent to the district and physically interconnected to three district contributors, would be compatible with the 25th Street Garage District, whose character is defined in part by its one-story height.

The architectural drawing set dated November 18, 2019, misrepresents the height of a number of buildings within and in the immediate vicinity of the 25th Street Garage District.<sup>17</sup> Notably, the building at 447 25th Street (adjacent to the project site and within the historic district boundaries) is incorrectly shown as three stories, when it is actually a one-story-plus-mezzanine building with a small, non-historic rooftop addition.<sup>18</sup> This building is represented as being two stories taller than all adjacent buildings when in fact it is less than 10 feet taller and well below the allowable height of 45 feet above grade.<sup>19</sup> As a result, the Left Coast report's analysis concerning height and massing of contributing buildings adjacent to the project site should be revisited in order to address any inaccuracies presented in the drawings.

## Proposed Rooftop Additions to District Contributors

According to the following guidance provided in the National Park Service's *Preservation Brief 14: New Exterior Additions to Historic Buildings – Preservation Concerns*, the proposed rooftop additions to the four district contributors, as designed, would be incompatible with the district and would not conform with Standards 9 and 10.

Generally, a rooftop addition should not be more than one story in height to minimize its visibility and its impact on the proportion and profile of the historic building [or in this case, the historic district]. A rooftop addition should almost always be set back at least one full bay from the primary elevation of the building, as well as from the other elevations if the building is free-standing or highly visible.

It is difficult, if not impossible, to minimize the impact of adding an entire new floor to relatively low buildings, such as small-scale residential or commercial structures, even if the new addition is set back from the plane of the façade. Constructing another floor on top of a small, one, two, or three-story building is seldom appropriate for buildings of this size as it would measurably alter the building's proportions and profile, and negatively impact its historic character.<sup>20</sup>

## Proposed Tower

Although the proposed tower would be constructed outside the boundaries of the 25th Street Garage District, it is important to note that it would be adjacent to the district and physically interconnected to three district contributors (i.e., the subject buildings). By this definition, the tower would qualify as “related new construction”

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<sup>17</sup> The heights of multiple buildings shown on sheets A1.5 and A1.6 do not match the building heights provided by the Alameda County Assessor.

<sup>18</sup> According to the Alameda County Assessor, 447 25th Street is a one-story building. The building height is incorrectly stated on sheets A1.5 and A1.6.

<sup>19</sup> By counting the number of brick courses, it appears that 447 25th Street is approximately 32 feet tall, 443 25th Street is approximately 23.5 feet tall, and 459-461 25th Street is approximately 23.5 feet tall.

<sup>20</sup> Anne E. Grimmer and Kay D. Weeks. *Preservation Brief 14: New Exterior Additions to Historic Buildings – Preservation Concerns*, p. 12.



to the district contributors and to the district itself, which is subject to analysis under Rehabilitation Standards 9 and 10. For these reasons, ESA disagrees with the Left Coast report's statement that, "The proposed tower [which] is located outside of District boundaries [...] will not affect any materials within the District or necessitate strong compatibility in scale, massing, features, etc."<sup>21</sup>

According to the following recommendations specifically for "related new construction" presented in *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*, the proposed tower, as designed, would be incompatible with the district and would not conform with Standards 9 and 10.

- Locate new construction far enough away from the historic building [or in this case the district], when possible, where it will be minimally visible and will not negatively affect the building's [or district's] character, the site, or setting.
- Consider the design for related new construction in terms of its relationship to the historic building as well as the historic district and setting.
- Ensure that new construction is secondary to the historic building [or district] and does not detract from its significance.
- Design an addition to a historic building [or district] in a densely-built location (such as a downtown commercial district) to appear as a separate building or infill, rather than as an addition. In such a setting, the addition or the infill structure must be compatible with the size and scale of the historic building [or district] and surrounding buildings—usually the front elevation of the new building should be in the same plane (i.e., not set back from the historic building). This approach may also provide the opportunity for a larger addition or infill when the façade can be broken up into smaller elements that are consistent with the scale of the historic building and surrounding buildings.<sup>22</sup>

## Analysis of the Project Regarding Historic Design Review Criteria

Per Planning Code Section 17.136.075, projects that would demolish or remove designated or potentially designated historic properties are subject to regular design review. Approval for the demolition or removal of a building(s) located within an API may be granted only if the proposed project conforms to the general design review criteria, all other applicable design review criteria, and the following additional criteria:

- C1a. The applicant demonstrates that: i) the existing property has no reasonable use or cannot generate a reasonable economic return and that the development replacing it will provide such use or generates such return, or ii) the applicant demonstrates that the structure constitutes a hazard and is economically infeasible to rehabilitate on its present site. For this criterion, a hazard constitutes a threat to health and safety that is not immediate;

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<sup>21</sup> Left Coast Architectural History, p. 15.

<sup>22</sup> U.S. Department of the Interior, National Park Service, Technical Preservation Services. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. Rev. 2017, pp. 161-162.

- C1b. It is economically, functionally architecturally, or structurally infeasible to incorporate the historic structure into the proposed development;
- C3a. The design quality of the replacement structure is equal/superior to that of the existing structure;
- C3b. The design of the replacement project is compatible with the character of the district, and there is no erosion of design quality at the replacement project site and in the surrounding area. This includes, but is not necessarily limited to, the following additional findings:
  - i. The replacement project is compatible with the district in terms of massing, siting, rhythm, composition, patterns of openings, quality of material, and intensity of detailing;
  - ii. New street frontage includes forms that reflect the widths and rhythm of the facades on the street and entrances that reflect the patterns on the street;
  - iii. The replacement project provides high visual interest that either reflects the level and quality of visual interest of the district contributors or otherwise enhances the visual interest of the district;
  - iv. If the design contrasts the new to the historic character, the replacement project enriches the historic character of the district;
  - v. The replacement project is consistent with the visual cohesiveness of the district. For the purpose of this item, visual cohesiveness is the architectural character, the sum of all visual aspects, features, and materials that defines the district. A new structure contributes to the visual cohesiveness of a district if it relates to the design characteristics of a historic district. New construction may do so by drawing upon some basic building features, such as the way in which a building is located on its site, the manner in which it relates to the street, its basic mass, form, direction or orientation (horizontal vs. vertical), recesses and projections, quality of materials, patterns of openings and level of detailing. When a combination of some of these design variables are arranged in a new building to relate to those seen traditionally in the area, but integral to the design and character of the proposed new construction, visual cohesiveness results; and
  - vi. The replacement project will not cause the district to lose its current historic status.

## General Analysis

As demonstrated above, the proposed project would result in the demolition of two contributing buildings with frontage on 25th Street (i.e., 459-461 and 465 25th Street) and remove CDFs from the two contributing buildings with frontage on 24th Street (i.e., 442 and 450 24th Street).

To ESA's knowledge, the applicant has not demonstrated that the rehabilitation and adaptive reuse of the two contributing buildings on 25th Street would be economically infeasible or that it would constitute a threat to health and safety or that it would be economically, functionally, architecturally, or structurally infeasible to

incorporate into the proposed development. Unless the applicant presents a claim of infeasibility, the proposed project would not conform with criteria C1a and C1b.

A detailed analysis of the design quality of the proposed project is beyond the scope of this memo (criterion C3a).

Regarding the compatibility of the proposed project with the character of the 25th Street Garage District API under design review criterion C3b, it should be reiterated that ESA concludes that the proposed project would not conform with Standards 2, 5, 9, and 10. The above analysis illustrates that the project is not compatible with the district in terms of massing and height (C3b.i). As the project would retain and rehabilitate the façades of the four district contributors, it would conform with criterion C3b.ii. Because the visual interest of the district is primarily embodied in the façades of its contributors, the retention and rehabilitation of the façades would conform with criterion C3b.iii. As the proposed project would remove historic materials and eliminate the industrial use of the district from four contributors and also be incompatible with the district in terms of height and massing, it certainly contrasts with the historic character of the district. While contrasting projects can be approved if they are demonstrated to enrich (i.e., increase/improve/enhance the quality or significance of) the historic character of the district, the proposed project would detract from – not enrich – the historic character of the 25th Street Garage District and would not conform with criterion C3b.iv.

Because the project fronts two streets within the district, it is important to consider the contribution that it will make to the cohesiveness both to the overall district and to the particular character of the district on each of those streets. 25th Street is the central spine of the 25th Street Garage District. Twenty buildings are located within the district. Of these, 16 are one story in height, three are two stories, and one is two stories with a small rooftop addition. Looking through the district on 25th Street, the buildings are mostly uniform in height and the low scale creates a sense of openness. On 24th Street, there are only three remaining buildings within the district. Two are one story in height and one is five stories. This street is mostly lined with taller buildings: three are one story in height, five are two stories, four are three stories, and three are four or more stories. The scale of the buildings makes the street feel narrower, and the sense of openness and uniformity that exists on 25th street is lacking.

The proposed project is inconsistent with the visual cohesiveness of the district both in scale and massing. The rest of the district has taller buildings concentrated at the periphery of the district along Broadway and Telegraph Avenue, and the project introduces that mass at the center of a block. Visually, this reduces the feeling of openness within the district and is inconsistent with the scale of surrounding buildings. It does not respond to or enhance the “architectural character, the sum of all visual aspects, features, and materials that [define] the district” as is stated in criterion C3b.v. Even where that massing is set back from the street wall by 30 feet, it remains visible because of the overall low scale of the buildings surrounding it.

Since 1985, two contributing buildings have been demolished and one has been extensively modified but retains its general scale and industrial character and one is currently under construction with a two-story, 45-foot addition to the current one-story building. Two non-contributing buildings have also been demolished. Today there remain 25 of the original 29 identified buildings, and 23 of the 29 retain their full original footprints. This project would result in reductions in footprint and additions in height to four district contributors, including a primary contributor. While these changes are substantial to the four contributors in question, the overall district remains substantially intact. Most changes have occurred along 24th Street at or adjacent to the district. This project continues that trend. While those portions along 24th Street will be compromised, the majority of the district

along 25th and 26th streets would remain unaltered and its significance would remain. The project would be compliant with Criterion 3b2.vi.

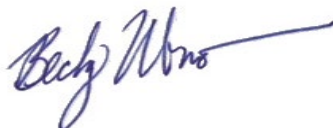
## Conclusion

In summary, ESA concurs with the author of the Left Coast report that the impact of the proposed project on the 25th Street Garage District would be less than significant because the district would continue to convey its historical significance and retain the majority of its contributing buildings. Changes are primarily concentrated at the periphery of the district, leaving the core largely unaltered. As the proposed project would remove historic materials and eliminate the industrial use of the district from four contributors and also be incompatible with the district in terms of height and massing, it contrasts with the historic character of the district. Despite these changes to individual district contributors and to the character of the district, the district as a whole would retain all of its character-defining features (while losing relatively small quantities of historic materials) and therefore retain sufficient integrity to convey its historical significance.

However, ESA disagrees with several report findings regarding the proposed project design. First, we believe that the Left Coast report's characterization of the proposed project as a rehabilitation is not correct. Second, we dispute the conclusion that the two subject buildings with frontage on 25th Street would remain contributors to the district following completion of the proposed project. Finally, ESA believes that additional analysis is required pertaining to massing, height, and compatibility of elements of the proposed project relative to the 25th Street Garage District in order to justify full conformance with the Standards for Rehabilitation. As presented, the conclusion of compliance with the Standards is not supported.



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**442 and 450 24th Street, 459-61 and 465 25th Street  
Oakland, California**

Historic Status Verification & Secretary of the Interior's Standards Analysis

Prepared for:

Northgate 8 Investors, LLC

23 March 2020

L E F T C O A S T A R C H I T E C T U R A L H I S T O R Y



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## INTRODUCTION

This memorandum was prepared by Caitlin Hibma of Left Coast Architectural History (Author), who meets and exceeds the Secretary of the Interior's Professional Qualification Standards for Architectural History. The report was produced for Northgate 8 Investors, LLC (Project Sponsor). It pertains to the following properties (Subject Properties) that are located within Oakland's 25<sup>th</sup> Street Garage District Area of Primary Importance (District):

Parcel No.	Street Address(es)	Buildings on Parcel
8-674-6	442 24 <sup>th</sup> Street	(1) One-story, brick masonry, automotive garage, built 1929-30
8-674-7	450 24 <sup>th</sup> Street	(1) One-story and mezzanine, brick masonry, automotive garage, built 1928
8-674-33-1	459-61 25 <sup>th</sup> Street 465 25 <sup>th</sup> Street	(2 + addition) Two one-story, brick and hollow clay tile, automotive garage buildings, built 1926 and 1927, respectively and a non-historic hollow clay tile addition spanning the rear of both buildings (addition located outside of the District).

## EXECUTIVE SUMMARY

This report includes verification of the current historic status, integrity, and continued designation eligibility of the 25<sup>th</sup> Street Garage District API, which is a locally designated historic district and is considered eligible for the California Register of Historical Resources and the National Register of Historic Places. The status, integrity, and district contribution of the Subject Properties to the 25<sup>th</sup> Street Garage District API is also verified here. Additionally, the project currently proposed by the Project Sponsor is evaluated according to the Secretary of the Interior's Standards for the Treatment of Historic Properties in regard to its effects on the 25<sup>th</sup> Street Garage District API.

## Methodology

In conducting this analysis, the Author met with the Project Sponsor and project architect and performed a site visit on 23 October 2019 to view the Subject Properties, component buildings and structures of the 25<sup>th</sup> Street Garage District API, and surrounding neighborhood context.

Information obtained from the Project Sponsor included a set of proposed project drawings and renderings entitled "460 24<sup>th</sup> Street" by Flynn Architecture, dated 18 November 2019.

Research was performed at the Oakland Cultural Heritage Survey archives, where information on each of the Subject Properties was gathered, along with general information about the 25<sup>th</sup> Street Garage District API. Materials consulted included:

- California Department of Parks & Recreation (DPR) 523 District Record for "25<sup>th</sup> Street Garage District," by Oakland Cultural Heritage Survey staff, 30 June 1985.
- DPR 523 Primary and Building, Structure, Object records for each of the four buildings on the Subject Properties, by Oakland Cultural Heritage Survey staff, 30 June 1985.
- Updated DPR 523 Primary and Building, Structure, Object records for each of the four buildings on the Subject Properties, by Oakland Cultural Heritage Survey staff, 30 September 1994; updated as part of the citywide inventory of unreinforced masonry (URM) buildings.

- Individual building files (by address) for the four buildings on the Subject Properties, including survey notes, historic photos, Sanborn Fire Insurance maps, and other data.
- General file for the 25<sup>th</sup> Street Garage District, including research notes, articles, maps, city directory research, and other information pertaining to the historic background of the district and its automotive and industrial uses.

The historic documentation above was compared to current conditions in the District, which were observed during the site visit, and synthesized to determine the continuing integrity and, thus, National Register eligibility of the 25<sup>th</sup> Street Garage District. The same exercise was done to determine the continuing integrity and edibility of the buildings on the Subject Properties as contributors to the larger District. In so doing, the seven aspects that define integrity (as defined by the National Park Service) were assessed:

Location is the place where the historic property was constructed.

Design is the combination of elements that create the form, plans, space, structure and style of the property.

Setting addresses the physical environment of the historic property inclusive of the landscape and spatial relationships of the building/s.

Materials refer to the physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the historic property.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history.

Feeling is the property's expression of the aesthetic or historic sense of a particular period of time.

Association is the direct link between an important historic event or person and a historic property.

Conclusions regarding the integrity and eligibility of the District and the Subject Properties was subsequently the basis for an analysis of the proposed project's effects on the District according to the Secretary of the Interior's Standards for Rehabilitation (Standards). The Standards applied are as follows, with the "property" or historic resource being the 25<sup>th</sup> Street Garage District:

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own



right shall be retained and preserved.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8. Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

## **HISTORIC STATUS VERIFICATION**

### **25<sup>th</sup> Street Garage District API**

The 25<sup>th</sup> Street Garage District API was surveyed and documented in June 1985 by the Oakland Cultural Heritage Survey. It is documented on California Department of Parks and Recreation (DPR) 523 forms; generic "Historic Resource Inventory" forms, which would constitute a DPR 523 D: District Record by current standards. The significance evaluation concluded that the District was eligible for listing in the National Register of Historic Places. By default, this would also make it eligible for the California Register of Historical Resources and as a local Preservation District. The District has never been formally designated at any of these levels, but is recognized as an Area of Primary Importance and effectively considered to be a National Register-eligible historic district for planning purposes.

The 25<sup>th</sup> Street Garage District documentation states that the District consists of 29 properties total, including 24 contributing properties, and 5 non-contributing properties. It is noted that one property (2355 Broadway) is a primary contributor, meaning that it is individually eligible for the National Register above and beyond its contribution to the District, and that another (442 24<sup>th</sup> Street, one of the Subject Properties) has the potential to be a primary contributor if it were restored. Of the 5 non-contributing properties, two have the potential to contribute if restored (2401-11 Broadway/400 24<sup>th</sup> Street and 483 25<sup>th</sup> Street), while three were built later than the District's effective 1905-1929 period of significance (456, 482, and 489-93 25<sup>th</sup> Street). It should be noted that although no formal period of significance is named in District documentation, contributing properties are described as dating from as early as 1905 through 1929, after which an approximately decade-long lull in

construction establishes a logical end point for a period of significance.

The table below provides the addresses of the 29 properties in the District and the status they were assigned at the time the District was documented in 1985. Also shown, is the apparent status today, based on windshield-level survey performed by the Author. Statuses remaining the same between 1985 and today indicate no major change in physical integrity, while changed status are typically the result of major alterations, demolition, or other developments, as described in the notes.

Address	Status per District Record	Status Today/Notes
2355 Broadway/415 24 <sup>th</sup> Street	Primary contributor	Primary contributor
2401-11 Broadway/400 24 <sup>th</sup> Street	Contingency contributor	Non-contributor; demolished for new construction currently in progress
442 24 <sup>th</sup> Street	District contributor/contingency primary contributor	District contributor/contingency primary contributor; no restoration has taken place to justify elevation to primary contributor status
450 24 <sup>th</sup> Street	District contributor	District contributor
416-20 25 <sup>th</sup> Street	District contributor	District contributor; although facade alterations have been made, including stucco siding and infill of openings, building retains general form, features, and historic associations that support District character.
426 25 <sup>th</sup> Street	District contributor	District contributor; although facade alterations have been made, including infill of display window openings, building retains general form, features, and historic associations that support District character.
431-39 25 <sup>th</sup> Street	District contributor	District contributor; although facade alterations have been made, including removal of display windows, building retains general form, features, and historic associations that support District character.
434 25 <sup>th</sup> Street	District contributor	District contributor
443 25 <sup>th</sup> Street	District contributor	District contributor
447 25 <sup>th</sup> Street	District contributor	District contributor
450-54 25 <sup>th</sup> Street	District contributor	Non-contributor; demolished, now a surface parking lot
456 25 <sup>th</sup> Street	Non-contributor	Non-contributor
459-61 25 <sup>th</sup> Street	District contributor	District contributor; blade sign removed
465 25 <sup>th</sup> Street	District contributor	District contributor

468-70 25 <sup>th</sup> Street	District contributor	District contributor
469 25 <sup>th</sup> Street	District contributor	Non-contributor; demolished and replaced with new one-story industrial building that is compatible with District character.
471-73 (471-75) 25 <sup>th</sup> Street	District contributor	District contributor. (Address numbering has changed, see current number in parentheses in address column.)
475 (477) 25 <sup>th</sup> Street	District contributor	District contributor. (Address numbering has changed, see current number in parentheses in address column.)
478 25 <sup>th</sup> Street	District contributor	District contributor; although facade alterations have been made, including alteration of openings, building retains general form, features, and historic associations that support District character.
481 25 <sup>th</sup> Street	District contributor	District contributor
482 25 <sup>th</sup> Street	Non- contributor	Non-contributor
483 25 <sup>th</sup> Street	Contingency contributor	Contingency contributor; no restoration has taken place to justify elevation to contributor status.
484-90 25 <sup>th</sup> Street	District contributor	District contributor
489-93 25 <sup>th</sup> Street	Non-contributor	Non-contributor; has also undergone additional alterations to left window/now entrance.
365-67 26 <sup>th</sup> Street	District contributor	District contributor
373-75 26 <sup>th</sup> Street	District contributor	District contributor
379-81 26 <sup>th</sup> Street	District contributor	District contributor
391-95 (401) 26 <sup>th</sup> Street	District contributor	District contributor. (Address numbering has changed, see current number in parentheses in address column.)
401-03 (403?) 26 <sup>th</sup> Street	District contributor	District contributor; center tab on parapet removed. (Address numbering has changed, see current number in parentheses in address column.)

Based on the information in the table above, the District has experienced the following shift in the number of contributing and non-contributing properties:

- 1 primary contributing property remains 1 primary contributing property
- 23 contributing properties has decreased to 21 contributing properties
- 2 contingency contributing properties has decreased to 1 contingency contributing property
- 3 non-contributing properties has increased to 6 non-contributing properties

This results in an overall decrease in contributing properties from 24 to 22 and an increase in non-contributing properties from 5 to 7. In a district of 24 contributing properties, the loss of 2 contributors represents only a 6.9% reduction in the District's concentration of contributing properties and is not considered detrimental to the integrity and viability of the District.

Alterations and changes within the District may also be considered, and it was found that about 4 of the contributing properties had undergone notable alterations since the original District documentation in 1985. However, in all cases, the alterations did not destroy or obscure the general form, basic features, or historic associations of the properties, which continue to support District character and integrity.

It may also be noted, that since 1985 4 new buildings have been constructed (or are under construction) within the District, either replacing existing buildings (in 2 instances) or occupying previously vacant parcels (in 2 instances). These new buildings include:

- 2401-2411 Broadway/400 24<sup>th</sup> Street – Six-story hotel retaining portions of historic facade along 24<sup>th</sup> Street but otherwise Modern in aesthetic, replacing a two-story previously-altered Classical Revival style auto showroom and garage.
- 469 25<sup>th</sup> Street – One-story, industrial building with gabled roof, peaked parapet, unadorned concrete/stucco facade with center garage entrance, replacing a one-story brick garage building with stepped parapet.
- 448 25<sup>th</sup> Street – Large corrugated metal warehouse building with gable roof and garage entrances on east facade, located on previously vacant lot.
- 385 26<sup>th</sup> Street – Narrow rectangular, one-story, concrete block industrial building with flat roof and brick facade with large storefront windows, located on previously vacant lot.

The buildings that have been added to the District since its documentation are generally compatible with the character of the District. The buildings at 469 25<sup>th</sup> Street and 385 26<sup>th</sup> Street are in-keeping with the size, form, materials, and features of other District contributors, with little modern differentiation. The building at 448 25<sup>th</sup> Street is larger in scale and of different materials than are typical in the District, but is compatible with overarching industrial forms, materials, and character. The building under construction at 2401-2411 Broadway/400 24<sup>th</sup> Street retains elements of historic architecture at street level, creating a visual impression of smaller scale and traditional features and ornamentation, while upper stories of the building contrast dramatically in their Modern styling.

In conclusion, it appears that the 25<sup>th</sup> Street Garage District API retains adequate integrity to the time of its initial 1985 documentation, so that it continues to qualify as a National Register-eligible historic district today.

## Subject Properties

The four buildings located on the Subject Properties – 442 24<sup>th</sup> Street, 450 24<sup>th</sup> Street, 459-61 25<sup>th</sup> Street, and 465 25<sup>th</sup> Street – were all considered to be contributors to the 25<sup>th</sup> Street Garage District when it was documented in 1985. Today, they appear to retain that status based on the fact that no major alterations have been made to the buildings and they appear to retain their integrity, as follows:

Location is the place where the historic property was constructed.

- All four buildings remain in their original locations and have not been moved. Therefore, they retain integrity of location.

Design is the combination of elements that create the form, plans, space, structure and style of the property.

- All four buildings retain their original footprints, heights, and basic plans, which include voluminous interior space to facilitate vehicular use, which was the design intent of all of the buildings. They retain their original construction types including brick and/or hollow clay tile construction and wood and/or metal truss roofs. None have been changed in any way that alters their original architectural style or functional intent. A hollow clay tile addition was appended to the rear of 459-61 and 465 25<sup>th</sup> Street; however, the addition itself lies outside of the District boundaries and does not change the appearance of the buildings as viewed from within the District, nor their functional or historic relationship to the District. Therefore, the buildings retain integrity of design.

Setting addresses the physical environment of the historic property inclusive of the landscape and spatial relationships of the building/s.

- The buildings' setting within the 25<sup>th</sup> Street Garage District has remained relatively unchanged. Alterations and infill in the area have not detrimentally changed the character of the District, which itself retains integrity; therefore, the integrity of setting for the individual buildings is also retained.

Materials refer to the physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the historic property.

- All four buildings retain the majority of their original construction and finish materials and/or altered materials that were present in 1985 and deemed acceptable for contribution to the District. All buildings retain their brick or brick and hollow clay tile construction and wood or metal truss roofs. A few minor material changes have occurred, such as wood panel garage doors replaced with a metal roll-up door at 442 24<sup>th</sup> Street, vinyl sash windows replacing wood on the second story of 450 24<sup>th</sup> Street, and damaged cast concrete "torch" ornaments and a missing blade sign at 459-51 25<sup>th</sup> Street; however, these alterations and instances of damage are minor enough that they do not diminish the overall character of each building in the context of the District, which relies most on a basic materials palette of brick, hollow clay tile, concrete, metal sash, and wood doors and trusses. Therefore, the buildings retain integrity of materials.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history.

- All four buildings continue to express their original workmanship. This is particularly evident in the application of elaborate and multi-colored brickwork on the primary facades, which demonstrates the craft of skilled masons who incorporated various bond patterns and types of brick. The use and application of colored glazed tile on 442 24<sup>th</sup> Street, clay tile roofing on 450 24<sup>th</sup> Street, and cast concrete and plaster ornament on 450 24<sup>th</sup> Street and 459-61 25<sup>th</sup> Street are also examples of early 20<sup>th</sup> century workmanship. Therefore, the buildings retain integrity of workmanship.

Feeling is the property's expression of the aesthetic or historic sense of a particular period of time.

- All four buildings easily evoke the feeling of early 20<sup>th</sup> century automobile garages in their retained one-story rectangular forms, brick facades and other industrial construction materials, and large vehicular entrances. They readily convey both the aesthetics of their time and the use for which they were designed. Therefore, the buildings retain integrity of feeling.

Association is the direct link between an important historic event or person and a historic property.

- The 25<sup>th</sup> Street Garage District and its contributing properties are “significant as a concentrated, intact, and homogeneous group of buildings of a distinctive type, dating from a specific period of Oakland's economic development.”<sup>1</sup> In retaining the location, setting, design, materials, workmanship, and feeling that convey their role as early 20<sup>th</sup> century automotive garages, the Subject Properties retain integrity of association. All operate or operated until recently as automotive facilities; a couple are currently vacant or used for storage. Nevertheless, they retain their utilitarian, industrial character, which supports that of the District as a concentration of industrial and automotive-related properties.

In conclusion, it appears that the extant buildings on the Subject Properties all retain adequate integrity to the time of their initial 1985 documentation, allowing them to continue to qualify as contributors to a National Register-eligible historic district.

## SECRETARY OF THE INTERIOR'S STANDARDS ANALYSIS

### Proposed Project Description

The proposed project site is made up of the three parcels containing four buildings, one non-historic addition, and associated vacant land (parking and storage yard areas) that make up the Subject Properties. The proposed project site will be partially located within the 25<sup>th</sup> Street Garage District, but will also overlap the District boundaries into areas just outside the District; namely the southern portion of parcel 8-674-33-1, which includes the non-historic addition at the rear of 459-461 25<sup>th</sup> Street and 465 25<sup>th</sup> Street, and an area of vacant land that fronts on 24<sup>th</sup> Street.

The proposed project seeks to retain the four extant buildings, which are District contributors. It will retain the exterior walls of each building, while reinforcing the original masonry structural systems. It will install new roofs, so that roof decks can be created, and construct 45' vertical additions set 30' back from the front facades of the buildings. At the southwest corner of the project site (the southern portion of parcel 8-674-33-1 that is outside the District boundaries and occupied only by a non-historic addition and vacant land) an 85' high tower will be constructed. A narrow open paseo will run along the west side of the project site, separating it from properties to the west, which consist of a building outside the District on the south, and a non-contributing/non-historic infill building on the north (468 25<sup>th</sup> Street).

The proposed project will retain and rehabilitate the four contributing buildings on the Subject Properties. As noted, the masonry building envelopes will be retained and seismically reinforced. The facades will be cleaned and repaired, and their materials and features restored, with the following exceptions of rehabilitation-oriented alterations:

- 442 24<sup>th</sup> Street: Previously altered non-historic windows will be replaced with a multi-lite aluminum sash

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1 Oakland Cultural Heritage Survey, “California Department of Parks & Recreation Historic Resources Inventory: 25<sup>th</sup> Street Garage District,” 30 June 1985.

window within the original opening on the left, and with a door on the right located within the elongated original opening. The previously altered non-historic metal roll-up garage doors and arched wood spandrel panel above will be replaced with a fully-glazed aluminum-frame storefront window and door assembly that will have an arched multi-lite transom above. The storefront assembly will fill the original opening and be recessed, though not as deeply as the current doors.

- 450 24<sup>th</sup> Street: The previously altered non-historic garage door at the center of the first story will be removed and replaced with a set of fully-glazed aluminum frame double doors, the upper portion of which will be surrounded by multi-lite aluminum sash windows that fill the upper portion of the original opening. A previously altered non-historic pedestrian door at the left side of the first story will be removed and brick dado and aluminum window sash installed as infill.
- 459-61 25<sup>th</sup> Street: The metal-sash storefront windows and door in the left bay will be restored or replaced-in-kind, depending on condition, and will consist primarily of large plate-glass lites with a multi-lite transom above. The previously altered non-historic metal roll-up garage door in the right bay will be replaced with an aluminum frame storefront assembly to match that in the left bay. Both assemblies will be installed within the original bay openings.
- 465 25<sup>th</sup> Street: The glazed and paneled hinged wood service doors at the center of the facade will be replaced with new glazed multi-lite metal frame doors that will fill the entirety of the opening as the current doors do. The existing window on the right side of the facade will be removed, along with the brick dado below, to create an opening that will access the paseo at the west side of the project site. The west facade of the building will be demolished and a new facade constructed 11'-6" to the east to accommodate the north end of the paseo.

The non-historic hollow clay tile addition at the rear of 459-61 and 465 25<sup>th</sup> Street, which is located outside the District boundaries, will be demolished to make way for the proposed tower.

#### *Vertical Additions*

New construction associated with the proposed project will be simple and Modern in its aesthetics. The vertical addition at the rear of 442 and 450 24<sup>th</sup> Street will be set back 30' and rise to 45' (25' above the existing buildings). It will be clad with painted, smooth, cement plaster and will have a regular fenestration pattern of large, horizontally oriented, black aluminum window sashes with minimal asymmetrical muntins. Perforated flat metal awnings will be located above the windows. The roofline will be flat and unadorned. The north facade of this vertical addition, which will rise above, but not physically connect to, the rear of the contributing buildings at 443 and 447 25<sup>th</sup> Street will have the same characteristics, as well as the same height above the existing rooftops.

Similarly, on the north side of the project site, the vertical addition at the rear of 459-61 and 465 25<sup>th</sup> Street will be set back 36' and rise to 45' (25' above the existing buildings). It will be clad with painted, smooth, cement plaster and will have a regular fenestration pattern of large, horizontally oriented, black aluminum window sashes with minimal asymmetrical muntins. Perforated flat metal awnings will be located above the windows. The roofline will be flat and unadorned.

#### *Infill Along 25<sup>th</sup> Street*

Where there is currently a narrow vacant lot between 459-61 25<sup>th</sup> Street and the neighboring property at neighboring 447 25<sup>th</sup> Street, the project will infill the space at the first and second story levels. The 25<sup>th</sup> Street facade of this infill will have two distinct sections of treatment. On the left (east) will be a section of brick facade

with public art at the ground level and three multi-lite aluminum-sash windows at the second story. It will have a flat roofline with glazed guardrail near the edge. The right (west) section will have painted, smooth, cement plaster cladding with a pedestrian door and a garage entrance with a metal frame and mesh gate at the first story, and a wide multi-lite black aluminum sash window at the second story. This section of facade will also have a flat roofline with an open guardrail near the edge.

### *Tower*

At the southwest corner of the project site, outside of the District boundary, the proposed project will construct an 85' high tower. The tower will abut the west facade of the contributing building at 450 24<sup>th</sup> Street and will abut the rear (south) facades of the contributing buildings at 459-61 and 465 25<sup>th</sup> Street. It will abut and communicate internally with the buildings and the proposed vertical additions at the first through third stories. The tower will be Modern in style and include concrete cladding at the base, vertically corrugated fiber cement cladding on the west side of the upper stories and west facade, and colored metal panel cladding rectilinear frames around the upper stories on the east sides of the north and south facades and across the east facade. Large horizontally oriented, black aluminum window sashes with minimal and occasionally asymmetrical muntins will be divided horizontally at each story level and intermittently by fiber cement panels textured to resemble wood. Black aluminum sash windows and storefront assemblies will be located at the first story of the south facade, some covered by an industrial style sliding metal door.

### *Paseo*

The open paseo proposed to run along the west side of the project site will remove the west facade of the contributing building at 465 25<sup>th</sup> Street and construct a new facade slightly to the east that will be clad with cement plaster and feature three glazed, black aluminum framed overhead garage doors. The new facade will form the east wall of the paseo, while the entirety of the building's primary (north) facade will remain to enclose the north end of the paseo. Near the middle of the paseo the wall will feature colorful ceramic tile with cement plaster above and more black aluminum sash windows and glazed garage doors. At the south end of the paseo, the base of the proposed tower will, much like the north end, be clad with cement plaster and feature three glazed, black aluminum framed overhead garage doors opening into the paseo.

## **District Character**

Character defining features of the 25<sup>th</sup> Street Garage District are not specifically called out as such in District documentation; however, based on the description of general characteristics provided and observations made for this study, the following can be considered character defining features of the District:

- Service or industrial uses, not retail, the majority automotive garages
- One-story, though often double-height, sometimes incorporating mezzanine levels
- 50' x 118' lot sizes standard
- No setbacks from lot lines (front, sides, or rear)
- Brick construction, often integrating hollow clay tile and concrete or wood support posts
- Wood truss roofs with stepped or peaked parapets at the front
- Pressed brick facades, often incorporating polychrome brick or decorative bonds
- Ornament and decorative features confined to front facades only
- Large multi-lite metal sash windows
- Glazed and paneled wood folding vehicles doors, though often replaced with metal roll-up doors



## Secretary of the Interior's Standards Analysis

The following Standards analysis addresses the effects of the proposed project on the character of the 25<sup>th</sup> Street Garage District, which is considered to be the historic resource for the purposes of this evaluation. As needed, the Standards, which are most often applied to single individually designated or eligible properties, have been interpreted to apply to the situation at hand: that of proposed alterations within a historic district. Proposed work and its effects on the contributing buildings at the Subject Properties is discussed as representational of effects at both the project site and throughout the District.

*1. A [District] shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the [District] and its site and environment.*

The 25<sup>th</sup> Street Garage District was historically light-industrial in use, with an emphasis on automotive garage activities, which are associated with the historic themes for which the District is significant. The proposed project will change the current light-industrial uses of the Subject Properties to commercial uses, including both retail and office activities. The new uses will not change the character defining features of the Subject Properties, as their front facades and exterior walls – thus, their scale, massing, materials, fenestration patterns, and decorative features – will remain intact. By maintaining the character of the individual properties, the project will also maintain the overall character of the District. The proposed vertical additions at the rear of the buildings will enable new uses for the properties, but will be located outside of District boundaries or setback – and the rear of the buildings and at the interior of the block – such that District character as experienced at the street will not be significantly altered.

As proposed, the project meets Standard 1.

*2. The historic character of a [District] shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a [District] shall be avoided.*

The historic character of the District lies in its contributing properties and the characteristics that are common to them. Neither the contributing buildings on the Subject Properties nor any other contributing buildings will be removed from the District by the proposed project. The Subject Properties will be altered with new fenestration in order to rehabilitate the facades and accommodate new uses. Vertical additions will be constructed over their rear portions. The introduction of new fenestration will not result in the removal of any materials or features, such as existing doors and windows, that are particularly significant or have not already been altered. No other significant portions of the buildings will be removed, as front facades and front masses will be left intact. Only roof structures and the west facade of 465 25<sup>th</sup> Street, which are either not visible or not significant or both, will be removed and replaced. Distinctive brickwork, parapets, and other ornament will not be removed, but in many cases restored. Alteration of spaces will occur with the infill of vacant land adjacent to the contributing buildings on the Subject Properties and adjacent properties; however, this space is not considered significant, as small vacant lots exist throughout the District and are neither character-defining nor degrade the District's cohesion. The large vacant area to the west of 450 24<sup>th</sup> Street is not located within the District, so its infill also does not contribute to an alteration of characteristic space.

As proposed, the project meets Standard 2.

*3. Each [District] shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.*

The proposed project will rehabilitate the front facades and exterior walls of the contributing buildings on the Subject Properties and will restore features, like the damaged concrete torch ornaments at 459-61 25<sup>th</sup> Street, based on remnant material and photographic evidence. New fenestration to be installed will use compatible materials like glass in multi-lite metal framing, but the metal framing will be extruded aluminum and will not attempt to mimic historic steel-sash industrial fenestration. Vertical additions to be made to the rear portions of the building and infill to the east of 459-61 25<sup>th</sup> Street will be neutral and Modern in materials and styling and will not reference historic materials or elements found within the District.

As proposed, the project meets Standard 3.

*4. Most [Districts] change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.*

The District has evolved over time as buildings have been demolished, constructed, and altered; however, the basis of its eligibility lies in the fact that relatively little change has occurred since its period of significance and it continues to represent a distinct historic period and theme in its physical character. None of the buildings lost, newer buildings constructed, or property-specific alterations that have been made within the District appear to be historic in their own right nor contribute significantly to the District's theme or character. At the Subject Properties, only minimal changes to elements like fenestration and the hollow clay tile rear addition to 459-61 and 465 25<sup>th</sup> Street (which is outside the District boundaries) have occurred and they do not lend significance to the District in any way. The previously altered fenestration and the rear addition will be removed by the proposed project, but do not qualify as having significance in their own right, so this Standard is not applicable to them.

As proposed, the project meets Standard 4.

*5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize [the District] shall be preserved.*

The proposed project will retain the front portions of the contributing buildings on the Subject Properties, which is where the majority of character defining features and materials are located, such as brick construction with polychroming and decorative bonds, large industrial sash windows, vehicular openings, and ornament. Retention of the front portions will also maintain a good representation of the size, form, and massing that is characteristic in District contributors, including one-to-two story heights, full-lot footprints, and no setbacks. At the rear of the buildings, in the locations of the vertical additions and along secondary facades where infill and the paseo will be built, there are few to no elements of architectural distinction. In this way, the overall character and environment of both the Subject Properties and the District will be preserved.

As proposed, the project meets Standard 5.

*6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.*

Deteriorated features at the Subject Properties include vandalized facade surfaces, broken and boarded up fenestration, and damaged decorative features. The fenestration is proposed to be replaced with compatible Modern components, which will be done for functional purposes and not as a repair or a replacement effort. The proposed project will also clean the brick facades, repair damaged brickwork, and otherwise restore the original

fabric of the building envelopes. Where and if necessary, brick that is compatible in size, color, and texture will be used to replace that which is too damaged to remain in place. Damaged decorative features consist of the broken concrete torches on the facade of 459-61 25<sup>th</sup> Street. Here, replacement may be necessary due to the materials involved and the extent of damage, but enough remnants of the original ornaments remain, as well as photographs of the building prior to damage, that faithful reproductions will be made of the same material.

As purposed, the project meets Standard 6.

*7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.*

The proposed project does not propose to undertake any chemical or physical treatments to the contributing properties on the project site. It proposes to clean and rehabilitate the brick facades, but unduly harsh chemicals or forcible methods will be avoided.

As proposed, the project meets Standard 7.

*8. Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.*

The proposed project may require ground disturbance for construction activities in some areas of the site, but does not propose to undertake any deep excavation or major earth moving, such as that required to excavate a basement level. No archaeological resources are known to be located on the property and the area has already been disturbed by past construction and other activities; however, if any archaeological deposits are uncovered in the course of the project, work will be halted and appropriate mitigation measures will be taken.

As proposed, the project meets Standard 8.

*9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the [District]. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the [District] and its environment.*

New additions within the District that will be made by the proposed project include infill of the vacant lot to the east of 459-61 25<sup>th</sup> Street, the vertical additions to the rear portions of the contributing buildings on the Subject properties, and the paseo along the west side of 465 25<sup>th</sup> Street (though only its north end lies within District boundaries). These additions physically connect to portions of the contributing buildings that are not considered significant nor bear character-defining features; namely, side and rear facades, and the rear portions of roofs. Therefore, no materials or features that lend character to the District will be affected. The additions to be made will be Modern in style, so as to be differentiated, while using materials with industrial aesthetics and being neutral in their lack of articulation and ornament, so as to be compatible. They will be readily interpreted as additions to the Subject Properties and, subsequently, the District. The paseo will feature eye-catching tilework and other features. To some extent the glazed tile references similar polychrome glazed tile on the facade of 442 24<sup>th</sup> Street and is therefore compatible; nevertheless, it is generally concealed from view from within the District by a section of the facade of 465 25<sup>th</sup> Street, and with most striking architectural treatments located at the center and south end, which lie mostly outside the District. Alterations to fenestration on the primary facades of the contributing buildings will mostly be inserted within existing openings and will not remove large or significant sections of wall. They will also use materials (metal and glass) that are industrial in their aesthetic, but modern in

their actual fabric, such as aluminum. The proposed tower is located outside of District boundaries and, therefore, will not affect any materials within the District or necessitate strong compatibility in scale, massing, features, etc. It will be strongly differentiated in a Modern aesthetic, using modern materials and applications, with slight industrial aesthetics, so as to set it apart from nearby District contributors.

As proposed, the project meets Standard 9.

*10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the [District] and its environment would be unimpaired*

The proposed project includes vertical additions above the rear portions of the contributing buildings on the Subject Properties, infill of the vacant lot to the east of 459-61 25<sup>th</sup> Street, a paseo on the west side of the project site, and a new tower that is located outside District boundaries but directly adjacent to the boundaries and abuts and internally communicates with the contributing buildings. The tower could be demolished in the future and have little effect on the District. Because the exterior walls of the contributing buildings will be retained, only the closure of communication points between the tower and the Subject Properties would be necessary. Likewise, the infill of the vacant lot could be removed and communication points closed without greatly affecting the character of the contributing buildings. The paseo could also be removed and, where it is located within the District boundaries, the west wall of 465 25<sup>th</sup> Street could be rebuilt without visual effect, as the preserved front facade of that building will continue to be intact, concealing the paseo from view within the District. The vertical additions, while more integrally and structurally connected to the contributing buildings could also be removed without affecting the overall massing and form of the buildings, the front portions of which would remain intact and the rear portions easily returned to their original one-to-two story rectilinear forms. In this way, removal of the proposed new construction would readily return the District to its pre-project state and leave its environment unimpaired.

As proposed, the project meets Standard 10.

## Conclusion

It does not appear that the proposed project will affect the continued eligibility of the 25<sup>th</sup> Street Garage District API. The District currently retains integrity; of the 24 contributing resources that were present at designation, 22 remain, which is more than 91% and represents an adequately high concentration of contributing properties. The proposed project will affect 4 contributing properties, but will retain and rehabilitate them for the most part, making some alterations to serve adaptive reuse and making vertical additions that are respectful in setback and character to minimize visual impact. By rehabilitating the front facades and maintaining the front 30' of the contributing buildings, where all character defining features are located and typical scale and massing is well represented, the proposed project preserves the visual character of the District as seen from the Street. Infill and additions are neutral and differentiated in design aesthetics. They are concentrated toward the center of the block and the new tower at the southwest corner of the project site, locating them close to or outside of the District boundaries. This keeps visual intrusion to the edge of the District and avoids degrading the historic feel at the heart of the District. The preservation of the front sections of the contributing buildings does not appear to interfere with the current significance or integrity of the District, which retains strong character throughout its area and still conveys its historic significance in a high concentration of contributing properties.

# Appendix E

## **Air Quality and Health Risk Assessment Information**

# APPENDIX E.1

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## Construction Health Risk Assessment

The Health Risk Assessment (HRA) presented below includes a detailed assessment of the health risks from construction of the 460 24<sup>th</sup> Street project. Once operational, the project would include a backup generator which would be a source of TAC emissions. However, the generator would be required to comply with the BAAQMD's permit requirements for new stationary sources. The BAAQMD would not approve an Authority to Construct or 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 risk impacts of the backup generator would be less than significant.

The project does not include residential or other sensitive uses, but health risks from project construction would contribute to the cumulative health risks to existing and proposed receptors in the vicinity. The nearest sensitive receptors to the project are the multi-family apartments at 466 24<sup>th</sup> Street adjacent to the project site. Residences are also located to the south of the project site across 24<sup>th</sup> street. Additional residential uses would be located at 2401 Broadway (currently under construction), approximately 125 feet to the east of the project site. These receptors would be exposed TAC emissions project construction and operation (backup generator) in addition to health risks from several BAAQMD permitted stationary sources, highways and major roadways with traffic volumes greater than 10,000 vehicles per day located within 1,000 feet of the receptors. Therefore, the analysis presented below also includes a screening level assessment of the cumulative risk to nearby receptors from existing and proposed sources of TACs within 1,000 feet of the project site.

The HRA consists of four principal components:

1. Estimation of TAC emissions from project construction,
2. Estimation of TAC concentrations at sensitive receptors in the project vicinity 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, and
4. Identification of sources of TAC emissions and their emission levels located within a 1,000-foot radius from the project as part of the cumulative assessment of health risks and comparison of the resulting cumulative health impacts with applicable health risk significance thresholds.

The HRA was conducted in accordance with technical guidelines developed by federal, state, and regional agencies, including U.S. Environmental Protection Agency (U.S. EPA), California Environmental Protection Agency (CalEPA), California Office of Environmental Health Hazard

Assessment (OEHHA) *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*<sup>1</sup> and the Bay Area Air Quality Management District (BAAQMD) *Air Toxics New Source Review (NSR) Program Health Risk Assessment Guidelines*.<sup>2</sup>

## 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 OEHHA guidelines, exhaust emissions of PM<sub>10</sub> are represented as DPM. Exhaust PM<sub>10</sub> emissions from project construction were derived from CalEEMod (Version 2016.3.2) using the following assumptions:

- Construction of 86,100 square feet of office and 12,620 square feet of retail space with approximately 1,068 square feet of lobby, service and utility space;
- Construction was assumed to begin in February 2022 and last for a period of 27 months;
- The duration of the various construction phases (e.g., demolition, grading, building construction, etc.) were provided by the applicant (shown in **Table E.1-1**);
- The number and types of construction equipment used for each phase, their size and activity level as well as the number of construction related worker, vendor and hauling trips during each phase were also provided by the applicant and are shown in **Tables E.1-2 and E.1-3**;
- Demolition of 34,254 square feet of existing structures; and
- Off-haul of 3,389 cubic yards of material during the grading phase.

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<sup>1</sup> Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, February 2015, [http://oehha.ca.gov/air/hot\\_spots/hotspots2015.html](http://oehha.ca.gov/air/hot_spots/hotspots2015.html)

<sup>2</sup> BAAQMD, *BAAQMD Air Toxics New Source Review (NSR) Program Health Risk Assessment Guidelines*, January 2016.

**TABLE E.1-1  
PROJECT CONSTRUCTION SCHEDULE <sup>a</sup>**

Construction Phase	Duration
Demolition	2/1/2022 – 3/7/2022
Site Preparation	3/8/2022 – 3/21/2022
Grading	3/22/2022 – 6/13/2022
Building Construction	6/14/2022 – 12/26/2023
Paving	12/27/2023 – 1/10/2024
Architectural Coating	1/11/2024 – 5/9/2024
Total number of workdays over the construction duration	

<sup>a</sup> Provided by applicant.

**TABLE E.1-2  
CONSTRUCTION EQUIPMENT USED BY PHASE <sup>a</sup>**

Equipment	Number	No. of days Used	No. of Hours/Day Used
<b>Demolition</b>			
Concrete/Industrial Saw	1	5	6
Excavator	1	20	5
Tractors/Loaders/Backhoes	2	20	4
Crushing/Processing Equipment	1	3	6
Skid Steer Loader	1	3	6
<b>Site Preparation</b>			
Grader	1	4	6
Tractor/Loader/Backhoe	1	3	4
<b>Grading</b>			
Grader	1	20	6
Excavator	1	15	6
Tractors/Loaders/Backhoes	2	10	6
<b>Building Construction</b>			
Crane	1	340	4
Forklifts	2	300	6
Tractors/Loaders/Backhoes	2	300	6
Skid Steer Loaders	2	60	6
<b>Paving</b>			
Paver	1	7	5
Rollers	2	7	5
Tractor/Loader/Backhoe	1	7	4
Cement & Mortar Mixers	2	4	6
<b>Architectural Coating</b>			
Air Compressor	2	70	6
Cement & Mortar Mixers	2	60	6

<sup>a</sup> Data provided by the applicant.



**TABLE E.1-3  
VEHICLE TRIPS BY CONSTRUCTION PHASE <sup>a</sup>**

Construction Phase	Worker Commute Trips/Day	Vendor Trips/Day	Total Number of Hauling Trips
Demolition	16	0	300 <sup>b</sup>
Site Preparation	10	0	0
Grading	12	0	424 <sup>c</sup>
Building Construction	50	6	0
Architectural Coating	20	12	0
Paving	8	4	0

a CalEEMod default one-way vehicle trips.

b As estimated by CalEEMod based on demolition area provided by the applicant.

c As estimated by CalEEMod based on off-haul volume provided by the applicant.

Exhaust PM<sub>10</sub> emissions by year from on-site construction equipment and off-site vendor and hauling trips were extracted from the CalEEMod output and are presented in **Table E.1-4** for both the uncontrolled and the mitigated scenarios. The mitigated scenario assumes use of Tier 4 engines as the best available control technology for all construction equipment as required by the SCA AIR-3a(ii) [*City SCA 22a(ii)*]. 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 (*City SCA 20*).

**TABLE E.1-4  
TOTAL PM<sub>10</sub> EXHAUST EMISSIONS FROM PROJECT CONSTRUCTION**

Construction Year	Emissions <sup>a</sup> (tons/year)	Emission Rate <sup>b</sup> (grams/second)
Uncontrolled		
2022	0.02	0.0017
2023	0.03	0.0021
2024	0.01	0.0004
With Tier 4 Equipment		
2022	0.0018	0.0001
2023	0.0021	0.0002
2024	0.0004	<0.0001

a Emissions conservatively include off-site emissions from mobile sources.

b Emission rate calculated assuming 12 hours of construction on weekdays and 8 hours of construction on weekends.

## 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 using the project's emission rate shown in **Table E.1-5**.

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. 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 emissions are 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 for 12 hours per day on weekdays and for 8 hours per day on weekends. Five years of meteorological data from the Metropolitan Oakland International Airport was used to represent wind conditions at the project site. Maximum concentrations were found to be at the future residential receptors at 2401 Broadway (currently under construction), approximately 125 feet east of the project site and would represent the Maximum Exposed Individual Receptor (MEIR) for the project. It is assumed that 2401 Broadway would be constructed and occupied prior to start of project construction.

### **3. Assessment of Health Risks from Project Construction to Existing Receptors**

Assessment of health risks from project construction was conducted following methodologies and exposure parameters recommended in OEHHA's Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.<sup>3</sup> OEHHA's 2015 revisions to its Guidance Manual are primarily designed to ensure that the greater sensitivity of children to cancer and other health risks is reflected in HRAs. For example, OEHHA now recommends that risks be analyzed separately for multiple age groups, focusing especially on young children and teenagers, rather than the past practice of analyzing risks to the general population, without distinction by age. OEHHA also now recommends that statistical "age sensitivity factors" be incorporated into a HRA, and that children's relatively high breathing rates be accounted for. On the other hand, the Guidance Manual revisions also include some changes that would reduce calculated health risks. For example, under the former guidance, OEHHA recommended that residential cancer risks be assessed by assuming 70 years of exposure at a residential receptor; under the revised Guidance Manual, this assumption is lessened to 30 years. This is based on studies showing that 30 years is a reasonable estimate of the 90th to 95th percentile of residency duration in the population. For short term projects such as construction activities, OEHHA recommends using the actual project duration.

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<sup>3</sup> Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, February 2015, [http://oehha.ca.gov/air/hot\\_spots/hotspots2015.html](http://oehha.ca.gov/air/hot_spots/hotspots2015.html)

Based on OEHHA recommendations, the cancer risk to residential receptors assumes that exposure occurs 24 hours per day for 350 days per year while accounting for a percentage of time at home. OEHHA evaluated information from activity pattern databases to estimate the fraction of time at home (FAH) during the day. This information was used to adjust exposure duration and cancer risk based on the assumption that a person is not present at home continuously for 24 hours and therefore exposure to emissions is not occurring when a person is away from their home.

**TABLE E.1-5  
EXPOSURE PARAMETERS USED**

Receptor Age	Exposure Duration (ED) (years)	Age Sensitivity Factors (ASF)	Fraction of time at Home (TAH) (%)	Daily Breathing Rate (DBR) <sup>a</sup> (L/kg-day)
Residential Receptor - Infant				
3 <sup>rd</sup> trimester	0.25	10	0.85	361
0 – 2 years	2	10	0.85	1090
2 – 16 years	0	3	0.72	745

## NOTES

a BAAQMD Air Toxics New Source Review Program HRA Guidelines recommend using the 95th percentile rate for age groups less than 2 years old and the 80th percentile rate for age groups that are greater than or equal to 2 years old.

Cancer risk at the MEIR was estimated using the OEHHA recommended method shown in the following equations and the cancer risk exposure parameters shown in **Table G-5**. Estimates were made using the mandatory minimum pathways, which for DPM is only through inhalation.

$$\text{Risk}_{\text{inh-res}} = \text{DOSE}_{\text{air}} \times \text{CPF} \times \text{ASF} \times \text{ED}/\text{AT} \times \text{FAH}$$

$\text{Risk}_{\text{inh-res}}$  = Residential inhalation cancer risk

$\text{DOSE}_{\text{air}}$  = Daily Inhalation Dose

CPF = Cancer Potency Factor for DPM = 1.1

ASF = Age Sensitivity Factors

ED = Exposure Duration in each age group (years)

AT = Averaging Time over lifetime cancer risk (years) = 70 years

FAH = Fraction of Time at Home (%)

$$\text{DOSE}_{\text{air}} = C_{\text{air}} \times \text{DBR} \times A \times \text{EF} \times 10^{-6}$$

$C_{\text{air}}$  = Concentration of TAC in air ( $\mu\text{g}/\text{m}^3$ )

DBR = Daily Breathing Rate

A = Inhalation Absorption factor = 1.0 for DPM

EF = Exposure Frequency =  $350/365 = 0.96$

Chronic (long-term) adverse health impacts unrelated to cancer are measured against a hazard index (HI), which is defined as the ratio of the predicted incremental DPM exposure concentration from the proposed project to a reference exposure level (REL) that could cause adverse health

effects. The RELs are published by OEHHA based on epidemiological research. The chronic reference exposure level for DPM was established by the California OEHHA as  $5 \mu\text{g}/\text{m}^3$ .<sup>4</sup>

Estimated health risks and maximum  $\text{PM}_{2.5}$  concentration to infant receptors at the MEIR are shown in **Table E.1-6** below and compared to the BAAQMD project-level thresholds that have been adopted by the City of Oakland. Risks to child and adult receptors would less than shown in Table E.1-6.

**TABLE E.1-6  
MAXIMUM HEALTH RISKS FROM PROJECT CONSTRUCTION**

Health Risk at MEIR	Maximum Cancer Risk (in a million)	Chronic Risk (Hazard Index)	Maximum $\text{PM}_{2.5}$ concentration
<b>Uncontrolled Scenario</b>			
Residential Receptor - Infant	92.3	0.077	0.35
<b>With Tier 4 Equipment</b>			
Residential Receptor - Infant	6.7	0.005	0.03
<b>Project-level Threshold</b>	10	1.0	0.3
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>

As shown in the table, health risks (cancer and chronic) and  $\text{PM}_{2.5}$  concentrations resulting from project construction would be less than the applicable significance thresholds with the use of Tier 4 equipment for construction. Therefore, project construction would not expose receptors in the project vicinity to substantial TAC emissions. This impact would be less than significant.

#### 4. Cumulative Health Risks to MEIR

The BAAQMD's CEQA Air Quality Guidelines include standards and methods for determining the significance of cumulative health risk impacts. The method for determining cumulative health risk requires the tallying of health risks from permitted stationary sources, highways, major roadways, rail and any other identified substantial air toxic sources in the vicinity of a project site (i.e., within a 1,000-foot radius) and then adding the individual sources to determine whether the BAAQMD's cumulative health risk thresholds are exceeded. The cumulative screening analysis for the project's MEIR is shown in **Table E.1-7**. The screening analysis shows that health risks to existing and future receptors in the project vicinity would be less than the City's thresholds and hence, less than significant.

<sup>4</sup> California Office of Environmental Health Hazards Assessment - Acute, 8-hour, and Chronic Reference Exposure Levels, June 2014, <http://www.oehha.ca.gov/air/allrels.html>

**TABLE G-7  
CUMULATIVE HEALTH RISKS TO PROJECT MEIR**

Source	Source Type	Distance to MEIR (feet)	Cancer Risk (persons per million)	Chronic Hazard Impact	PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )
<b>Existing Permitted Stationary Sources (BAAQMD Plant Number) within 1,000 feet</b>					
Johnson Plating Works (3490)	Coating Operation	670	0.002	0.0	0.0
State Department of Transportation (14195)	Generator	850	2.55	0.003	0.003
City of Oakland Fire Station #15 (21819)	Generator	510	1.48	0.002	0.004
Verizon Wireless (22279)	Natural Gas Generator	1500	0.0	0.0	0.0
Royal Coffee Company (23098)	Coffee Roaster	50	0.00	0.0	0.155
Uptown Body & Fender (200538)	Coating Operation	280	0.0	0.0	0.0
BA1 2201 Broadway LLC (200620)	Generator	930	0.11	0.0	0.0
<b>Backup Generators at Proposed Projects within 1,000 feet</b>					
24 <sup>th</sup> & Harrison	Diesel Generator	650	1.0	<0.001	0.002
88 Grand <sup>a</sup>	Diesel Generator	600	0.9	<0.001	0.002
2100 Telegraph	Diesel Generator	1030	0.2	0.002	0.002
2201 Valley Street	Diesel Generator	905	0.1	<0.001	0.001
2270 Broadway	Diesel Generator	190	0.3	0.004	0.004
2305 Webster <sup>a</sup>	Diesel Generator	370	0.2	<0.01	<0.001
2424 Webster <sup>a</sup>	Diesel Generator	200	4.1	0.004	0.008
2600 Telegraph <sup>a</sup>	Diesel Generator	310	2.5	0.003	0.005
<b>Mobile Sources</b>					
		Highways	18.9	--	0.4
		Major Roadways	3.2	--	0.033
		Rail	3.9	--	0.005
<b>Project Sources</b>					
		Mitigated Project Construction	6.7	0.005	0.027
		Project Generator <sup>a</sup>	6.4	0.006	0.013
		<b>Cumulative Impacts<sup>b</sup></b>	<b>52.6</b>	<b>0.033</b>	<b>0.665</b>
		City of Oakland Cumulative Significance Threshold	100	10	0.8
		Exceeds Significance Threshold?	No	No	No

## NOTES:

<sup>a</sup> Risks posed by the generators are conservatively assumed to be at the maximum permitted value but will likely be less.

<sup>b</sup> Cumulative totals may not add up due to rounding.

SOURCE: Appendix E.

## Construction Data for AQ/GHG/HRA - 460 24th Street

### Project Information

Proposed Land Uses	Area	Units	Area including L, B & S
Office	86100	sqft	87031.5
Retail	12620	sqft	12756.5
Lobby, Service & Utility	1068	sqft	
Parking		sqft	
Off-site craft stall	0	sqft	

Project Site Area	0.92	acres
Off-site lot area		acres
Area to be demolished	34,254	sqft
Total Demo Volume (off-haul)	7,796	tons
Total Proposed building area	99,788	sqft
Volume of infill to be brought in		cubic yards
Volume of material to be exported	3,389	cubic yards
Off-site Lot paving area		sqft

### Construction schedule

Start date of construction	2/1/2022
First year of operation	2024

Construction Phase	From	To	# of days
Demolition	2/1/2022	3/7/2022	25
Site Preparation	3/8/2022	3/21/2022	10
Grading	3/22/2022	6/13/2022	60
Building Construction	6/14/2022	12/26/2023	401
Paving	12/27/2023	1/10/2024	11
Architectural Coating	1/11/2024	5/9/2024	86

593

### Construction Equipment

Equipment	Number	No. of Days used	Hrs/day used
<b><u>Demolition</u></b>			
Concrete/Industrial Saws	1	5	6
Excavators	1	20	5
Tractors/Loaders/Backhoes	2	20	4
Crushing/Proc. Equipment	1	3	6
Skid Steer Loaders	1	3	6
<b><u>Site Preparation</u></b>			
Graders	1	4	6
Tractors/Loaders/Backhoes	1	3	4
<b><u>Grading</u></b>			
Graders	1	20	6
Excavators	1	15	6
Tractors/Loaders/Backhoes	2	10	6
<b><u>Building Construction</u></b>			
Cranes	1	340	4

Forklifts	2	300	6
Tractors/Loaders/Backhoes	2	300	6
Skid Steer Loaders	2	60	6
<b><u>Paving</u></b>			
Pavers	1	7	5
Rollers	2	7	5
Tractors/Loaders/Backhoes	1	7	4
Cement and Mortar Mixers	2	4	6
<b><u>Architectural Coating</u></b>			
Air Compressors	2	70	6
Cement and Mortar Mixers	2	60	6

### Construction Vehicle Trips

Construction Phase	One-way Worker Trips/day	One-way Vendor Truck Trips/day	One-way Hauling Truck Trips/day
Demolition	16	0	12
Site Preparation	10	0	0
Grading	12	0	7
Building Construction	50	6	0
Paving	20	12	0
Architectural Coating	8	4	0

## CalEEMod Input Adjustments - 460 24th Street

### Operational Trips

#### Trips from Proposed Uses

Land Use	Size (1,000 sqft)	Daily Trips	Adjusted trips (less 46.9% for non-auto)	Wkday Trip Rate
Office	87.0	920	489	5.61
Retail	12.8	480	255	19.98
TOTAL		1400	743	

#### From CalEEMod

CalEEMod Land Use	Wkdy	Sat	Sun
General Office Building	11.03	2.46	1.05
Regional Shopping Center	42.7	49.97	25.24

#### CalEEMod weekend trips rates adjusted based on project traffic report

CalEEMod Land Use	Wkday	Sat	Sun
General Office Building	5.61	1.25	0.53
Regional Shopping Center	19.98	23.38	11.81

### Energy Consumption

Land Use	% savings over Title 24 (2016)		
	Electricity	Lighting	NG
Non-residential	11%	0%	1%
<i>CalEEMod defaults (based on 2016 Title 24)</i>			
General Office Building	4.1	3.58	18.32
Regional Shopping Center	2.24	4.88	3.9
<i>Adjusted for Title 24 (2019)</i>			
General Office Building	3.66	3.58	18.14
Regional Shopping Center	2.00	4.88	3.88



460 24th St - Pigozzi - Alameda County, Annual

**460 24th St - Pigozzi**  
**Alameda County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	87.03	1000sqft	0.94	87,031.50	0
Regional Shopping Center	12.76	1000sqft	0.00	12,756.50	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	63
<b>Climate Zone</b>	5			<b>Operational Year</b>	2025
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	210	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics - PG&E CO2 EF based on [http://www.pgecorp.com/corp\\_responsibility/reports/2019/assets/PGE\\_CRSR\\_2019.pdf](http://www.pgecorp.com/corp_responsibility/reports/2019/assets/PGE_CRSR_2019.pdf)
- Land Use - Project site area updated
- Construction Phase - Updated based on project schedule provided
- 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 - Project specific data
- Off-road Equipment - Project specific data
- Trips and VMT - Project specific data
- Demolition -
- Grading - Project specific data
- Vehicle Trips - Project specific data
- Energy Use - Adjusted to reflect usage rates based on Title 24 2019 standards
- Construction Off-road Equipment Mitigation - All Tier4 Final construction equipment used as BACT

Table Name	Column Name	Default Value	New Value
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	9.6000e-005	1.0000e-006
tblVehicleEF	HHD	2.2000e-005	1.0000e-006
tblVehicleEF	HHD	2.6350e-003	1.0600e-004
tblVehicleEF	HHD	0.53	0.48
tblVehicleEF	HHD	1.6000e-005	1.0000e-006
tblVehicleEF	HHD	0.14	0.12
tblVehicleEF	HHD	2.2500e-004	6.4700e-004
tblVehicleEF	HHD	0.05	1.0000e-006
tblVehicleEF	LDA	3.2030e-003	2.4280e-003
tblVehicleEF	LDA	4.3860e-003	0.06
tblVehicleEF	LDA	0.46	0.61
tblVehicleEF	LDA	1.03	2.31
tblVehicleEF	LDA	224.31	255.31
tblVehicleEF	LDA	51.88	53.97
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	1.6760e-003	1.5200e-003
tblVehicleEF	LDA	2.2200e-003	1.8350e-003
tblVehicleEF	LDA	1.5440e-003	1.4020e-003
tblVehicleEF	LDA	2.0410e-003	1.6880e-003
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.09	0.11
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	8.0660e-003	9.6360e-003
tblVehicleEF	LDA	0.03	0.23
tblVehicleEF	LDA	0.06	0.25
tblVehicleEF	LDA	2.2450e-003	2.5250e-003
tblVehicleEF	LDA	5.3600e-004	5.3400e-004
tblVehicleEF	LDA	0.03	0.04

tblVehicleEF	LDA	0.09	0.11
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.23
tblVehicleEF	LDA	0.06	0.28
tblVehicleEF	LDA	3.5790e-003	2.7510e-003
tblVehicleEF	LDA	3.5790e-003	0.05
tblVehicleEF	LDA	0.54	0.73
tblVehicleEF	LDA	0.80	1.77
tblVehicleEF	LDA	242.44	275.64
tblVehicleEF	LDA	51.88	52.95
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.05	0.18
tblVehicleEF	LDA	1.6760e-003	1.5200e-003
tblVehicleEF	LDA	2.2200e-003	1.8350e-003
tblVehicleEF	LDA	1.5440e-003	1.4020e-003
tblVehicleEF	LDA	2.0410e-003	1.6880e-003
tblVehicleEF	LDA	0.07	0.10
tblVehicleEF	LDA	0.10	0.12
tblVehicleEF	LDA	0.05	0.09
tblVehicleEF	LDA	8.9960e-003	0.01
tblVehicleEF	LDA	0.03	0.21
tblVehicleEF	LDA	0.05	0.21
tblVehicleEF	LDA	2.4280e-003	2.7270e-003
tblVehicleEF	LDA	5.3200e-004	5.2400e-004
tblVehicleEF	LDA	0.07	0.10
tblVehicleEF	LDA	0.10	0.12
tblVehicleEF	LDA	0.05	0.09
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.03	0.21
tblVehicleEF	LDA	0.05	0.23
tblVehicleEF	LDA	3.1270e-003	2.3470e-003
tblVehicleEF	LDA	4.9490e-003	0.06
tblVehicleEF	LDA	0.45	0.61
tblVehicleEF	LDA	1.21	2.71
tblVehicleEF	LDA	222.49	253.28
tblVehicleEF	LDA	51.88	54.70
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.06	0.22
tblVehicleEF	LDA	1.6760e-003	1.5200e-003
tblVehicleEF	LDA	2.2200e-003	1.8350e-003
tblVehicleEF	LDA	1.5440e-003	1.4020e-003
tblVehicleEF	LDA	2.0410e-003	1.6880e-003
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	7.8790e-003	9.4280e-003
tblVehicleEF	LDA	0.04	0.27
tblVehicleEF	LDA	0.07	0.28
tblVehicleEF	LDA	2.2270e-003	2.5050e-003
tblVehicleEF	LDA	5.3900e-004	5.4100e-004
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.10	0.11
tblVehicleEF	LDA	0.01	0.02

tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.27
tblVehicleEF	LDA	0.07	0.31
tblVehicleEF	LDT1	6.4470e-003	4.9480e-003
tblVehicleEF	LDT1	0.01	0.08
tblVehicleEF	LDT1	0.82	1.04
tblVehicleEF	LDT1	2.17	2.54
tblVehicleEF	LDT1	278.57	304.08
tblVehicleEF	LDT1	64.70	65.08
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.12	0.27
tblVehicleEF	LDT1	2.1340e-003	1.9610e-003
tblVehicleEF	LDT1	2.8790e-003	2.4940e-003
tblVehicleEF	LDT1	1.9640e-003	1.8050e-003
tblVehicleEF	LDT1	2.6480e-003	2.2940e-003
tblVehicleEF	LDT1	0.07	0.09
tblVehicleEF	LDT1	0.21	0.19
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.13	0.70
tblVehicleEF	LDT1	0.14	0.38
tblVehicleEF	LDT1	2.7940e-003	3.0090e-003
tblVehicleEF	LDT1	6.8400e-004	6.4400e-004
tblVehicleEF	LDT1	0.07	0.09
tblVehicleEF	LDT1	0.21	0.19
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.13	0.70
tblVehicleEF	LDT1	0.15	0.42
tblVehicleEF	LDT1	7.1370e-003	5.5490e-003
tblVehicleEF	LDT1	8.3030e-003	0.06
tblVehicleEF	LDT1	0.96	1.21
tblVehicleEF	LDT1	1.65	1.93
tblVehicleEF	LDT1	300.40	325.05
tblVehicleEF	LDT1	64.70	63.87
tblVehicleEF	LDT1	0.07	0.08
tblVehicleEF	LDT1	0.10	0.24
tblVehicleEF	LDT1	2.1340e-003	1.9610e-003
tblVehicleEF	LDT1	2.8790e-003	2.4940e-003
tblVehicleEF	LDT1	1.9640e-003	1.8050e-003
tblVehicleEF	LDT1	2.6480e-003	2.2940e-003
tblVehicleEF	LDT1	0.18	0.23
tblVehicleEF	LDT1	0.23	0.22
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.12	0.65
tblVehicleEF	LDT1	0.11	0.31
tblVehicleEF	LDT1	3.0140e-003	3.2170e-003
tblVehicleEF	LDT1	6.7600e-004	6.3200e-004
tblVehicleEF	LDT1	0.18	0.23
tblVehicleEF	LDT1	0.23	0.22
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.12	0.65

tblVehicleEF	LDT1	0.12	0.34
tblVehicleEF	LDT1	6.3240e-003	4.8010e-003
tblVehicleEF	LDT1	0.01	0.09
tblVehicleEF	LDT1	0.82	1.03
tblVehicleEF	LDT1	2.54	2.98
tblVehicleEF	LDT1	276.39	302.00
tblVehicleEF	LDT1	64.70	65.94
tblVehicleEF	LDT1	0.09	0.10
tblVehicleEF	LDT1	0.13	0.30
tblVehicleEF	LDT1	2.1340e-003	1.9610e-003
tblVehicleEF	LDT1	2.8790e-003	2.4940e-003
tblVehicleEF	LDT1	1.9640e-003	1.8050e-003
tblVehicleEF	LDT1	2.6480e-003	2.2940e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.21
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.16	0.87
tblVehicleEF	LDT1	0.16	0.43
tblVehicleEF	LDT1	2.7720e-003	2.9880e-003
tblVehicleEF	LDT1	6.9100e-004	6.5300e-004
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.22	0.21
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.16	0.87
tblVehicleEF	LDT1	0.17	0.47
tblVehicleEF	LDT2	4.2720e-003	3.5880e-003
tblVehicleEF	LDT2	5.5400e-003	0.07
tblVehicleEF	LDT2	0.59	0.81
tblVehicleEF	LDT2	1.29	2.96
tblVehicleEF	LDT2	313.43	329.02
tblVehicleEF	LDT2	72.23	70.88
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.09	0.31
tblVehicleEF	LDT2	1.7410e-003	1.4900e-003
tblVehicleEF	LDT2	2.3620e-003	1.8200e-003
tblVehicleEF	LDT2	1.6010e-003	1.3720e-003
tblVehicleEF	LDT2	2.1720e-003	1.6730e-003
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.45
tblVehicleEF	LDT2	0.07	0.35
tblVehicleEF	LDT2	3.1380e-003	3.2550e-003
tblVehicleEF	LDT2	7.4400e-004	7.0100e-004
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.45
tblVehicleEF	LDT2	0.08	0.38
tblVehicleEF	LDT2	4.7660e-003	4.0510e-003



tblVehicleEF	LDT2	4.5240e-003	0.06
tblVehicleEF	LDT2	0.70	0.96
tblVehicleEF	LDT2	1.00	2.26
tblVehicleEF	LDT2	338.30	349.63
tblVehicleEF	LDT2	72.23	69.55
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.08	0.27
tblVehicleEF	LDT2	1.7410e-003	1.4900e-003
tblVehicleEF	LDT2	2.3620e-003	1.8200e-003
tblVehicleEF	LDT2	1.6010e-003	1.3720e-003
tblVehicleEF	LDT2	2.1720e-003	1.6730e-003
tblVehicleEF	LDT2	0.08	0.14
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.07	0.13
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.05	0.42
tblVehicleEF	LDT2	0.06	0.28
tblVehicleEF	LDT2	3.3880e-003	3.4590e-003
tblVehicleEF	LDT2	7.3900e-004	6.8800e-004
tblVehicleEF	LDT2	0.08	0.14
tblVehicleEF	LDT2	0.11	0.14
tblVehicleEF	LDT2	0.07	0.13
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.05	0.42
tblVehicleEF	LDT2	0.07	0.31
tblVehicleEF	LDT2	4.1710e-003	3.4690e-003
tblVehicleEF	LDT2	6.2470e-003	0.08
tblVehicleEF	LDT2	0.58	0.81
tblVehicleEF	LDT2	1.50	3.47
tblVehicleEF	LDT2	310.94	326.96
tblVehicleEF	LDT2	72.23	71.84
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.10	0.33
tblVehicleEF	LDT2	1.7410e-003	1.4900e-003
tblVehicleEF	LDT2	2.3620e-003	1.8200e-003
tblVehicleEF	LDT2	1.6010e-003	1.3720e-003
tblVehicleEF	LDT2	2.1720e-003	1.6730e-003
tblVehicleEF	LDT2	0.01	0.03
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.07	0.55
tblVehicleEF	LDT2	0.08	0.39
tblVehicleEF	LDT2	3.1130e-003	3.2350e-003
tblVehicleEF	LDT2	7.4700e-004	7.1100e-004
tblVehicleEF	LDT2	0.01	0.03
tblVehicleEF	LDT2	0.10	0.14
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.55
tblVehicleEF	LDT2	0.09	0.43
tblVehicleEF	LHD1	5.0170e-003	5.5500e-003
tblVehicleEF	LHD1	0.02	9.7790e-003
tblVehicleEF	LHD1	0.02	0.02

tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.93	0.88
tblVehicleEF	LHD1	2.33	1.16
tblVehicleEF	LHD1	9.00	9.01
tblVehicleEF	LHD1	679.94	821.38
tblVehicleEF	LHD1	31.29	12.50
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	1.06	0.85
tblVehicleEF	LHD1	0.96	0.36
tblVehicleEF	LHD1	8.6200e-004	7.7500e-004
tblVehicleEF	LHD1	0.01	9.6360e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.4600e-004	2.7300e-004
tblVehicleEF	LHD1	8.2500e-004	7.4100e-004
tblVehicleEF	LHD1	2.5370e-003	2.4090e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.7800e-004	2.5100e-004
tblVehicleEF	LHD1	2.2020e-003	1.9500e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2910e-003	1.1020e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.30	0.58
tblVehicleEF	LHD1	0.23	0.08
tblVehicleEF	LHD1	9.0000e-005	8.8000e-005
tblVehicleEF	LHD1	6.6680e-003	8.0290e-003
tblVehicleEF	LHD1	3.5700e-004	1.2400e-004
tblVehicleEF	LHD1	2.2020e-003	1.9500e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.2910e-003	1.1020e-003
tblVehicleEF	LHD1	0.14	0.12
tblVehicleEF	LHD1	0.30	0.58
tblVehicleEF	LHD1	0.25	0.09
tblVehicleEF	LHD1	5.0170e-003	5.5670e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.95	0.91
tblVehicleEF	LHD1	2.14	1.07
tblVehicleEF	LHD1	9.00	9.01
tblVehicleEF	LHD1	679.94	821.43
tblVehicleEF	LHD1	31.29	12.33
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	1.01	0.80
tblVehicleEF	LHD1	0.88	0.33
tblVehicleEF	LHD1	8.6200e-004	7.7500e-004
tblVehicleEF	LHD1	0.01	9.6360e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.4600e-004	2.7300e-004
tblVehicleEF	LHD1	8.2500e-004	7.4100e-004
tblVehicleEF	LHD1	2.5370e-003	2.4090e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.7800e-004	2.5100e-004

tblVehicleEF	LHD1	5.3520e-003	4.8460e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.7090e-003	2.3930e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.29	0.56
tblVehicleEF	LHD1	0.22	0.08
tblVehicleEF	LHD1	9.0000e-005	8.8000e-005
tblVehicleEF	LHD1	6.6680e-003	8.0300e-003
tblVehicleEF	LHD1	3.5300e-004	1.2200e-004
tblVehicleEF	LHD1	5.3520e-003	4.8460e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.7090e-003	2.3930e-003
tblVehicleEF	LHD1	0.14	0.13
tblVehicleEF	LHD1	0.29	0.56
tblVehicleEF	LHD1	0.24	0.09
tblVehicleEF	LHD1	5.0170e-003	5.5370e-003
tblVehicleEF	LHD1	0.01	9.5700e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.91	0.87
tblVehicleEF	LHD1	2.50	1.24
tblVehicleEF	LHD1	9.00	9.01
tblVehicleEF	LHD1	679.94	821.35
tblVehicleEF	LHD1	31.29	12.64
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	1.09	0.87
tblVehicleEF	LHD1	1.01	0.38
tblVehicleEF	LHD1	8.6200e-004	7.7500e-004
tblVehicleEF	LHD1	0.01	9.6360e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.4600e-004	2.7300e-004
tblVehicleEF	LHD1	8.2500e-004	7.4100e-004
tblVehicleEF	LHD1	2.5370e-003	2.4090e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	7.7800e-004	2.5100e-004
tblVehicleEF	LHD1	9.3900e-004	7.8700e-004
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.4000e-004	5.2600e-004
tblVehicleEF	LHD1	0.11	0.10
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.24	0.09
tblVehicleEF	LHD1	9.0000e-005	8.8000e-005
tblVehicleEF	LHD1	6.6670e-003	8.0290e-003
tblVehicleEF	LHD1	3.6000e-004	1.2500e-004
tblVehicleEF	LHD1	9.3900e-004	7.8700e-004
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	6.4000e-004	5.2600e-004
tblVehicleEF	LHD1	0.14	0.12
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.27	0.10

tblVehicleEF	LHD2	3.2700e-003	3.8550e-003
tblVehicleEF	LHD2	6.9360e-003	7.6780e-003
tblVehicleEF	LHD2	6.0080e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.53	0.67
tblVehicleEF	LHD2	1.12	0.77
tblVehicleEF	LHD2	13.77	13.67
tblVehicleEF	LHD2	701.55	813.85
tblVehicleEF	LHD2	24.72	9.48
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.57	0.97
tblVehicleEF	LHD2	0.43	0.24
tblVehicleEF	LHD2	1.1530e-003	1.2690e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.9000e-004	1.5300e-004
tblVehicleEF	LHD2	1.1030e-003	1.2140e-003
tblVehicleEF	LHD2	2.6840e-003	2.6310e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5800e-004	1.4100e-004
tblVehicleEF	LHD2	7.0500e-004	1.1660e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.4100e-004	6.6400e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.35
tblVehicleEF	LHD2	0.08	0.05
tblVehicleEF	LHD2	1.3400e-004	1.3100e-004
tblVehicleEF	LHD2	6.8250e-003	7.8830e-003
tblVehicleEF	LHD2	2.6700e-004	9.4000e-005
tblVehicleEF	LHD2	7.0500e-004	1.1660e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.4100e-004	6.6400e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.35
tblVehicleEF	LHD2	0.09	0.06
tblVehicleEF	LHD2	3.2700e-003	3.8670e-003
tblVehicleEF	LHD2	7.0380e-003	7.8020e-003
tblVehicleEF	LHD2	5.6670e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.54	0.68
tblVehicleEF	LHD2	1.03	0.70
tblVehicleEF	LHD2	13.77	13.67
tblVehicleEF	LHD2	701.55	813.87
tblVehicleEF	LHD2	24.72	9.37
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.55	0.93
tblVehicleEF	LHD2	0.41	0.22
tblVehicleEF	LHD2	1.1530e-003	1.2690e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.9000e-004	1.5300e-004
tblVehicleEF	LHD2	1.1030e-003	1.2140e-003

tblVehicleEF	LHD2	2.6840e-003	2.6310e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5800e-004	1.4100e-004
tblVehicleEF	LHD2	1.7000e-003	2.8930e-003
tblVehicleEF	LHD2	0.03	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.2500e-004	1.4400e-003
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.33
tblVehicleEF	LHD2	0.08	0.05
tblVehicleEF	LHD2	1.3400e-004	1.3100e-004
tblVehicleEF	LHD2	6.8250e-003	7.8830e-003
tblVehicleEF	LHD2	2.6600e-004	9.3000e-005
tblVehicleEF	LHD2	1.7000e-003	2.8930e-003
tblVehicleEF	LHD2	0.03	0.06
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.2500e-004	1.4400e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.06	0.33
tblVehicleEF	LHD2	0.08	0.06
tblVehicleEF	LHD2	3.2700e-003	3.8460e-003
tblVehicleEF	LHD2	6.8630e-003	7.5890e-003
tblVehicleEF	LHD2	6.2760e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.53	0.67
tblVehicleEF	LHD2	1.20	0.82
tblVehicleEF	LHD2	13.77	13.67
tblVehicleEF	LHD2	701.55	813.84
tblVehicleEF	LHD2	24.72	9.58
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.58	0.99
tblVehicleEF	LHD2	0.45	0.25
tblVehicleEF	LHD2	1.1530e-003	1.2690e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.9000e-004	1.5300e-004
tblVehicleEF	LHD2	1.1030e-003	1.2140e-003
tblVehicleEF	LHD2	2.6840e-003	2.6310e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5800e-004	1.4100e-004
tblVehicleEF	LHD2	3.1700e-004	4.8300e-004
tblVehicleEF	LHD2	0.03	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	2.2200e-004	3.2500e-004
tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.07	0.39
tblVehicleEF	LHD2	0.08	0.06
tblVehicleEF	LHD2	1.3400e-004	1.3100e-004
tblVehicleEF	LHD2	6.8250e-003	7.8830e-003
tblVehicleEF	LHD2	2.6800e-004	9.5000e-005
tblVehicleEF	LHD2	3.1700e-004	4.8300e-004
tblVehicleEF	LHD2	0.03	0.06
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	2.2200e-004	3.2500e-004

tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.07	0.39
tblVehicleEF	LHD2	0.09	0.06
tblVehicleEF	MCY	0.47	0.35
tblVehicleEF	MCY	0.16	0.26
tblVehicleEF	MCY	19.41	20.54
tblVehicleEF	MCY	10.30	9.07
tblVehicleEF	MCY	175.52	215.58
tblVehicleEF	MCY	45.05	62.20
tblVehicleEF	MCY	1.16	1.17
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	2.1670e-003	2.0420e-003
tblVehicleEF	MCY	3.6900e-003	3.3520e-003
tblVehicleEF	MCY	2.0250e-003	1.9110e-003
tblVehicleEF	MCY	3.4710e-003	3.1620e-003
tblVehicleEF	MCY	0.80	0.81
tblVehicleEF	MCY	0.71	0.74
tblVehicleEF	MCY	0.49	0.50
tblVehicleEF	MCY	2.29	2.36
tblVehicleEF	MCY	0.55	2.28
tblVehicleEF	MCY	2.23	2.01
tblVehicleEF	MCY	2.1400e-003	2.1330e-003
tblVehicleEF	MCY	6.8400e-004	6.1600e-004
tblVehicleEF	MCY	0.80	0.81
tblVehicleEF	MCY	0.71	0.74
tblVehicleEF	MCY	0.49	0.50
tblVehicleEF	MCY	2.85	2.91
tblVehicleEF	MCY	0.55	2.28
tblVehicleEF	MCY	2.42	2.18
tblVehicleEF	MCY	0.45	0.33
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	18.42	19.42
tblVehicleEF	MCY	8.86	7.78
tblVehicleEF	MCY	175.52	213.43
tblVehicleEF	MCY	45.05	58.89
tblVehicleEF	MCY	1.01	1.02
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	2.1670e-003	2.0420e-003
tblVehicleEF	MCY	3.6900e-003	3.3520e-003
tblVehicleEF	MCY	2.0250e-003	1.9110e-003
tblVehicleEF	MCY	3.4710e-003	3.1620e-003
tblVehicleEF	MCY	2.32	2.35
tblVehicleEF	MCY	0.94	0.99
tblVehicleEF	MCY	1.41	1.45
tblVehicleEF	MCY	2.20	2.26
tblVehicleEF	MCY	0.52	2.13
tblVehicleEF	MCY	1.83	1.63
tblVehicleEF	MCY	2.1210e-003	2.1120e-003
tblVehicleEF	MCY	6.4900e-004	5.8300e-004
tblVehicleEF	MCY	2.32	2.35
tblVehicleEF	MCY	0.94	0.99
tblVehicleEF	MCY	1.41	1.45
tblVehicleEF	MCY	2.74	2.78
tblVehicleEF	MCY	0.52	2.13

tblVehicleEF	MCY	1.99	1.77
tblVehicleEF	MCY	0.49	0.36
tblVehicleEF	MCY	0.19	0.30
tblVehicleEF	MCY	20.98	22.29
tblVehicleEF	MCY	11.74	10.39
tblVehicleEF	MCY	175.52	218.73
tblVehicleEF	MCY	45.05	65.42
tblVehicleEF	MCY	1.25	1.26
tblVehicleEF	MCY	0.34	0.29
tblVehicleEF	MCY	2.1670e-003	2.0420e-003
tblVehicleEF	MCY	3.6900e-003	3.3520e-003
tblVehicleEF	MCY	2.0250e-003	1.9110e-003
tblVehicleEF	MCY	3.4710e-003	3.1620e-003
tblVehicleEF	MCY	0.21	0.21
tblVehicleEF	MCY	0.85	0.89
tblVehicleEF	MCY	0.17	0.18
tblVehicleEF	MCY	2.39	2.47
tblVehicleEF	MCY	0.65	2.70
tblVehicleEF	MCY	2.58	2.35
tblVehicleEF	MCY	2.1680e-003	2.1640e-003
tblVehicleEF	MCY	7.1900e-004	6.4700e-004
tblVehicleEF	MCY	0.21	0.21
tblVehicleEF	MCY	0.85	0.89
tblVehicleEF	MCY	0.17	0.18
tblVehicleEF	MCY	2.96	3.04
tblVehicleEF	MCY	0.65	2.70
tblVehicleEF	MCY	2.80	2.55
tblVehicleEF	MDV	7.9410e-003	4.4190e-003
tblVehicleEF	MDV	0.01	0.09
tblVehicleEF	MDV	0.89	0.91
tblVehicleEF	MDV	2.41	3.45
tblVehicleEF	MDV	425.55	396.32
tblVehicleEF	MDV	96.55	85.19
tblVehicleEF	MDV	0.11	0.09
tblVehicleEF	MDV	0.20	0.38
tblVehicleEF	MDV	1.8340e-003	1.6500e-003
tblVehicleEF	MDV	2.4550e-003	2.0710e-003
tblVehicleEF	MDV	1.6900e-003	1.5210e-003
tblVehicleEF	MDV	2.2570e-003	1.9040e-003
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.10	0.49
tblVehicleEF	MDV	0.18	0.45
tblVehicleEF	MDV	4.2580e-003	3.9180e-003
tblVehicleEF	MDV	1.0070e-003	8.4300e-004
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.16	0.15
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.10	0.49
tblVehicleEF	MDV	0.19	0.49
tblVehicleEF	MDV	8.8400e-003	4.9810e-003

tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.04	1.07
tblVehicleEF	MDV	1.85	2.62
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tblVehicleEF	MDV	96.55	83.59
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tblVehicleEF	MDV	0.18	0.33
tblVehicleEF	MDV	1.8340e-003	1.6500e-003
tblVehicleEF	MDV	2.4550e-003	2.0710e-003
tblVehicleEF	MDV	1.6900e-003	1.5210e-003
tblVehicleEF	MDV	2.2570e-003	1.9040e-003
tblVehicleEF	MDV	0.13	0.17
tblVehicleEF	MDV	0.18	0.17
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.14	0.37
tblVehicleEF	MDV	4.5890e-003	4.1260e-003
tblVehicleEF	MDV	9.9800e-004	8.2700e-004
tblVehicleEF	MDV	0.13	0.17
tblVehicleEF	MDV	0.18	0.17
tblVehicleEF	MDV	0.12	0.15
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.45
tblVehicleEF	MDV	0.16	0.40
tblVehicleEF	MDV	7.7730e-003	4.2870e-003
tblVehicleEF	MDV	0.01	0.10
tblVehicleEF	MDV	0.88	0.91
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tblVehicleEF	MDV	96.55	86.35
tblVehicleEF	MDV	0.12	0.10
tblVehicleEF	MDV	0.22	0.41
tblVehicleEF	MDV	1.8340e-003	1.6500e-003
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tblVehicleEF	MDV	2.2570e-003	1.9040e-003
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.17	0.16
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.12	0.59
tblVehicleEF	MDV	0.20	0.51
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tblVehicleEF	MDV	1.0140e-003	8.5400e-004
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.17	0.16
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.03	0.03
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tblVehicleEF	MDV	0.22	0.56
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.58	1.34



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tblVehicleEF	MH	1,204.53	1,563.71
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tblVehicleEF	MH	1.14	1.33
tblVehicleEF	MH	0.78	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.0630e-003	2.9700e-004
tblVehicleEF	MH	3.2150e-003	3.2550e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.7800e-004	2.7300e-004
tblVehicleEF	MH	0.64	0.68
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	0.25	0.26
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.02	1.57
tblVehicleEF	MH	0.30	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.7700e-004	1.9400e-004
tblVehicleEF	MH	0.64	0.68
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	0.25	0.26
tblVehicleEF	MH	0.10	0.10
tblVehicleEF	MH	0.02	1.57
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tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.02	0.02
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tblVehicleEF	MH	0.02	0.02
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tblVehicleEF	MH	3.2150e-003	3.2550e-003
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tblVehicleEF	MH	9.7800e-004	2.7300e-004
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tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.54	0.57
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.02	1.53
tblVehicleEF	MH	0.28	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.6800e-004	1.9000e-004
tblVehicleEF	MH	1.58	1.68
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.54	0.57
tblVehicleEF	MH	0.11	0.10
tblVehicleEF	MH	0.02	1.53
tblVehicleEF	MH	0.30	0.11
tblVehicleEF	MH	0.02	0.01

tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.53	1.30
tblVehicleEF	MH	5.61	2.47
tblVehicleEF	MH	1,204.53	1,563.65
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tblVehicleEF	MH	0.02	0.02
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tblVehicleEF	MH	3.2150e-003	3.2550e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.7800e-004	2.7300e-004
tblVehicleEF	MH	0.25	0.26
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.12	0.13
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.02	1.69
tblVehicleEF	MH	0.31	0.11
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	6.8400e-004	1.9700e-004
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tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.12	0.13
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tblVehicleEF	MHD	13.30	1.49
tblVehicleEF	MHD	1.0200e-004	1.1190e-003
tblVehicleEF	MHD	3.0930e-003	0.03
tblVehicleEF	MHD	5.9300e-004	8.3000e-005
tblVehicleEF	MHD	9.8000e-005	1.0710e-003
tblVehicleEF	MHD	2.9550e-003	0.03
tblVehicleEF	MHD	5.4600e-004	7.7000e-005
tblVehicleEF	MHD	5.7600e-004	2.9600e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	3.5000e-004	1.7000e-004
tblVehicleEF	MHD	0.04	0.08
tblVehicleEF	MHD	0.01	0.09
tblVehicleEF	MHD	0.23	0.04
tblVehicleEF	MHD	1.6370e-003	7.2200e-004
tblVehicleEF	MHD	0.01	0.01

tblVehicleEF	MHD	5.0000e-004	7.1000e-005
tblVehicleEF	MHD	5.7600e-004	2.9600e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	3.5000e-004	1.7000e-004
tblVehicleEF	MHD	0.05	0.10
tblVehicleEF	MHD	0.01	0.09
tblVehicleEF	MHD	0.25	0.04
tblVehicleEF	MHD	0.01	2.6110e-003
tblVehicleEF	MHD	3.1990e-003	4.8340e-003
tblVehicleEF	MHD	0.04	6.9020e-003
tblVehicleEF	MHD	0.19	0.29
tblVehicleEF	MHD	0.29	0.41
tblVehicleEF	MHD	3.46	0.81
tblVehicleEF	MHD	180.84	76.85
tblVehicleEF	MHD	1,177.05	1,096.18
tblVehicleEF	MHD	43.34	7.04
tblVehicleEF	MHD	0.48	0.55
tblVehicleEF	MHD	1.06	1.90
tblVehicleEF	MHD	13.25	1.48
tblVehicleEF	MHD	8.6000e-005	9.4700e-004
tblVehicleEF	MHD	3.0930e-003	0.03
tblVehicleEF	MHD	5.9300e-004	8.3000e-005
tblVehicleEF	MHD	8.2000e-005	9.0600e-004
tblVehicleEF	MHD	2.9550e-003	0.03
tblVehicleEF	MHD	5.4600e-004	7.7000e-005
tblVehicleEF	MHD	1.4280e-003	7.5100e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	7.6400e-004	3.8400e-004
tblVehicleEF	MHD	0.04	0.08
tblVehicleEF	MHD	0.01	0.09
tblVehicleEF	MHD	0.21	0.04
tblVehicleEF	MHD	1.7330e-003	7.2800e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	4.9400e-004	7.0000e-005
tblVehicleEF	MHD	1.4280e-003	7.5100e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	7.6400e-004	3.8400e-004
tblVehicleEF	MHD	0.05	0.10
tblVehicleEF	MHD	0.01	0.09
tblVehicleEF	MHD	0.23	0.04
tblVehicleEF	MHD	0.02	2.9220e-003
tblVehicleEF	MHD	3.1160e-003	4.7460e-003
tblVehicleEF	MHD	0.05	7.7440e-003
tblVehicleEF	MHD	0.36	0.40
tblVehicleEF	MHD	0.28	0.40
tblVehicleEF	MHD	4.09	0.95
tblVehicleEF	MHD	156.74	75.32
tblVehicleEF	MHD	1,177.05	1,096.17
tblVehicleEF	MHD	43.34	7.29
tblVehicleEF	MHD	0.45	0.56
tblVehicleEF	MHD	1.13	2.02

tblVehicleEF	MHD	13.33	1.49
tblVehicleEF	MHD	1.2400e-004	1.3580e-003
tblVehicleEF	MHD	3.0930e-003	0.03
tblVehicleEF	MHD	5.9300e-004	8.3000e-005
tblVehicleEF	MHD	1.1900e-004	1.2990e-003
tblVehicleEF	MHD	2.9550e-003	0.03
tblVehicleEF	MHD	5.4600e-004	7.7000e-005
tblVehicleEF	MHD	2.4700e-004	1.1900e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.7000e-004	8.0000e-005
tblVehicleEF	MHD	0.04	0.08
tblVehicleEF	MHD	0.01	0.10
tblVehicleEF	MHD	0.24	0.04
tblVehicleEF	MHD	1.5050e-003	7.1400e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.0500e-004	7.2000e-005
tblVehicleEF	MHD	2.4700e-004	1.1900e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.7000e-004	8.0000e-005
tblVehicleEF	MHD	0.05	0.09
tblVehicleEF	MHD	0.01	0.10
tblVehicleEF	MHD	0.26	0.05
tblVehicleEF	OBUS	0.01	8.6420e-003
tblVehicleEF	OBUS	6.6370e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.56
tblVehicleEF	OBUS	0.46	1.04
tblVehicleEF	OBUS	5.23	2.60
tblVehicleEF	OBUS	111.04	85.85
tblVehicleEF	OBUS	1,288.37	1,506.41
tblVehicleEF	OBUS	65.70	20.17
tblVehicleEF	OBUS	0.24	0.41
tblVehicleEF	OBUS	0.94	1.65
tblVehicleEF	OBUS	3.00	0.71
tblVehicleEF	OBUS	2.2000e-005	7.6700e-004
tblVehicleEF	OBUS	2.8390e-003	0.02
tblVehicleEF	OBUS	8.8600e-004	1.9400e-004
tblVehicleEF	OBUS	2.1000e-005	7.3400e-004
tblVehicleEF	OBUS	2.6950e-003	0.02
tblVehicleEF	OBUS	8.1400e-004	1.7900e-004
tblVehicleEF	OBUS	1.1640e-003	1.4680e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	5.5500e-004	6.8600e-004
tblVehicleEF	OBUS	0.05	0.09
tblVehicleEF	OBUS	0.03	0.26
tblVehicleEF	OBUS	0.32	0.12
tblVehicleEF	OBUS	1.0710e-003	8.1700e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.4900e-004	2.0000e-004
tblVehicleEF	OBUS	1.1640e-003	1.4680e-003
tblVehicleEF	OBUS	0.02	0.02

tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	5.5500e-004	6.8600e-004
tblVehicleEF	OBUS	0.06	0.12
tblVehicleEF	OBUS	0.03	0.26
tblVehicleEF	OBUS	0.35	0.13
tblVehicleEF	OBUS	0.01	8.7070e-003
tblVehicleEF	OBUS	6.8380e-003	0.01
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.23	0.55
tblVehicleEF	OBUS	0.47	1.07
tblVehicleEF	OBUS	4.72	2.35
tblVehicleEF	OBUS	116.68	85.74
tblVehicleEF	OBUS	1,288.37	1,506.47
tblVehicleEF	OBUS	65.70	19.74
tblVehicleEF	OBUS	0.25	0.40
tblVehicleEF	OBUS	0.89	1.57
tblVehicleEF	OBUS	2.94	0.69
tblVehicleEF	OBUS	1.9000e-005	6.5200e-004
tblVehicleEF	OBUS	2.8390e-003	0.02
tblVehicleEF	OBUS	8.8600e-004	1.9400e-004
tblVehicleEF	OBUS	1.8000e-005	6.2300e-004
tblVehicleEF	OBUS	2.6950e-003	0.02
tblVehicleEF	OBUS	8.1400e-004	1.7900e-004
tblVehicleEF	OBUS	2.7890e-003	3.5390e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.1920e-003	1.4850e-003
tblVehicleEF	OBUS	0.05	0.09
tblVehicleEF	OBUS	0.03	0.26
tblVehicleEF	OBUS	0.30	0.11
tblVehicleEF	OBUS	1.1250e-003	8.1600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.4000e-004	1.9500e-004
tblVehicleEF	OBUS	2.7890e-003	3.5390e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	1.1920e-003	1.4850e-003
tblVehicleEF	OBUS	0.06	0.12
tblVehicleEF	OBUS	0.03	0.26
tblVehicleEF	OBUS	0.33	0.12
tblVehicleEF	OBUS	0.01	8.5720e-003
tblVehicleEF	OBUS	6.5000e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.25	0.58
tblVehicleEF	OBUS	0.46	1.02
tblVehicleEF	OBUS	5.63	2.80
tblVehicleEF	OBUS	103.26	85.99
tblVehicleEF	OBUS	1,288.37	1,506.36
tblVehicleEF	OBUS	65.70	20.51
tblVehicleEF	OBUS	0.23	0.43
tblVehicleEF	OBUS	0.96	1.69
tblVehicleEF	OBUS	3.06	0.73
tblVehicleEF	OBUS	2.7000e-005	9.2700e-004
tblVehicleEF	OBUS	2.8390e-003	0.02

tblVehicleEF	OBUS	8.8600e-004	1.9400e-004
tblVehicleEF	OBUS	2.6000e-005	8.8700e-004
tblVehicleEF	OBUS	2.6950e-003	0.02
tblVehicleEF	OBUS	8.1400e-004	1.7900e-004
tblVehicleEF	OBUS	5.5100e-004	6.7400e-004
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	2.8900e-004	3.5100e-004
tblVehicleEF	OBUS	0.05	0.09
tblVehicleEF	OBUS	0.04	0.29
tblVehicleEF	OBUS	0.34	0.13
tblVehicleEF	OBUS	9.9700e-004	8.1900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.5500e-004	2.0300e-004
tblVehicleEF	OBUS	5.5100e-004	6.7400e-004
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	2.8900e-004	3.5100e-004
tblVehicleEF	OBUS	0.06	0.11
tblVehicleEF	OBUS	0.04	0.29
tblVehicleEF	OBUS	0.37	0.14
tblVehicleEF	SBUS	0.83	0.06
tblVehicleEF	SBUS	0.01	4.5520e-003
tblVehicleEF	SBUS	0.06	5.3550e-003
tblVehicleEF	SBUS	10.93	2.55
tblVehicleEF	SBUS	0.80	0.36
tblVehicleEF	SBUS	10.51	0.78
tblVehicleEF	SBUS	942.53	341.69
tblVehicleEF	SBUS	913.72	1,012.09
tblVehicleEF	SBUS	75.80	4.47
tblVehicleEF	SBUS	5.18	2.98
tblVehicleEF	SBUS	2.16	3.81
tblVehicleEF	SBUS	8.57	1.08
tblVehicleEF	SBUS	4.2610e-003	3.1880e-003
tblVehicleEF	SBUS	9.6910e-003	0.01
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	1.3750e-003	6.1000e-005
tblVehicleEF	SBUS	4.0770e-003	3.0500e-003
tblVehicleEF	SBUS	2.4230e-003	2.6740e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	1.2640e-003	5.6000e-005
tblVehicleEF	SBUS	3.0300e-003	2.8700e-004
tblVehicleEF	SBUS	0.03	2.8600e-003
tblVehicleEF	SBUS	1.30	0.28
tblVehicleEF	SBUS	1.4980e-003	1.3600e-004
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.52	0.03
tblVehicleEF	SBUS	9.3790e-003	3.2550e-003
tblVehicleEF	SBUS	8.8930e-003	9.6830e-003
tblVehicleEF	SBUS	9.3900e-004	4.4000e-005
tblVehicleEF	SBUS	3.0300e-003	2.8700e-004
tblVehicleEF	SBUS	0.03	2.8600e-003
tblVehicleEF	SBUS	1.89	0.40

tblVehicleEF	SBUS	1.4980e-003	1.3600e-004
tblVehicleEF	SBUS	0.10	0.07
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.57	0.03
tblVehicleEF	SBUS	0.83	0.06
tblVehicleEF	SBUS	0.01	4.6320e-003
tblVehicleEF	SBUS	0.05	4.4260e-003
tblVehicleEF	SBUS	10.87	2.52
tblVehicleEF	SBUS	0.83	0.37
tblVehicleEF	SBUS	7.50	0.56
tblVehicleEF	SBUS	976.31	347.82
tblVehicleEF	SBUS	913.72	1,012.11
tblVehicleEF	SBUS	75.80	4.10
tblVehicleEF	SBUS	5.35	3.02
tblVehicleEF	SBUS	2.06	3.65
tblVehicleEF	SBUS	8.51	1.08
tblVehicleEF	SBUS	3.5920e-003	2.6960e-003
tblVehicleEF	SBUS	9.6910e-003	0.01
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	1.3750e-003	6.1000e-005
tblVehicleEF	SBUS	3.4370e-003	2.5790e-003
tblVehicleEF	SBUS	2.4230e-003	2.6740e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	1.2640e-003	5.6000e-005
tblVehicleEF	SBUS	7.2080e-003	7.1400e-004
tblVehicleEF	SBUS	0.03	3.0150e-003
tblVehicleEF	SBUS	1.30	0.28
tblVehicleEF	SBUS	3.2150e-003	3.1500e-004
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.43	0.02
tblVehicleEF	SBUS	9.7020e-003	3.3130e-003
tblVehicleEF	SBUS	8.8930e-003	9.6830e-003
tblVehicleEF	SBUS	8.8900e-004	4.1000e-005
tblVehicleEF	SBUS	7.2080e-003	7.1400e-004
tblVehicleEF	SBUS	0.03	3.0150e-003
tblVehicleEF	SBUS	1.89	0.40
tblVehicleEF	SBUS	3.2150e-003	3.1500e-004
tblVehicleEF	SBUS	0.10	0.07
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.47	0.03
tblVehicleEF	SBUS	0.83	0.06
tblVehicleEF	SBUS	0.01	4.4950e-003
tblVehicleEF	SBUS	0.07	6.0610e-003
tblVehicleEF	SBUS	11.02	2.60
tblVehicleEF	SBUS	0.79	0.35
tblVehicleEF	SBUS	13.10	0.97
tblVehicleEF	SBUS	895.87	333.23
tblVehicleEF	SBUS	913.72	1,012.08
tblVehicleEF	SBUS	75.80	4.79
tblVehicleEF	SBUS	4.96	2.91
tblVehicleEF	SBUS	2.21	3.88
tblVehicleEF	SBUS	8.62	1.08
tblVehicleEF	SBUS	5.1850e-003	3.8670e-003

tblVehicleEF	SBUS	9.6910e-003	0.01
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	1.3750e-003	6.1000e-005
tblVehicleEF	SBUS	4.9600e-003	3.7000e-003
tblVehicleEF	SBUS	2.4230e-003	2.6740e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	1.2640e-003	5.6000e-005
tblVehicleEF	SBUS	1.4830e-003	1.2800e-004
tblVehicleEF	SBUS	0.03	2.9270e-003
tblVehicleEF	SBUS	1.30	0.28
tblVehicleEF	SBUS	7.8700e-004	6.7000e-005
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.59	0.03
tblVehicleEF	SBUS	8.9340e-003	3.1750e-003
tblVehicleEF	SBUS	8.8930e-003	9.6830e-003
tblVehicleEF	SBUS	9.8200e-004	4.7000e-005
tblVehicleEF	SBUS	1.4830e-003	1.2800e-004
tblVehicleEF	SBUS	0.03	2.9270e-003
tblVehicleEF	SBUS	1.89	0.40
tblVehicleEF	SBUS	7.8700e-004	6.7000e-005
tblVehicleEF	SBUS	0.09	0.07
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.64	0.04
tblVehicleEF	UBUS	0.26	0.97
tblVehicleEF	UBUS	0.04	1.1260e-003
tblVehicleEF	UBUS	6.18	6.84
tblVehicleEF	UBUS	7.78	0.07
tblVehicleEF	UBUS	2,169.74	1,683.41
tblVehicleEF	UBUS	84.13	0.87
tblVehicleEF	UBUS	13.74	1.43
tblVehicleEF	UBUS	16.04	9.4870e-003
tblVehicleEF	UBUS	0.64	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.28	5.9990e-003
tblVehicleEF	UBUS	9.8900e-004	5.0000e-006
tblVehicleEF	UBUS	0.27	0.03
tblVehicleEF	UBUS	3.0000e-003	7.8870e-003
tblVehicleEF	UBUS	0.27	5.7390e-003
tblVehicleEF	UBUS	9.0900e-004	5.0000e-006
tblVehicleEF	UBUS	2.3960e-003	5.1000e-005
tblVehicleEF	UBUS	0.05	7.6700e-004
tblVehicleEF	UBUS	1.2220e-003	3.4000e-005
tblVehicleEF	UBUS	0.71	0.01
tblVehicleEF	UBUS	0.01	4.7340e-003
tblVehicleEF	UBUS	0.59	4.9110e-003
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	9.8100e-004	9.0000e-006
tblVehicleEF	UBUS	2.3960e-003	5.1000e-005
tblVehicleEF	UBUS	0.05	7.6700e-004
tblVehicleEF	UBUS	1.2220e-003	3.4000e-005
tblVehicleEF	UBUS	1.03	0.99
tblVehicleEF	UBUS	0.01	4.7340e-003
tblVehicleEF	UBUS	0.65	5.3770e-003



tblVehicleEF	UBUS	0.27	0.97
tblVehicleEF	UBUS	0.04	9.9100e-004
tblVehicleEF	UBUS	6.23	6.84
tblVehicleEF	UBUS	6.09	0.06
tblVehicleEF	UBUS	2,169.74	1,683.41
tblVehicleEF	UBUS	84.13	0.85
tblVehicleEF	UBUS	13.17	1.43
tblVehicleEF	UBUS	15.96	8.7590e-003
tblVehicleEF	UBUS	0.64	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.28	5.9990e-003
tblVehicleEF	UBUS	9.8900e-004	5.0000e-006
tblVehicleEF	UBUS	0.27	0.03
tblVehicleEF	UBUS	3.0000e-003	7.8870e-003
tblVehicleEF	UBUS	0.27	5.7390e-003
tblVehicleEF	UBUS	9.0900e-004	5.0000e-006
tblVehicleEF	UBUS	6.0420e-003	1.2400e-004
tblVehicleEF	UBUS	0.06	8.5200e-004
tblVehicleEF	UBUS	2.6570e-003	7.2000e-005
tblVehicleEF	UBUS	0.71	0.01
tblVehicleEF	UBUS	0.01	4.2510e-003
tblVehicleEF	UBUS	0.51	4.2890e-003
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	9.5200e-004	8.0000e-006
tblVehicleEF	UBUS	6.0420e-003	1.2400e-004
tblVehicleEF	UBUS	0.06	8.5200e-004
tblVehicleEF	UBUS	2.6570e-003	7.2000e-005
tblVehicleEF	UBUS	1.04	0.99
tblVehicleEF	UBUS	0.01	4.2510e-003
tblVehicleEF	UBUS	0.56	4.6960e-003
tblVehicleEF	UBUS	0.26	0.97
tblVehicleEF	UBUS	0.05	1.2270e-003
tblVehicleEF	UBUS	6.14	6.84
tblVehicleEF	UBUS	9.21	0.09
tblVehicleEF	UBUS	2,169.74	1,683.41
tblVehicleEF	UBUS	84.13	0.89
tblVehicleEF	UBUS	13.96	1.43
tblVehicleEF	UBUS	16.10	0.01
tblVehicleEF	UBUS	0.64	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.28	5.9990e-003
tblVehicleEF	UBUS	9.8900e-004	5.0000e-006
tblVehicleEF	UBUS	0.27	0.03
tblVehicleEF	UBUS	3.0000e-003	7.8870e-003
tblVehicleEF	UBUS	0.27	5.7390e-003
tblVehicleEF	UBUS	9.0900e-004	5.0000e-006
tblVehicleEF	UBUS	9.6400e-004	2.6000e-005
tblVehicleEF	UBUS	0.06	7.9400e-004
tblVehicleEF	UBUS	5.9400e-004	1.8000e-005
tblVehicleEF	UBUS	0.70	0.01
tblVehicleEF	UBUS	0.02	5.9600e-003
tblVehicleEF	UBUS	0.66	5.3820e-003
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.0060e-003	9.0000e-006

tblVehicleEF	UBUS	9.6400e-004	2.6000e-005
tblVehicleEF	UBUS	0.06	7.9400e-004
tblVehicleEF	UBUS	5.9400e-004	1.8000e-005
tblVehicleEF	UBUS	1.02	0.99
tblVehicleEF	UBUS	0.02	5.9600e-003
tblVehicleEF	UBUS	0.72	5.8930e-003
tblVehicleTrips	ST_TR	2.46	1.25
tblVehicleTrips	ST_TR	49.97	23.38
tblVehicleTrips	SU_TR	1.05	0.53
tblVehicleTrips	SU_TR	25.24	11.81
tblVehicleTrips	WD_TR	11.03	5.61
tblVehicleTrips	WD_TR	42.70	19.98

## 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					
2022	0.062	0.6154	0.5819	1.49E-03	0.0604	0.0241	0.0844	0.0141	0.0222	0.0363	0	134.684	134.684	0.0244	0	135.2935
2023	0.0777	0.672	0.7772	1.71E-03	0.0562	0.0297	0.0859	0.0151	0.0273	0.0424	0	153.0691	153.0691	0.0316	0	153.8603
2024	0.5383	0.1304	0.1668	3.50E-04	4.80E-03	5.47E-03	0.0103	1.31E-03	5.43E-03	6.74E-03	0	29.9094	29.9094	2.09E-03	0	29.9615
<b>Maximum</b>	<b>0.5383</b>	<b>0.672</b>	<b>0.7772</b>	<b>1.71E-03</b>	<b>0.0604</b>	<b>0.0297</b>	<b>0.0859</b>	<b>0.0151</b>	<b>0.0273</b>	<b>0.0424</b>	<b>0</b>	<b>153.0691</b>	<b>153.0691</b>	<b>0.0316</b>	<b>0</b>	<b>153.8603</b>

#### 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					
2022	0.0265	0.2021	0.6372	1.49E-03	0.0604	1.83E-03	0.0622	0.0141	1.80E-03	0.0159	0	134.6839	134.6839	0.0244	0	135.2934
2023	0.0331	0.1602	0.843	1.71E-03	0.0562	2.11E-03	0.0583	0.0151	2.09E-03	0.0172	0	153.069	153.069	0.0316	0	153.8601
2024	0.5242	0.028	0.1554	3.50E-04	4.80E-03	3.50E-04	5.15E-03	1.31E-03	3.50E-04	1.66E-03	0	29.9094	29.9094	2.09E-03	0	29.9615
<b>Maximum</b>	<b>0.5242</b>	<b>0.2021</b>	<b>0.843</b>	<b>1.71E-03</b>	<b>0.0604</b>	<b>2.11E-03</b>	<b>0.0622</b>	<b>0.0151</b>	<b>2.09E-03</b>	<b>0.0172</b>	<b>0</b>	<b>153.069</b>	<b>153.069</b>	<b>0.0316</b>	<b>0</b>	<b>153.8601</b>

	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
<b>Percent Reduction</b>	<b>13.88</b>	<b>72.47</b>	<b>-7.19</b>	<b>0.00</b>	<b>0.00</b>	<b>92.76</b>	<b>30.41</b>	<b>0.00</b>	<b>92.28</b>	<b>59.38</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-1-2022	4-30-2022	0.1501	0.0767
2	5-1-2022	7-31-2022	0.1741	0.0605
3	8-1-2022	10-31-2022	0.2111	0.0543
4	11-1-2022	1-31-2023	0.2048	0.0532
5	2-1-2023	4-30-2023	0.1844	0.0477
6	5-1-2023	7-31-2023	0.1899	0.0487
7	8-1-2023	10-31-2023	0.1903	0.0490
8	11-1-2023	1-31-2024	0.2513	0.1330
9	2-1-2024	4-30-2024	0.4883	0.4087

10	5-1-2024	7-31-2024	0.0488	0.0409
		Highest	0.4883	0.4087

## 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	0.4418	1.00E-05	9.10E-04	0		0	0		0	0	0	1.78E-03	1.78E-03	0	0	1.90E-03
Energy	9.30E-03	0.0846	0.071	5.10E-04		6.43E-03	6.43E-03		6.43E-03	6.43E-03	0	204.3127	204.3127	0.0173	4.90E-03	206.2031
Mobile	0.2555	0.5654	1.8509	5.61E-03	0.4907	6.38E-03	0.4971	0.1316	6.02E-03	0.1376	0	523.2316	523.2316	0.0242	0	523.8375
Waste						0	0		0	0	19.1502	0	19.1502	1.1317	0	47.4437
Water						0	0		0	0	5.2072	11.8136	17.0208	0.5365	0.013	34.2962
<b>Total</b>	<b>0.7066</b>	<b>0.65</b>	<b>1.9228</b>	<b>6.12E-03</b>	<b>0.4907</b>	<b>0.0128</b>	<b>0.5036</b>	<b>0.1316</b>	<b>0.0125</b>	<b>0.144</b>	<b>24.3574</b>	<b>739.3596</b>	<b>763.717</b>	<b>1.7097</b>	<b>0.0179</b>	<b>811.7824</b>

### 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	0.4418	1.00E-05	9.10E-04	0		0	0		0	0	0	1.78E-03	1.78E-03	0	0	1.90E-03
Energy	9.30E-03	0.0846	0.071	5.10E-04		6.43E-03	6.43E-03		6.43E-03	6.43E-03	0	204.3127	204.3127	0.0173	4.90E-03	206.2031
Mobile	0.2555	0.5654	1.8509	5.61E-03	0.4907	6.38E-03	0.4971	0.1316	6.02E-03	0.1376	0	523.2316	523.2316	0.0242	0	523.8375
Waste						0	0		0	0	19.1502	0	19.1502	1.1317	0	47.4437
Water						0	0		0	0	5.2072	11.8136	17.0208	0.5365	0.013	34.2962
<b>Total</b>	<b>0.7066</b>	<b>0.65</b>	<b>1.9228</b>	<b>6.12E-03</b>	<b>0.4907</b>	<b>0.0128</b>	<b>0.5036</b>	<b>0.1316</b>	<b>0.0125</b>	<b>0.144</b>	<b>24.3574</b>	<b>739.3596</b>	<b>763.717</b>	<b>1.7097</b>	<b>0.0179</b>	<b>811.7824</b>

	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
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	2/1/2022	3/7/2022	5	25	
2	Site Preparation	Site Preparation	3/8/2022	3/21/2022	5	10	
3	Grading	Grading	3/22/2022	6/13/2022	5	60	
4	Building Construction	Building Construction	6/14/2022	12/26/2023	5	401	
5	Paving	Paving	12/27/2023	1/10/2024	5	11	
6	Architectural Coating	Architectural Coating	1/11/2024	5/9/2024	5	86	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 149,682; Non-Residential Outdoor: 49,894; Striped Parking Area: 0

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	1.20	81	0.73
Demolition	Crushing/Proc. Equipment	1	0.70	85	0.78
Demolition	Excavators	1	4.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Skid Steer Loaders	1	0.70	65	0.37
Demolition	Tractors/Loaders/Backhoes	2	3.20	97	0.37
Site Preparation	Graders	1	2.40	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	1.20	97	0.37
Grading	Concrete/Industrial Saws	0	0.00	81	0.73
Grading	Excavators	1	1.50	158	0.38
Grading	Graders	1	2.00	187	0.41
Grading	Rubber Tired Dozers	0	0.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	1.00	97	0.37
Building Construction	Cranes	1	3.40	231	0.29
Building Construction	Forklifts	2	4.50	89	0.20
Building Construction	Skid Steer Loaders	2	0.90	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	4.50	97	0.37
Paving	Cement and Mortar Mixers	2	2.20	9	0.56
Paving	Pavers	1	3.20	130	0.42
Paving	Rollers	2	3.20	80	0.38
Paving	Tractors/Loaders/Backhoes	1	2.50	97	0.37
Architectural Coating	Air Compressors	2	4.90	78	0.48
Architectural Coating	Cement and Mortar Mixers	2	4.20	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
Demolition	6	16.00	0.00	300.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	12.00	0.00	424.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	50.00	6.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	20.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

**3.2 Demolition - 2022**

**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					0.0169	0.0000	0.0169	2.5500e-003	0.0000	2.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1800e-003	0.0377	0.0559	9.0000e-005		1.9500e-003	1.9500e-003		1.8400e-003	1.8400e-003	0.0000	7.4341	7.4341	1.9600e-003	0.0000	7.4832
<b>Total</b>	<b>4.1800e-003</b>	<b>0.0377</b>	<b>0.0559</b>	<b>9.0000e-005</b>	<b>0.0169</b>	<b>1.9500e-003</b>	<b>0.0188</b>	<b>2.5500e-003</b>	<b>1.8400e-003</b>	<b>4.3900e-003</b>	<b>0.0000</b>	<b>7.4341</b>	<b>7.4341</b>	<b>1.9600e-003</b>	<b>0.0000</b>	<b>7.4832</b>

**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	1.1300e-003	0.0373	7.3200e-003	1.2000e-004	2.5400e-003	1.1000e-004	2.6500e-003	7.0000e-004	1.0000e-004	8.0000e-004	0.0000	11.1909	11.1909	5.5000e-004	0.0000	11.2046
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.3600e-003	1.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3075	1.3075	3.0000e-005	0.0000	1.3082
<b>Total</b>	<b>1.7200e-003</b>	<b>0.0377</b>	<b>0.0117</b>	<b>1.3000e-004</b>	<b>4.1200e-003</b>	<b>1.2000e-004</b>	<b>4.2400e-003</b>	<b>1.1200e-003</b>	<b>1.1000e-004</b>	<b>1.2300e-003</b>	<b>0.0000</b>	<b>12.4984</b>	<b>12.4984</b>	<b>5.8000e-004</b>	<b>0.0000</b>	<b>12.5128</b>

**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					0.0169	0.0000	0.0169	2.5500e-003	0.0000	2.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0300e-003	5.4800e-003	0.0616	9.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	7.4341	7.4341	1.9600e-003	0.0000	7.4832
<b>Total</b>	<b>1.0300e-003</b>	<b>5.4800e-003</b>	<b>0.0616</b>	<b>9.0000e-005</b>	<b>0.0169</b>	<b>1.3000e-004</b>	<b>0.0170</b>	<b>2.5500e-003</b>	<b>1.3000e-004</b>	<b>2.6800e-003</b>	<b>0.0000</b>	<b>7.4341</b>	<b>7.4341</b>	<b>1.9600e-003</b>	<b>0.0000</b>	<b>7.4832</b>

**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	1.1300e-003	0.0373	7.3200e-003	1.2000e-004	2.5400e-003	1.1000e-004	2.6500e-003	7.0000e-004	1.0000e-004	8.0000e-004	0.0000	11.1909	11.1909	5.5000e-004	0.0000	11.2046
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.3600e-003	1.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3075	1.3075	3.0000e-005	0.0000	1.3082
<b>Total</b>	<b>1.7200e-003</b>	<b>0.0377</b>	<b>0.0117</b>	<b>1.3000e-004</b>	<b>4.1200e-003</b>	<b>1.2000e-004</b>	<b>4.2400e-003</b>	<b>1.1200e-003</b>	<b>1.1000e-004</b>	<b>1.2300e-003</b>	<b>0.0000</b>	<b>12.4984</b>	<b>12.4984</b>	<b>5.8000e-004</b>	<b>0.0000</b>	<b>12.5128</b>

**3.3 Site Preparation - 2022**

**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					5.3000e-004	0.0000	5.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.5000e-004	9.1400e-003	4.2600e-003	1.0000e-005		3.2000e-004	3.2000e-004		2.9000e-004	2.9000e-004	0.0000	1.0776	1.0776	3.5000e-004	0.0000	1.0863
<b>Total</b>	<b>7.5000e-004</b>	<b>9.1400e-003</b>	<b>4.2600e-003</b>	<b>1.0000e-005</b>	<b>5.3000e-004</b>	<b>3.2000e-004</b>	<b>8.5000e-004</b>	<b>6.0000e-005</b>	<b>2.9000e-004</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>1.0776</b>	<b>1.0776</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>1.0863</b>

**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
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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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.0000e-004	1.0900e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3269	0.3269	1.0000e-005	0.0000	0.3271
<b>Total</b>	<b>1.5000e-004</b>	<b>1.0000e-004</b>	<b>1.0900e-003</b>	<b>0.0000</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>4.0000e-004</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>0.3269</b>	<b>0.3269</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3271</b>

**Mitigated Construction On-Site**

Category	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
	tons/yr										MT/yr					
Fugitive Dust					5.3000e-004	0.0000	5.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5000e-004	6.5000e-004	6.2200e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.0776	1.0776	3.5000e-004	0.0000	1.0863
<b>Total</b>	<b>1.5000e-004</b>	<b>6.5000e-004</b>	<b>6.2200e-003</b>	<b>1.0000e-005</b>	<b>5.3000e-004</b>	<b>2.0000e-005</b>	<b>5.5000e-004</b>	<b>6.0000e-005</b>	<b>2.0000e-005</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.0776</b>	<b>1.0776</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>1.0863</b>

**Mitigated Construction Off-Site**

Category	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
	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	1.5000e-004	1.0000e-004	1.0900e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3269	0.3269	1.0000e-005	0.0000	0.3271
<b>Total</b>	<b>1.5000e-004</b>	<b>1.0000e-004</b>	<b>1.0900e-003</b>	<b>0.0000</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>4.0000e-004</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>0.3269</b>	<b>0.3269</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.3271</b>

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

Category	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
	tons/yr										MT/yr					
Fugitive Dust					7.2000e-004	0.0000	7.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4900e-003	0.0620	0.0480	1.0000e-004		2.4100e-003	2.4100e-003		2.2200e-003	2.2200e-003	0.0000	8.9643	8.9643	2.9000e-003	0.0000	9.0368
<b>Total</b>	<b>5.4900e-003</b>	<b>0.0620</b>	<b>0.0480</b>	<b>1.0000e-004</b>	<b>7.2000e-004</b>	<b>2.4100e-003</b>	<b>3.1300e-003</b>	<b>9.0000e-005</b>	<b>2.2200e-003</b>	<b>2.3100e-003</b>	<b>0.0000</b>	<b>8.9643</b>	<b>8.9643</b>	<b>2.9000e-003</b>	<b>0.0000</b>	<b>9.0368</b>

**Unmitigated Construction Off-Site**

Category	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
	tons/yr										MT/yr					
Hauling	1.6000e-003	0.0527	0.0103	1.6000e-004	3.5900e-003	1.5000e-004	3.7400e-003	9.9000e-004	1.4000e-004	1.1300e-003	0.0000	15.8165	15.8165	7.7000e-004	0.0000	15.8358

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0700e-003	7.3000e-004	7.8600e-003	3.0000e-005	2.8500e-003	2.0000e-005	2.8700e-003	7.6000e-004	2.0000e-005	7.7000e-004	0.0000	2.3535	2.3535	5.0000e-005	0.0000	2.3548
<b>Total</b>	<b>2.6700e-003</b>	<b>0.0534</b>	<b>0.0182</b>	<b>1.9000e-004</b>	<b>6.4400e-003</b>	<b>1.7000e-004</b>	<b>6.6100e-003</b>	<b>1.7500e-003</b>	<b>1.6000e-004</b>	<b>1.9000e-003</b>	<b>0.0000</b>	<b>18.1700</b>	<b>18.1700</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>18.1906</b>

**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					7.2000e-004	0.0000	7.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2500e-003	5.4200e-003	0.0619	1.0000e-004		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	8.9643	8.9643	2.9000e-003	0.0000	9.0368
<b>Total</b>	<b>1.2500e-003</b>	<b>5.4200e-003</b>	<b>0.0619</b>	<b>1.0000e-004</b>	<b>7.2000e-004</b>	<b>1.7000e-004</b>	<b>8.9000e-004</b>	<b>9.0000e-005</b>	<b>1.7000e-004</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>8.9643</b>	<b>8.9643</b>	<b>2.9000e-003</b>	<b>0.0000</b>	<b>9.0368</b>

**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	1.6000e-003	0.0527	0.0103	1.6000e-004	3.5900e-003	1.5000e-004	3.7400e-003	9.9000e-004	1.4000e-004	1.1300e-003	0.0000	15.8165	15.8165	7.7000e-004	0.0000	15.8358
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0700e-003	7.3000e-004	7.8600e-003	3.0000e-005	2.8500e-003	2.0000e-005	2.8700e-003	7.6000e-004	2.0000e-005	7.7000e-004	0.0000	2.3535	2.3535	5.0000e-005	0.0000	2.3548
<b>Total</b>	<b>2.6700e-003</b>	<b>0.0534</b>	<b>0.0182</b>	<b>1.9000e-004</b>	<b>6.4400e-003</b>	<b>1.7000e-004</b>	<b>6.6100e-003</b>	<b>1.7500e-003</b>	<b>1.6000e-004</b>	<b>1.9000e-003</b>	<b>0.0000</b>	<b>18.1700</b>	<b>18.1700</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>18.1906</b>

**3.5 Building Construction - 2022**

**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	0.0351	0.3643	0.3551	5.9000e-004		0.0188	0.0188		0.0173	0.0173	0.0000	51.4713	51.4713	0.0167	0.0000	51.8875
<b>Total</b>	<b>0.0351</b>	<b>0.3643</b>	<b>0.3551</b>	<b>5.9000e-004</b>		<b>0.0188</b>	<b>0.0188</b>		<b>0.0173</b>	<b>0.0173</b>	<b>0.0000</b>	<b>51.4713</b>	<b>51.4713</b>	<b>0.0167</b>	<b>0.0000</b>	<b>51.8875</b>

**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	1.2500e-003	0.0439	9.1700e-003	1.2000e-004	2.8400e-003	8.0000e-005	2.9200e-003	8.2000e-004	8.0000e-005	9.0000e-004	0.0000	11.2065	11.2065	5.9000e-004	0.0000	11.2213
Worker	0.0107	7.3300e-003	0.0786	2.6000e-004	0.0285	1.9000e-004	0.0287	7.5700e-003	1.7000e-004	7.7400e-003	0.0000	23.5349	23.5349	5.2000e-004	0.0000	23.5479

<b>Total</b>	<b>0.0119</b>	<b>0.0512</b>	<b>0.0877</b>	<b>3.8000e-004</b>	<b>0.0313</b>	<b>2.7000e-004</b>	<b>0.0316</b>	<b>8.3900e-003</b>	<b>2.5000e-004</b>	<b>8.6400e-003</b>	<b>0.0000</b>	<b>34.7414</b>	<b>34.7414</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>34.7693</b>
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**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	7.6000e-003	0.0482	0.3888	5.9000e-004		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	51.4712	51.4712	0.0167	0.0000	51.8874
<b>Total</b>	<b>7.6000e-003</b>	<b>0.0482</b>	<b>0.3888</b>	<b>5.9000e-004</b>		<b>9.6000e-004</b>	<b>9.6000e-004</b>		<b>9.6000e-004</b>	<b>9.6000e-004</b>	<b>0.0000</b>	<b>51.4712</b>	<b>51.4712</b>	<b>0.0167</b>	<b>0.0000</b>	<b>51.8874</b>

**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	1.2500e-003	0.0439	9.1700e-003	1.2000e-004	2.8400e-003	8.0000e-005	2.9200e-003	8.2000e-004	8.0000e-005	9.0000e-004	0.0000	11.2065	11.2065	5.9000e-004	0.0000	11.2213
Worker	0.0107	7.3300e-003	0.0786	2.6000e-004	0.0285	1.9000e-004	0.0287	7.5700e-003	1.7000e-004	7.7400e-003	0.0000	23.5349	23.5349	5.2000e-004	0.0000	23.5479
<b>Total</b>	<b>0.0119</b>	<b>0.0512</b>	<b>0.0877</b>	<b>3.8000e-004</b>	<b>0.0313</b>	<b>2.7000e-004</b>	<b>0.0316</b>	<b>8.3900e-003</b>	<b>2.5000e-004</b>	<b>8.6400e-003</b>	<b>0.0000</b>	<b>34.7414</b>	<b>34.7414</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>34.7693</b>

**3.5 Building Construction - 2023**

**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	0.0578	0.5941	0.6283	1.0500e-003		0.0291	0.0291		0.0268	0.0268	0.0000	91.9082	91.9082	0.0297	0.0000	92.6513
<b>Total</b>	<b>0.0578</b>	<b>0.5941</b>	<b>0.6283</b>	<b>1.0500e-003</b>		<b>0.0291</b>	<b>0.0291</b>		<b>0.0268</b>	<b>0.0268</b>	<b>0.0000</b>	<b>91.9082</b>	<b>91.9082</b>	<b>0.0297</b>	<b>0.0000</b>	<b>92.6513</b>

**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	1.6400e-003	0.0606	0.0143	2.0000e-004	5.0600e-003	6.0000e-005	5.1300e-003	1.4600e-003	6.0000e-005	1.5300e-003	0.0000	19.4314	19.4314	8.5000e-004	0.0000	19.4526
Worker	0.0177	0.0117	0.1284	4.5000e-004	0.0508	3.2000e-004	0.0511	0.0135	3.0000e-004	0.0138	0.0000	40.3968	40.3968	8.3000e-004	0.0000	40.4176
<b>Total</b>	<b>0.0194</b>	<b>0.0724</b>	<b>0.1427</b>	<b>6.5000e-004</b>	<b>0.0559</b>	<b>3.8000e-004</b>	<b>0.0563</b>	<b>0.0150</b>	<b>3.6000e-004</b>	<b>0.0153</b>	<b>0.0000</b>	<b>59.8282</b>	<b>59.8282</b>	<b>1.6800e-003</b>	<b>0.0000</b>	<b>59.8702</b>



**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	0.0136	0.0860	0.6938	1.0500e-003		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	91.9081	91.9081	0.0297	0.0000	92.6512
<b>Total</b>	<b>0.0136</b>	<b>0.0860</b>	<b>0.6938</b>	<b>1.0500e-003</b>		<b>1.7100e-003</b>	<b>1.7100e-003</b>		<b>1.7100e-003</b>	<b>1.7100e-003</b>	<b>0.0000</b>	<b>91.9081</b>	<b>91.9081</b>	<b>0.0297</b>	<b>0.0000</b>	<b>92.6512</b>

**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	1.6400e-003	0.0606	0.0143	2.0000e-004	5.0600e-003	6.0000e-005	5.1300e-003	1.4600e-003	6.0000e-005	1.5300e-003	0.0000	19.4314	19.4314	8.5000e-004	0.0000	19.4526
Worker	0.0177	0.0117	0.1284	4.5000e-004	0.0508	3.2000e-004	0.0511	0.0135	3.0000e-004	0.0138	0.0000	40.3968	40.3968	8.3000e-004	0.0000	40.4176
<b>Total</b>	<b>0.0194</b>	<b>0.0724</b>	<b>0.1427</b>	<b>6.5000e-004</b>	<b>0.0559</b>	<b>3.8000e-004</b>	<b>0.0563</b>	<b>0.0150</b>	<b>3.6000e-004</b>	<b>0.0153</b>	<b>0.0000</b>	<b>59.8282</b>	<b>59.8282</b>	<b>1.6800e-003</b>	<b>0.0000</b>	<b>59.8702</b>

**3.6 Paving - 2023**

**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	4.2000e-004	4.0900e-003	5.2500e-003	1.0000e-005		2.1000e-004	2.1000e-004		1.9000e-004	1.9000e-004	0.0000	0.6905	0.6905	2.2000e-004	0.0000	0.6958
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.2000e-004</b>	<b>4.0900e-003</b>	<b>5.2500e-003</b>	<b>1.0000e-005</b>		<b>2.1000e-004</b>	<b>2.1000e-004</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.6905</b>	<b>0.6905</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.6958</b>

**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	4.0000e-005	1.4200e-003	3.3000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.4537	0.4537	2.0000e-005	0.0000	0.4542
Worker	8.0000e-005	5.0000e-005	6.0000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1886	0.1886	0.0000	0.0000	0.1887
<b>Total</b>	<b>1.2000e-004</b>	<b>1.4700e-003</b>	<b>9.3000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.6423</b>	<b>0.6423</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6429</b>

**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	9.0000e-005	3.9000e-004	5.6200e-003	1.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.6905	0.6905	2.2000e-004	0.0000	0.6958
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>9.0000e-005</b>	<b>3.9000e-004</b>	<b>5.6200e-003</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.6905</b>	<b>0.6905</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.6958</b>

**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	4.0000e-005	1.4200e-003	3.3000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.4537	0.4537	2.0000e-005	0.0000	0.4542
Worker	8.0000e-005	5.0000e-005	6.0000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1886	0.1886	0.0000	0.0000	0.1887
<b>Total</b>	<b>1.2000e-004</b>	<b>1.4700e-003</b>	<b>9.3000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.6423</b>	<b>0.6423</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.6429</b>

**3.6 Paving - 2024**

**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	1.0700e-003	0.0103	0.0140	2.0000e-005		5.0000e-004	5.0000e-004		4.7000e-004	4.7000e-004	0.0000	1.8415	1.8415	5.7000e-004	0.0000	1.8558
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0700e-003</b>	<b>0.0103</b>	<b>0.0140</b>	<b>2.0000e-005</b>		<b>5.0000e-004</b>	<b>5.0000e-004</b>		<b>4.7000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.8415</b>	<b>1.8415</b>	<b>5.7000e-004</b>	<b>0.0000</b>	<b>1.8558</b>

**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	1.0000e-004	3.7500e-003	8.5000e-004	1.0000e-005	3.2000e-004	0.0000	3.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	1.2014	1.2014	5.0000e-005	0.0000	1.2027
Worker	2.1000e-004	1.3000e-004	1.4800e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4831	0.4831	1.0000e-005	0.0000	0.4833
<b>Total</b>	<b>3.1000e-004</b>	<b>3.8800e-003</b>	<b>2.3300e-003</b>	<b>2.0000e-005</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>9.6000e-004</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>1.6844</b>	<b>1.6844</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.6860</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	2.4000e-004	1.0500e-003	0.0150	2.0000e-005		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	1.8415	1.8415	5.7000e-004	0.0000	1.8558
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.4000e-004</b>	<b>1.0500e-003</b>	<b>0.0150</b>	<b>2.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.8415</b>	<b>1.8415</b>	<b>5.7000e-004</b>	<b>0.0000</b>	<b>1.8558</b>

**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	1.0000e-004	3.7500e-003	8.5000e-004	1.0000e-005	3.2000e-004	0.0000	3.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	1.2014	1.2014	5.0000e-005	0.0000	1.2027
Worker	2.1000e-004	1.3000e-004	1.4800e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.4831	0.4831	1.0000e-005	0.0000	0.4833
<b>Total</b>	<b>3.1000e-004</b>	<b>3.8800e-003</b>	<b>2.3300e-003</b>	<b>2.0000e-005</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>9.6000e-004</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>1.6844</b>	<b>1.6844</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.6860</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0154	0.1022	0.1411	2.4000e-004	4.9200e-003	4.9200e-003	4.9200e-003	4.9200e-003	4.9200e-003	4.9200e-003	0.0000	20.0015	20.0015	1.2200e-003	0.0000	20.0321
<b>Total</b>	<b>0.5357</b>	<b>0.1022</b>	<b>0.1411</b>	<b>2.4000e-004</b>	<b>4.9200e-003</b>	<b>4.9200e-003</b>	<b>4.9200e-003</b>	<b>4.9200e-003</b>	<b>4.9200e-003</b>	<b>4.9200e-003</b>	<b>0.0000</b>	<b>20.0015</b>	<b>20.0015</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>20.0321</b>

**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	3.5000e-004	0.0134	3.0600e-003	4.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	4.3049	4.3049	1.9000e-004	0.0000	4.3095
Worker	8.9000e-004	5.7000e-004	6.3400e-003	2.0000e-005	2.7200e-003	2.0000e-005	2.7400e-003	7.2000e-004	2.0000e-005	7.4000e-004	0.0000	2.0772	2.0772	4.0000e-005	0.0000	2.0782
<b>Total</b>	<b>1.2400e-003</b>	<b>0.0140</b>	<b>9.4000e-003</b>	<b>6.0000e-005</b>	<b>3.8500e-003</b>	<b>3.0000e-005</b>	<b>3.8800e-003</b>	<b>1.0500e-003</b>	<b>3.0000e-005</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>6.3820</b>	<b>6.3820</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>6.3877</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0900e-003	9.0400e-003	0.1287	2.4000e-004		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	20.0015	20.0015	1.2200e-003	0.0000	20.0321

Total	0.5224	9.0400e-003	0.1287	2.4000e-004		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	20.0015	20.0015	1.2200e-003	0.0000	20.0321
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#### 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	3.5000e-004	0.0134	3.0600e-003	4.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	4.3049	4.3049	1.9000e-004	0.0000	4.3095
Worker	8.9000e-004	5.7000e-004	6.3400e-003	2.0000e-005	2.7200e-003	2.0000e-005	2.7400e-003	7.2000e-004	2.0000e-005	7.4000e-004	0.0000	2.0772	2.0772	4.0000e-005	0.0000	2.0782
Total	1.2400e-003	0.0140	9.4000e-003	6.0000e-005	3.8500e-003	3.0000e-005	3.8800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	6.3820	6.3820	2.3000e-004	0.0000	6.3877

### 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2555	0.5654	1.8509	5.6100e-003	0.4907	6.3800e-003	0.4971	0.1316	6.0200e-003	0.1376	0.0000	523.2316	523.2316	0.0242	0.0000	523.8375
Unmitigated	0.2555	0.5654	1.8509	5.6100e-003	0.4907	6.3800e-003	0.4971	0.1316	6.0200e-003	0.1376	0.0000	523.2316	523.2316	0.0242	0.0000	523.8375

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
General Office Building	488.24	108.79	46.13	886,293	886,293
Regional Shopping Center	254.94	298.33	150.70	431,751	431,751
Total	743.18	407.12	196.82	1,318,044	1,318,044

#### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
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
General Office Building	0.559027	0.054312	0.177414	0.106392	0.021250	0.005147	0.023148	0.044002	0.001349	0.001824	0.005141	0.000321	0.000673
Regional Shopping Center	0.559027	0.054312	0.177414	0.106392	0.021250	0.005147	0.023148	0.044002	0.001349	0.001824	0.005141	0.000321	0.000673

### 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	112.2560	112.2560	0.0155	3.2100e-003	113.5993
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	112.2560	112.2560	0.0155	3.2100e-003	113.5993
NaturalGas Mitigated	9.3000e-003	0.0846	0.0710	5.1000e-004		6.4300e-003	6.4300e-003		6.4300e-003	6.4300e-003	0.0000	92.0567	92.0567	1.7600e-003	1.6900e-003	92.6038
NaturalGas Unmitigated	9.3000e-003	0.0846	0.0710	5.1000e-004		6.4300e-003	6.4300e-003		6.4300e-003	6.4300e-003	0.0000	92.0567	92.0567	1.7600e-003	1.6900e-003	92.6038

### 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					
General Office Building	1.66665e+006	8.9900e-003	0.0817	0.0686	4.9000e-004		6.2100e-003	6.2100e-003		6.2100e-003	6.2100e-003	0.0000	88.9390	88.9390	1.7000e-003	1.6300e-003	89.4675
Regional Shopping Center	58424.8	3.2000e-004	2.8600e-003	2.4100e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	3.1178	3.1178	6.0000e-005	6.0000e-005	3.1363
<b>Total</b>		<b>9.3100e-003</b>	<b>0.0846</b>	<b>0.0710</b>	<b>5.1000e-004</b>		<b>6.4300e-003</b>	<b>6.4300e-003</b>		<b>6.4300e-003</b>	<b>6.4300e-003</b>	<b>0.0000</b>	<b>92.0567</b>	<b>92.0567</b>	<b>1.7600e-003</b>	<b>1.6900e-003</b>	<b>92.6038</b>

#### 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					
General Office Building	1.66665e+006	8.9900e-003	0.0817	0.0686	4.9000e-004		6.2100e-003	6.2100e-003		6.2100e-003	6.2100e-003	0.0000	88.9390	88.9390	1.7000e-003	1.6300e-003	89.4675
Regional Shopping Center	58424.8	3.2000e-004	2.8600e-003	2.4100e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	3.1178	3.1178	6.0000e-005	6.0000e-005	3.1363
<b>Total</b>		<b>9.3100e-003</b>	<b>0.0846</b>	<b>0.0710</b>	<b>5.1000e-004</b>		<b>6.4300e-003</b>	<b>6.4300e-003</b>		<b>6.4300e-003</b>	<b>6.4300e-003</b>	<b>0.0000</b>	<b>92.0567</b>	<b>92.0567</b>	<b>1.7600e-003</b>	<b>1.6900e-003</b>	<b>92.6038</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.04786e+006	99.8132	0.0138	2.8500e-003	101.0076
Regional Shopping Center	130627	12.4428	1.7200e-003	3.6000e-004	12.5917
<b>Total</b>		<b>112.2560</b>	<b>0.0155</b>	<b>3.2100e-003</b>	<b>113.5993</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e

Land Use	kWh/yr	MT/yr			
General Office Building	1.04786e+006	99.8132	0.0138	2.8500e-003	101.0076
Regional Shopping Center	130627	12.4428	1.7200e-003	3.6000e-004	12.5917
<b>Total</b>		<b>112.2560</b>	<b>0.0155</b>	<b>3.2100e-003</b>	<b>113.5993</b>

## 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	0.4418	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7800e-003	1.7800e-003	0.0000	0.0000	1.9000e-003
Unmitigated	0.4418	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7800e-003	1.7800e-003	0.0000	0.0000	1.9000e-003

### 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	0.0520					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7800e-003	1.7800e-003	0.0000	0.0000	1.9000e-003
<b>Total</b>	<b>0.4418</b>	<b>1.0000e-005</b>	<b>9.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.7800e-003</b>	<b>1.7800e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.9000e-003</b>

#### 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	0.0520					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	9.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7800e-003	1.7800e-003	0.0000	0.0000	1.9000e-003
<b>Total</b>	<b>0.4418</b>	<b>1.0000e-005</b>	<b>9.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.7800e-003</b>	<b>1.7800e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.9000e-003</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.0208	0.5365	0.0130	34.2962
Unmitigated	17.0208	0.5365	0.0130	34.2962

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	15.4682 / 9.48049	16.0407	0.5056	0.0122	32.3212
Regional Shopping Center	0.945165 / 0.579295	0.9802	0.0309	7.5000e-004	1.9750
<b>Total</b>		<b>17.0208</b>	<b>0.5365</b>	<b>0.0130</b>	<b>34.2962</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	15.4682 / 9.48049	16.0407	0.5056	0.0122	32.3212
Regional Shopping Center	0.945165 / 0.579295	0.9802	0.0309	7.5000e-004	1.9750
<b>Total</b>		<b>17.0208</b>	<b>0.5365</b>	<b>0.0130</b>	<b>34.2962</b>

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.1502	1.1317	0.0000	47.4437
Unmitigated	19.1502	1.1317	0.0000	47.4437

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	80.94	16.4301	0.9710	0.0000	40.7049
Regional Shopping Center	13.4	2.7201	0.1608	0.0000	6.7389
<b>Total</b>		<b>19.1502</b>	<b>1.1317</b>	<b>0.0000</b>	<b>47.4437</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	80.94	16.4301	0.9710	0.0000	40.7049
Regional Shopping Center	13.4	2.7201	0.1608	0.0000	6.7389
<b>Total</b>		<b>19.1502</b>	<b>1.1317</b>	<b>0.0000</b>	<b>47.4437</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**



**Emissions Summaries - 460 24th Street**

**Uncontrolled Construction Emissions - Criteria Air Pollutants**

Year	No. of Construction Wokdays	Tons over Construction Period				Average Pounds per day			
		ROG	NOx	Exhaust PM <sub>10</sub>	Exhaust PM <sub>2.5</sub>	ROG	NOx	Exhaust PM <sub>10</sub>	Exhaust PM <sub>2.5</sub>
2022	239	0.06	0.62	0.02	0.02	0.5	5.1	0.2	0.2
2023	260	0.08	0.67	0.03	0.03	0.6	5.2	0.2	0.2
2024	94	0.54	0.13	0.01	0.01	11.5	2.8	0.1	0.1
<b>TOTAL CONSTRUCTION</b>	<b>593</b>	<b>0.7</b>	<b>1.4</b>	<b>0.1</b>	<b>0.1</b>	<b>2.3</b>	<b>4.8</b>	<b>0.2</b>	<b>0.2</b>

**TIER 4F Construction Emissions - Criteria Air Pollutants**

Year	No. of Construction Wokdays	Tons over Construction Period				Average Pounds per day			
		ROG	NOx	Exhaust PM <sub>10</sub>	Exhaust PM <sub>2.5</sub>	ROG	NOx	Exhaust PM <sub>10</sub>	Exhaust PM <sub>2.5</sub>
2022	239	0.03	0.20	0.002	0.002	0.2	1.7	0.02	0.02
2023	260	0.03	0.16	0.002	0.002	0.3	1.2	0.02	0.02
2024	94	0.52	0.03	0.000	0.000	11.2	0.6	0.01	0.01
<b>TOTAL CONSTRUCTION</b>	<b>593</b>	<b>0.6</b>	<b>0.4</b>	<b>0.004</b>	<b>0.004</b>	<b>2.0</b>	<b>1.3</b>	<b>0.01</b>	<b>0.01</b>

**Operational Emissions - Criteria Air Pollutants**

Source	Tons per year				Pounds per day			
	ROG	NOx	Total PM <sub>10</sub>	Total PM <sub>2.5</sub>	ROG	NOx	Total PM <sub>10</sub>	Total PM <sub>2.5</sub>
Area	0.44	0.00	0.00	0.00	2.4	0.00	0.00	0.00
Energy	0.01	0.08	0.01	0.01	0.1	0.5	0.04	0.04
Mobile	0.26	0.57	0.50	0.14	1.4	3.1	2.7	0.8
Backup Generator	0.004	0.08	0.004	0.004	0.02	0.43	0.02	0.02
<b>TOTAL</b>	<b>0.71</b>	<b>0.73</b>	<b>0.51</b>	<b>0.15</b>	<b>3.9</b>	<b>4.0</b>	<b>2.8</b>	<b>0.8</b>

**Construction Emissions - GHG (metric tons)**

	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
2022	135	0.024	0.0	135
2023	153	0.032	0.0	154
2024	30	0.002	0.0	30
<b>TOTAL CONSTRUCTION</b>	<b>318</b>	<b>0.06</b>	<b>0.00</b>	<b>319</b>
Life of project (years)				40
Amortized annual emissions (tons/year)				8.0

**Operational Emissions - GHG (metric tons/year)**

Operational Source	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Area	0.0	0	0.000	0
Energy	204	0.0173	0.005	206
Mobile	523	0.0242	0.000	524
Solid waste	19	1.1317	0.000	47
Water & Wastewater	17	0.5365	0.013	34
<b>Total Project Operational Emissions</b>	<b>764</b>	<b>2</b>	<b>0</b>	<b>812</b>
Project Construction Amortized Average				8.0
<b>TOTAL PROJECT OPERATIONAL EMISSIONS</b>				<b>819.8</b>

**Operational Stationary Source Emissions - GHG as CO<sub>2</sub>e (metric tons/year)**

Stationary Source	CO <sub>2</sub> e
Emergency Generator	17.8
City of Oakland Stationary Source Threshold	10000

**Emergency Generator Emissions - 460 24th Street**

**Conversion Factors**

HP/kW	1.3410	
lb/E	0.0022	
lb/ton	2.000	
Metric ton/ton	0.90719	
PM <sub>10</sub> Fraction of Total PM	0.960	Table A - Updated CEIDARS Table with PM2.5 Fractions, INTERNAL COMBUSTION - DISTILLATE AND DIESEL-ELECTRIC GENERATION
PM <sub>2.5</sub> Fraction of Total PM	0.937	Table A - Updated CEIDARS Table with PM2.5 Fractions, INTERNAL COMBUSTION - DISTILLATE AND DIESEL-ELECTRIC GENERATION
CO <sub>2</sub> kg/gal	10.21	Climate Registry, Table 13.1: <a href="https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf">https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf</a>
CH <sub>4</sub> g/gal	0.58	Climate Registry, Table 13.7: <a href="https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf">https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf</a>
N <sub>2</sub> O g/gal	0.26	Climate Registry, Table 13.7: <a href="https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf">https://www.theclimateregistry.org/wp-content/uploads/2014/11/2016-Climate-Registry-Default-Emission-Factors.pdf</a>
GWP CH <sub>4</sub>	25	IPCC AR4, <a href="https://www2.arb.ca.gov/ghg-gwps">https://www2.arb.ca.gov/ghg-gwps</a>
GWP N <sub>2</sub> O	298	IPCC AR4, <a href="https://www2.arb.ca.gov/ghg-gwps">https://www2.arb.ca.gov/ghg-gwps</a>
CO <sub>2</sub> e g/gal	10.302	
CO <sub>2</sub> g/gal	10.210	
CO <sub>2</sub> /CO <sub>2</sub> e	0.9911	

Generator Rating:	500 kW	(Source: Project Description)
	671 HP	(based on conservative engineering assumptions; conversion from kW to hp)
Load Factor:	0.74	(based on CalEEMod Generator Set Load Factor)
Engine Emissions Tier:		(compliance with CARB diesel regulations)
Operating Hours per Unit:	50 hours/year	
	1.00 hours/day - maximum	
	0.14 hours/day - average	

Units	Criteria Pollutants <sup>1,2</sup>					Greenhouse Gases <sup>3</sup>	
	VOC	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>	CO <sub>2</sub> e
g/kW-hr	—	—	3.50	—	—	—	—
g/HP-hr	0.15	2.85	2.61	0.1440	0.1406	526.17	530.91
lbs/hr	0.16	3.12	2.86	0.16	0.15	778.36	785.37
lbs/day (maximum daily)	0.16	3.12	2.86	0.16	0.15	778.36	785.37
lbs/day (average daily)	0.02	0.43	0.39	0.02	0.02	106.62	107.59
lbs/yr	8.21	155.99	142.85	7.88	7.69	38,918.00	39,268.61
tons/yr	0.00	0.08	0.07	0.004	0.004	19.46	19.63
metric tons/yr	—	—	—	—	—	17.65	17.81

- Notes:
- Emission factors for VOC and NO<sub>x</sub>: ARB 2011 Final Regulation Order for the ATCM for stationary engines, Table 1, Model year 2008+; <https://www.arb.ca.gov/regact/2010/atcm2010/finalregorder.pdf>; Policy: CARB Emission Factors for CI Diesel Engines – Percent HC in Relation to NMHC + NO<sub>x</sub>; [http://www.baaqmd.gov/~media/Files/Engineering/policy\\_and\\_procedures/Engines/EmissionfactorsforDieselEngines.aspx](http://www.baaqmd.gov/~media/Files/Engineering/policy_and_procedures/Engines/EmissionfactorsforDieselEngines.aspx)
  - Emission factors for CO, PM<sub>10</sub>, and PM<sub>2.5</sub>: ARB 2011 Final Regulation Order for the ATCM for stationary engines, Table 1, Model year 2008+; <https://www.arb.ca.gov/regact/2010/atcm2010/finalregorder.pdf>
  - Emission factor for CO<sub>2</sub>: U.S. Environmental Protection Agency, AP-42 Compilation of Air Pollutant Emission Factors, Fifth Edition, Section 3.4, Table 3.4-1.
  - Emissions of GHGs assume 99.11% of the CO<sub>2</sub>e emissions occur as CO<sub>2</sub>, based on Climate Registry emission factors as referenced above.

**Table 1: Emission Standards for New Stationary Emergency Standby Diesel-Fueled CI Engines g/bhp-hr (g/kW-hr)**

Maximum Engine Power	Model year(s)	PM	NMHC+NO <sub>x</sub>	CO
50 ≤ HP < 75 (37 ≤ kW < 56)	2007		5.6 (7.5)	3.7 (5.0)
	2008+	0.15 (0.20)	3.5 (4.7)	
75 ≤ HP < 100 (56 ≤ kW < 75)	2007		5.6 (7.5)	3.7 (5.0)
	2008+	0.15 (0.20)	3.5 (4.7)	
100 ≤ HP < 175 (75 ≤ kW < 130)	2007		3.0 (4.0)	3.7 (5.0)
	2008+	0.15 (0.20)	3.0 (4.0)	
175 ≤ HP < 300 (130 ≤ kW < 225)	2007		3.0 (4.0)	2.6 (3.5)
	2008+	0.15 (0.20)	3.0 (4.0)	
300 ≤ HP < 600 (225 ≤ kW < 450)	2007		3.0 (4.0)	2.6 (3.5)
	2008+	0.15 (0.20)	3.0 (4.0)	
800 ≤ HP < 750 (450 ≤ kW < 560)	2007		3.0 (4.0)	2.6 (3.5)
	2008+	0.15 (0.20)	3.0 (4.0)	
HP > 750 (kW > 560)	2007		4.8 (6.4)	2.6 (3.5)
	2008+	0.15 (0.20)	4.8 (6.4)	

1. May be subject to additional emission limitations as specified in current applicable district rules, regulations or policies.

**Construction Health Risk Assessment - 460 24th Street**  
**Residential Risk, no schools and daycare centers within 1,000 feet**

**Onsite DPM Emissions per Year (tons)**

Year	Uncontrolled	Tier 4
2022	0.02	0.0018
2023	0.03	0.0021
2024	0.01	0.0004

**PM<sub>2.5</sub> Concentration - Uncontrolled**

Total tons/year	Emission Rate (g/s)	PM <sub>2.5</sub> Conc. (µg/m <sup>3</sup> )
0.02	0.002	0.31
0.03	0.002	0.35
0.01	0.001	0.20

**Emission Rates - Scaling Factors (g/s)**

Year	Uncontrolled	Tier 4
2022	0.0019	0.0001
2023	0.0021	0.0001
2024	0.0011	0.0001

**PM<sub>2.5</sub> Concentration - Tier 4**

Total tons/year	Emission Rate (g/s)	PM <sub>2.5</sub> Conc. (µg/m <sup>3</sup> )
0.002	1.4E-04	0.03
0.002	1.5E-04	0.03
0.000	7.0E-05	0.01

Exposure Duration in seconds/week based on allowed hours of construction  
 ((12\*5)+(8\*1))\*60\*60 = 244800

DPM (2022)	334 * ((12*5)+(8*1))/7*60*60 =	11680457
DPM (2023)	365 * ((12*5)+(8*1))/7*60*60 =	12764571
DPM (2024)	130 * ((12*5)+(8*1))/7*60*60 =	4546286

**AERMOD Output [µg/m<sup>3</sup>]/[g/s]**

Annual Average	Resident	181.80	µg/m <sup>3</sup>	UTM X	UTM Y
				564596.50	4185424.36

2401 Broadway

**Emission Impact - (µg/m<sup>3</sup>)**

Year	Uncontrolled	Tier 4
2022	3.40E-01	2.58E-02
2023	3.84E-01	2.73E-02
2024	1.98E-01	1.27E-02

Age Group	3rd Trimester	Age 0<2	Age 2<16
Exposure Duration (years)	0.25	2	0
2022	0.25	0.67	0.00
2023	0.00	1.00	0.00
2024	0.00	0.36	0.00

**Cancer Risk = Dose inhalation × Inhalation CPF × ASF × ED/AT × FAH**

(Equation 8.2.4 A)

Where:

Cancer Risk = residential inhalation cancer risk

**Dose inhalation (mg/kg-day) = C<sub>AIR</sub> × DBR × A × EF × 10<sup>-6</sup>**

(Equation 2)

Inhalation CPF = inhalation cancer potency factor ((mg/kg/day)<sup>-1</sup>)

ASF = age sensitivity factor for a specified age group (unitless)

ED = exposure duration for a specified age group (years)

AT = averaging time period over which exposure is averaged in days (years)

FAH = fraction of time at home (unitless)

Where:

C<sub>AIR</sub> = concentration of compound in air in micrograms per cubic meter (µg/m<sup>3</sup>)

DBR = daily breathing rate in liter per kilogram of body weight per day (L/kg-body weight/day)

A = inhalation absorption factor (1 for DPM, unitless)

EF = exposure frequency in days per year (unitless, days/365 days)

10<sup>-6</sup> = micrograms to milligrams conversion, liters to cubic meters conversion

**Dose Inhalation Inputs**

Receptor Type	Exposure Scenario	Receptor Group Age	C <sub>AIR</sub> (µg/m <sup>3</sup> )		DBR (L/kg-day)	A (unitless)	EF (days/year)
			Uncontrolled	Tier 4			
Off-Site Child Resident	Construction	3rd Trimester	3.40E-01	2.58E-02	361	1	0.96
		Age 0<2	3.37E-01	2.42E-02	1090	1	0.96
		Age 2<16	0.00E+00	0.00E+00	745	1	0.96

**Dose Inhalation Outputs**

Receptor Type	Exposure Scenario	Receptor Group Age	Dose inhalation (mg/kg-day)	
			Uncontrolled	Tier 4
Off-Site Child Resident	Construction	3rd Trimester	1.18E-04	8.94E-06
		Age 0<2	3.52E-04	2.53E-05
		Age 2<16	0.00E+00	0.00E+00

**Risk Inputs**

Receptor Type	Exposure Scenario	Receptor Group Age	CPF (mg/kg-day <sup>-1</sup> )	ASF (unitless)	ED (years)	AT (years)	FAH (unitless)	REL (µg/m <sup>3</sup> )
Off-Site Child Resident	Construction	3rd Trimester	1.1	10	0.25	70.00	0.85	5
		Age 0<2	1.1	10	2.02	70.00	0.85	5
		Age 2<16	1.1	3	0.00	70.00	0.72	5

**Risk Outputs**

Receptor Type	Exposure Scenario	Receptor Group Age	Cancer Risk		Chronic Non-Cancer Risk	
			Uncontrolled	Tier 4	Uncontrolled	Tier 4
Off-Site Child Resident	Construction	3rd Trimester	3.93E-06	2.99E-07		
		Age 0<2	9.50E-05	6.84E-06		
		Age 2<16	0.00E+00	0.00E+00		
<b>Total Risk</b>			9.90E-05	7.14E-06	0.077	0.005
<b>Risk per Million</b>			99.0	7.1	NA	NA

SOURCE: Office of Environmental Health Hazard Assessment, 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments*. February.

Daily breathing rate for residential receptor is based on the OEHHA 95th percentile moderate intensity breathing rates (OEHHA Table 5.7).

Fraction of time at home is set to values per OEHHA Table 8.4 for residential since there are no nearby schools and daycares within 1,000 feet

Inhalation cancer potency factor from OEHHA Table 7.1

* AERMOD ( 191 91): C:\Lakes\A ERMOD View\46 24th Str eet\460 24 th Stre et.isc							1/19/2002	1	
* AERMET ( 141 34):							0:15:05	2	
* MODELING OPTIONS USED: Re gDFault CONC ELEV FL GPOL URBA N									
* PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SO URCE GRO UP: ALL									
* FOR A TOTAL OF 23 3 RECEPTORS.									
* FORM AT: (3(1X,F13.5 ),3(1X,F8.2),2 X,A6,2X,A 8,2X,I8.8, 2X,A8)									
X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM YRS	NET ID
564346.85	4185202.04	5.73572	7.29	7.29	1.5	ANNUAL	ALL	5	
564386.85	4185202.04	6.47406	6.55	6.55	1.5	ANNUAL	ALL	5	
564406.85	4185202.04	6.81992	6.32	6.32	1.5	ANNUAL	ALL	5	
564426.85	4185202.04	7.13871	6.09	6.09	1.5	ANNUAL	ALL	5	
564466.85	4185202.04	7.71928	5.93	5.93	1.5	ANNUAL	ALL	5	
564486.85	4185202.04	8.01299	6.12	6.12	1.5	ANNUAL	ALL	5	
564546.85	4185202.04	8.98738	6.88	6.88	1.5	ANNUAL	ALL	5	
564366.85	4185225.04	6.86779	7.11	7.11	1.5	ANNUAL	ALL	5	
564386.85	4185225.04	7.37623	7.01	7.01	1.5	ANNUAL	ALL	5	
564406.85	4185225.04	7.87733	6.49	6.49	1.5	ANNUAL	ALL	5	
564426.85	4185225.04	8.34757	6.16	6.16	1.5	ANNUAL	ALL	5	
564446.85	4185225.04	8.77839	5.78	5.78	1.5	ANNUAL	ALL	5	
564466.85	4185225.04	9.20217	5.89	5.89	1.5	ANNUAL	ALL	5	
564486.85	4185225.04	9.62303	6.13	6.13	1.5	ANNUAL	ALL	5	
564506.85	4185225.04	10.05781	6.35	6.35	1.5	ANNUAL	ALL	5	
564526.85	4185225.04	10.50332	6.63	6.63	1.5	ANNUAL	ALL	5	
564546.85	4185225.04	10.93458	6.81	6.81	1.5	ANNUAL	ALL	5	
564686.85	4185225.04	11.57329	8.02	8.02	1.5	ANNUAL	ALL	5	
564706.85	4185225.04	11.31965	8.44	8.44	1.5	ANNUAL	ALL	5	
564726.85	4185225.04	11.00516	8.53	8.53	1.5	ANNUAL	ALL	5	
564326.85	4185248.04	6.3975	7.71	7.71	1.5	ANNUAL	ALL	5	
564386.85	4185248.04	8.40677	7.09	7.09	1.5	ANNUAL	ALL	5	
564406.85	4185248.04	9.12874	6.55	6.55	1.5	ANNUAL	ALL	5	
564426.85	4185248.04	9.8337	6.2	6.2	1.5	ANNUAL	ALL	5	
564446.85	4185248.04	10.49664	5.82	5.82	1.5	ANNUAL	ALL	5	
564546.85	4185248.04	13.63157	6.89	6.89	1.5	ANNUAL	ALL	5	
564566.85	4185248.04	14.07748	7.25	7.25	1.5	ANNUAL	ALL	5	
564606.85	4185248.04	14.59897	7.33	7.33	1.5	ANNUAL	ALL	5	
564626.85	4185248.04	14.62891	7.7	7.7	1.5	ANNUAL	ALL	5	
564706.85	4185248.04	13.55097	8.57	8.57	1.5	ANNUAL	ALL	5	
564726.85	4185248.04	13.00404	8.86	8.86	1.5	ANNUAL	ALL	5	
564326.85	4185271.04	6.9076	7.42	7.42	1.5	ANNUAL	ALL	5	
564406.85	4185271.04	10.58948	6.54	6.54	1.5	ANNUAL	ALL	5	
564426.85	4185271.04	11.6587	6.35	6.35	1.5	ANNUAL	ALL	5	
564446.85	4185271.04	12.70869	6.03	6.03	1.5	ANNUAL	ALL	5	
564486.85	4185271.04	14.76463	6.28	6.28	1.5	ANNUAL	ALL	5	
564546.85	4185271.04	17.52631	6.97	6.97	1.5	ANNUAL	ALL	5	
564566.85	4185271.04	18.11311	7.37	7.37	1.5	ANNUAL	ALL	5	
564626.85	4185271.04	18.63732	7.73	7.73	1.5	ANNUAL	ALL	5	
564646.85	4185271.04	18.35411	8.08	8.08	1.5	ANNUAL	ALL	5	
564666.85	4185271.04	17.86614	8.32	8.32	1.5	ANNUAL	ALL	5	
564706.85	4185271.04	16.36924	8.49	8.49	1.5	ANNUAL	ALL	5	
564726.85	4185271.04	15.44758	8.69	8.69	1.5	ANNUAL	ALL	5	
564326.85	4185294.04	7.3699	7.42	7.42	1.5	ANNUAL	ALL	5	
564346.85	4185294.04	8.3496	7.32	7.32	1.5	ANNUAL	ALL	5	
564386.85	4185294.04	10.78089	7.2	7.2	1.5	ANNUAL	ALL	5	
564406.85	4185294.04	12.24295	7.04	7.04	1.5	ANNUAL	ALL	5	
564446.85	4185294.04	15.53531	6.21	6.21	1.5	ANNUAL	ALL	5	
564486.85	4185294.04	19.00309	6.44	6.44	1.5	ANNUAL	ALL	5	
564506.85	4185294.04	20.65457	6.62	6.62	1.5	ANNUAL	ALL	5	

564526.85	4185294.04	22.2057	6.74	6.74	1.5 ANNUAL	ALL	5
564546.85	4185294.04	23.47488	7.09	7.09	1.5 ANNUAL	ALL	5
564646.85	4185294.04	23.78633	8.07	8.07	1.5 ANNUAL	ALL	5
564666.85	4185294.04	22.67439	8.36	8.36	1.5 ANNUAL	ALL	5
564706.85	4185294.04	19.83923	8.62	8.62	1.5 ANNUAL	ALL	5
564726.85	4185294.04	18.31906	8.75	8.75	1.5 ANNUAL	ALL	5
564386.85	4185317.04	12.00539	7.44	7.44	1.5 ANNUAL	ALL	5
564406.85	4185317.04	14.02139	7.27	7.27	1.5 ANNUAL	ALL	5
564446.85	4185317.04	19.09987	6.64	6.64	1.5 ANNUAL	ALL	5
564466.85	4185317.04	22.0705	6.38	6.38	1.5 ANNUAL	ALL	5
564486.85	4185317.04	25.17821	6.48	6.48	1.5 ANNUAL	ALL	5
564506.85	4185317.04	28.26916	6.66	6.66	1.5 ANNUAL	ALL	5
564566.85	4185317.04	34.65079	7.48	7.48	1.5 ANNUAL	ALL	5
564586.85	4185317.04	35.15835	7.6	7.6	1.5 ANNUAL	ALL	5
564606.85	4185317.04	34.81387	7.73	7.73	1.5 ANNUAL	ALL	5
564646.85	4185317.04	31.60069	8.13	8.13	1.5 ANNUAL	ALL	5
564666.85	4185317.04	29.1369	8.45	8.45	1.5 ANNUAL	ALL	5
564706.85	4185317.04	23.93808	8.74	8.74	1.5 ANNUAL	ALL	5
564726.85	4185317.04	21.52232	8.88	8.88	1.5 ANNUAL	ALL	5
564386.85	4185340.04	13.10568	7.47	7.47	1.5 ANNUAL	ALL	5
564406.85	4185340.04	15.76861	7.41	7.41	1.5 ANNUAL	ALL	5
564426.85	4185340.04	19.14381	7.16	7.16	1.5 ANNUAL	ALL	5
564486.85	4185340.04	34.44882	6.59	6.59	1.5 ANNUAL	ALL	5
564506.85	4185340.04	40.83182	6.93	6.93	1.5 ANNUAL	ALL	5
564546.85	4185340.04	51.52604	7.29	7.29	1.5 ANNUAL	ALL	5
564566.85	4185340.04	54.10413	7.36	7.36	1.5 ANNUAL	ALL	5
564586.85	4185340.04	54.15323	7.53	7.53	1.5 ANNUAL	ALL	5
564606.85	4185340.04	51.88139	7.81	7.81	1.5 ANNUAL	ALL	5
564666.85	4185340.04	37.3994	8.45	8.45	1.5 ANNUAL	ALL	5
564686.85	4185340.04	32.58897	8.76	8.76	1.5 ANNUAL	ALL	5
564406.85	4185363.04	17.22512	7.53	7.53	1.5 ANNUAL	ALL	5
564446.85	4185363.04	28.02717	6.99	6.99	1.5 ANNUAL	ALL	5
564466.85	4185363.04	36.72067	6.84	6.84	1.5 ANNUAL	ALL	5
564506.85	4185363.04	63.04133	7.07	7.07	1.5 ANNUAL	ALL	5
564546.85	4185363.04	91.40572	7.28	7.28	1.5 ANNUAL	ALL	5
564566.85	4185363.04	97.27327	7.33	7.33	1.5 ANNUAL	ALL	5
564586.85	4185363.04	93.74198	7.38	7.38	1.5 ANNUAL	ALL	5
564606.85	4185363.04	82.4467	7.73	7.73	1.5 ANNUAL	ALL	5
564726.85	4185363.04	27.62697	8.52	8.52	1.5 ANNUAL	ALL	5
564326.85	4185386.04	8.05465	8.13	8.13	1.5 ANNUAL	ALL	5
564346.85	4185386.04	9.57444	7.8	7.8	1.5 ANNUAL	ALL	5
564426.85	4185386.04	23.60078	7.54	7.54	1.5 ANNUAL	ALL	5
564446.85	4185386.04	32.02461	7.39	7.39	1.5 ANNUAL	ALL	5
564466.85	4185386.04	45.57522	7.13	7.13	1.5 ANNUAL	ALL	5
564486.85	4185386.04	68.2427	6.91	6.91	1.5 ANNUAL	ALL	5
564506.85	4185386.04	103.67975	7.02	7.02	1.5 ANNUAL	ALL	5
564686.85	4185386.04	43.34425	8.58	8.58	1.5 ANNUAL	ALL	5
564726.85	4185386.04	29.35336	8.66	8.66	1.5 ANNUAL	ALL	5
564326.85	4185409.04	7.83703	8.88	8.88	1.5 ANNUAL	ALL	5
564346.85	4185409.04	9.34877	8.16	8.16	1.5 ANNUAL	ALL	5
564366.85	4185409.04	11.35442	7.88	7.88	1.5 ANNUAL	ALL	5
564466.85	4185409.04	50.94714	7.21	7.21	1.5 ANNUAL	ALL	5
564486.85	4185409.04	84.98506	7.09	7.09	1.5 ANNUAL	ALL	5
564626.85	4185409.04	105.67986	8.6	8.6	1.5 ANNUAL	ALL	5
564646.85	4185409.04	75.7671	8.41	8.41	1.5 ANNUAL	ALL	5
564686.85	4185409.04	44.54972	8.44	8.44	1.5 ANNUAL	ALL	5
564726.85	4185409.04	29.46085	8.63	8.63	1.5 ANNUAL	ALL	5
564326.85	4185432.04	7.50631	8.82	8.82	1.5 ANNUAL	ALL	5

564346.85	4185432.04	8.93371	8.14	8.14	1.5 ANNUAL	ALL	5
564366.85	4185432.04	10.81494	8.15	8.15	1.5 ANNUAL	ALL	5
564406.85	4185432.04	17.14653	7.92	7.92	1.5 ANNUAL	ALL	5
564426.85	4185432.04	22.80537	7.86	7.86	1.5 ANNUAL	ALL	5
564446.85	4185432.04	32.09643	7.47	7.47	1.5 ANNUAL	ALL	5
564466.85	4185432.04	48.68745	7.3	7.3	1.5 ANNUAL	ALL	5
564486.85	4185432.04	81.50556	7.38	7.38	1.5 ANNUAL	ALL	5
564506.85	4185432.04	141.04177	7.58	7.58	1.5 ANNUAL	ALL	5
564606.85	4185432.04	133.80084	8.46	8.46	1.5 ANNUAL	ALL	5
564626.85	4185432.04	94.10397	8.57	8.57	1.5 ANNUAL	ALL	5
564646.85	4185432.04	69.16274	8.48	8.48	1.5 ANNUAL	ALL	5
564706.85	4185432.04	33.63961	8.57	8.57	1.5 ANNUAL	ALL	5
564326.85	4185455.04	7.06981	9.07	9.07	1.5 ANNUAL	ALL	5
564366.85	4185455.04	10.03642	8.4	8.4	1.5 ANNUAL	ALL	5
564406.85	4185455.04	15.53566	8.06	8.06	1.5 ANNUAL	ALL	5
564426.85	4185455.04	20.26814	8	8	1.5 ANNUAL	ALL	5
564446.85	4185455.04	27.63567	8.07	8.07	1.5 ANNUAL	ALL	5
564466.85	4185455.04	40.11603	7.85	7.85	1.5 ANNUAL	ALL	5
564486.85	4185455.04	63.08783	7.82	7.82	1.5 ANNUAL	ALL	5
564506.85	4185455.04	106.0705	7.97	7.97	1.5 ANNUAL	ALL	5
564606.85	4185455.04	94.81024	8.04	8.04	1.5 ANNUAL	ALL	5
564426.85	4185478.04	17.09138	8.37	8.37	1.5 ANNUAL	ALL	5
564446.85	4185478.04	22.17578	8.54	8.54	1.5 ANNUAL	ALL	5
564466.85	4185478.04	29.9099	8.22	8.22	1.5 ANNUAL	ALL	5
564486.85	4185478.04	41.95983	8.14	8.14	1.5 ANNUAL	ALL	5
564606.85	4185478.04	59.53926	8.27	8.27	1.5 ANNUAL	ALL	5
564626.85	4185478.04	48.66198	8.37	8.37	1.5 ANNUAL	ALL	5
564646.85	4185478.04	40.21858	8.49	8.49	1.5 ANNUAL	ALL	5
564666.85	4185478.04	33.64275	8.52	8.52	1.5 ANNUAL	ALL	5
564326.85	4185501.04	6.03942	9.21	9.21	1.5 ANNUAL	ALL	5
564346.85	4185501.04	6.96526	9.27	9.27	1.5 ANNUAL	ALL	5
564366.85	4185501.04	8.13822	8.81	8.81	1.5 ANNUAL	ALL	5
564386.85	4185501.04	9.61482	8.67	8.67	1.5 ANNUAL	ALL	5
564466.85	4185501.04	21.38605	8.31	8.31	1.5 ANNUAL	ALL	5
564486.85	4185501.04	26.65084	8.22	8.22	1.5 ANNUAL	ALL	5
564526.85	4185501.04	36.26617	8.47	8.47	1.5 ANNUAL	ALL	5
564546.85	4185501.04	38.3038	8.67	8.67	1.5 ANNUAL	ALL	5
564586.85	4185501.04	38.07771	8.47	8.47	1.5 ANNUAL	ALL	5
564606.85	4185501.04	35.03531	8.53	8.53	1.5 ANNUAL	ALL	5
564626.85	4185501.04	31.37176	8.81	8.81	1.5 ANNUAL	ALL	5
564646.85	4185501.04	27.79567	9.06	9.06	1.5 ANNUAL	ALL	5
564666.85	4185501.04	24.70553	8.51	8.51	1.5 ANNUAL	ALL	5
564686.85	4185501.04	21.81086	8.52	8.52	1.5 ANNUAL	ALL	5
564326.85	4185524.04	5.49017	9.57	9.57	1.5 ANNUAL	ALL	5
564346.85	4185524.04	6.24109	9.72	9.72	1.5 ANNUAL	ALL	5
564366.85	4185524.04	7.17043	8.94	8.94	1.5 ANNUAL	ALL	5
564386.85	4185524.04	8.27415	8.98	8.98	1.5 ANNUAL	ALL	5
564426.85	4185524.04	11.24482	8.46	8.46	1.5 ANNUAL	ALL	5
564446.85	4185524.04	13.1666	8.23	8.23	1.5 ANNUAL	ALL	5
564466.85	4185524.04	15.31491	8.75	8.75	1.5 ANNUAL	ALL	5
564486.85	4185524.04	17.60856	8.59	8.59	1.5 ANNUAL	ALL	5
564506.85	4185524.04	19.54743	8.77	8.77	1.5 ANNUAL	ALL	5
564526.85	4185524.04	20.70907	8.83	8.83	1.5 ANNUAL	ALL	5
564546.85	4185524.04	21.29357	8.98	8.98	1.5 ANNUAL	ALL	5
564566.85	4185524.04	21.74931	9.11	9.11	1.5 ANNUAL	ALL	5
564586.85	4185524.04	21.91775	9.06	9.06	1.5 ANNUAL	ALL	5
564606.85	4185524.04	21.49536	8.95	8.95	1.5 ANNUAL	ALL	5
564626.85	4185524.04	20.56297	8.76	8.76	1.5 ANNUAL	ALL	5

564646.85	4185524.04	19.28438	8.68	8.68	1.5 ANNUAL	ALL	5
564686.85	4185524.04	16.43048	8.42	8.42	1.5 ANNUAL	ALL	5
564706.85	4185524.04	15.04223	8.23	8.23	1.5 ANNUAL	ALL	5
564326.85	4185547.04	4.95436	9.66	9.66	1.5 ANNUAL	ALL	5
564346.85	4185547.04	5.55437	9.53	9.53	1.5 ANNUAL	ALL	5
564366.85	4185547.04	6.25506	9.21	9.21	1.5 ANNUAL	ALL	5
564426.85	4185547.04	9.00912	9.12	9.12	1.5 ANNUAL	ALL	5
564446.85	4185547.04	10.12065	9.27	9.27	1.5 ANNUAL	ALL	5
564466.85	4185547.04	11.25318	9.38	9.38	1.5 ANNUAL	ALL	5
564486.85	4185547.04	12.28669	9.34	9.34	1.5 ANNUAL	ALL	5
564506.85	4185547.04	13.0574	9.23	9.23	1.5 ANNUAL	ALL	5
564526.85	4185547.04	13.51397	9.1	9.1	1.5 ANNUAL	ALL	5
564546.85	4185547.04	13.80119	8.98	8.98	1.5 ANNUAL	ALL	5
564586.85	4185547.04	14.27112	8.76	8.76	1.5 ANNUAL	ALL	5
564346.85	4185570.04	4.91317	9.14	9.14	1.5 ANNUAL	ALL	5
564366.85	4185570.04	5.43011	9.27	9.27	1.5 ANNUAL	ALL	5
564386.85	4185570.04	6.0026	9.28	9.28	1.5 ANNUAL	ALL	5
564446.85	4185570.04	7.93378	9.3	9.3	1.5 ANNUAL	ALL	5
564466.85	4185570.04	8.548	9.19	9.19	1.5 ANNUAL	ALL	5
564586.85	4185570.04	10.016	8.89	8.89	1.5 ANNUAL	ALL	5
564606.85	4185570.04	10.07861	9.08	9.08	1.5 ANNUAL	ALL	5
564626.85	4185570.04	10.02184	9.61	9.61	1.5 ANNUAL	ALL	5
564646.85	4185570.04	9.91459	9.52	9.52	1.5 ANNUAL	ALL	5
564666.85	4185570.04	9.66712	9.83	9.83	1.5 ANNUAL	ALL	5
564686.85	4185570.04	9.38133	9.54	9.54	1.5 ANNUAL	ALL	5
564326.85	4185593.04	3.96834	9.53	9.53	1.5 ANNUAL	ALL	5
564346.85	4185593.04	4.32182	9.52	9.52	1.5 ANNUAL	ALL	5
564366.85	4185593.04	4.70229	9.55	9.55	1.5 ANNUAL	ALL	5
564386.85	4185593.04	5.10661	9.47	9.47	1.5 ANNUAL	ALL	5
564446.85	4185593.04	6.32811	9.34	9.34	1.5 ANNUAL	ALL	5
564466.85	4185593.04	6.66136	9.36	9.36	1.5 ANNUAL	ALL	5
564506.85	4185593.04	7.06835	9.54	9.54	1.5 ANNUAL	ALL	5
564526.85	4185593.04	7.18094	9.33	9.33	1.5 ANNUAL	ALL	5
564546.85	4185593.04	7.26002	9.35	9.35	1.5 ANNUAL	ALL	5
564566.85	4185593.04	7.33409	9.46	9.46	1.5 ANNUAL	ALL	5
564586.85	4185593.04	7.41106	9.56	9.56	1.5 ANNUAL	ALL	5
564606.85	4185593.04	7.47852	9.62	9.62	1.5 ANNUAL	ALL	5
564626.85	4185593.04	7.5033	9.83	9.83	1.5 ANNUAL	ALL	5
564666.85	4185593.04	7.5187	8.02	9.77	1.5 ANNUAL	ALL	5
564686.85	4185593.04	7.297	9.68	9.68	1.5 ANNUAL	ALL	5
564706.85	4185593.04	7.12316	9.54	9.54	1.5 ANNUAL	ALL	5
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564366.85	4185616.04	4.07408	9.97	9.97	1.5 ANNUAL	ALL	5
564386.85	4185616.04	4.35701	9.86	9.86	1.5 ANNUAL	ALL	5
564406.85	4185616.04	4.63582	9.78	9.78	1.5 ANNUAL	ALL	5
564466.85	4185616.04	5.31197	9.83	9.83	1.5 ANNUAL	ALL	5
564526.85	4185616.04	5.58835	9.65	9.65	1.5 ANNUAL	ALL	5
564546.85	4185616.04	5.64384	9.54	9.54	1.5 ANNUAL	ALL	5
564566.85	4185616.04	5.70018	9.5	9.5	1.5 ANNUAL	ALL	5
564586.85	4185616.04	5.74694	9.73	9.73	1.5 ANNUAL	ALL	5
564606.85	4185616.04	5.80034	9.73	9.73	1.5 ANNUAL	ALL	5
564726.85	4185616.04	5.61057	9.3	9.3	1.5 ANNUAL	ALL	5
564366.85	4185639.04	3.54175	9.97	9.97	1.5 ANNUAL	ALL	5
564386.85	4185639.04	3.73761	9.99	9.99	1.5 ANNUAL	ALL	5
564406.85	4185639.04	3.92351	9.89	9.89	1.5 ANNUAL	ALL	5
564466.85	4185639.04	4.33546	9.78	9.78	1.5 ANNUAL	ALL	5
564726.85	4185639.04	4.59503	9.94	9.94	1.5 ANNUAL	ALL	5
564526.85	4185662.04	3.69456	9.68	9.68	1.5 ANNUAL	ALL	5

564646.85	4185662.04	3.83015	10.91	10.91	1.5 ANNUAL	ALL	5
564706.85	4185662.04	3.82342	11.36	11.36	1.5 ANNUAL	ALL	5
564726.85	4185662.04	3.80576	11.02	11.02	1.5 ANNUAL	ALL	5
564571.45	4185480.68	77.81734	8.03	8.03	1.5 ANNUAL	ALL	5
564351.56	4185346.74	9.7919	7.93	7.93	1.5 ANNUAL	ALL	5
564340.71	4185319.08	8.56483	7.96	7.96	1.5 ANNUAL	ALL	5
564596.5	4185424.36	181.80184	8.29	8.29	1.5 ANNUAL	ALL	5
564609.46	4185387.18	125.62677	8.1	8.1	1.5 ANNUAL	ALL	5
564628.55	4185387.69	92.56056	8.42	8.42	1.5 ANNUAL	ALL	5

\*\* CONCUNIT ug /m<sup>3</sup>

\*\* DEPUNIT g/m <sup>2</sup>



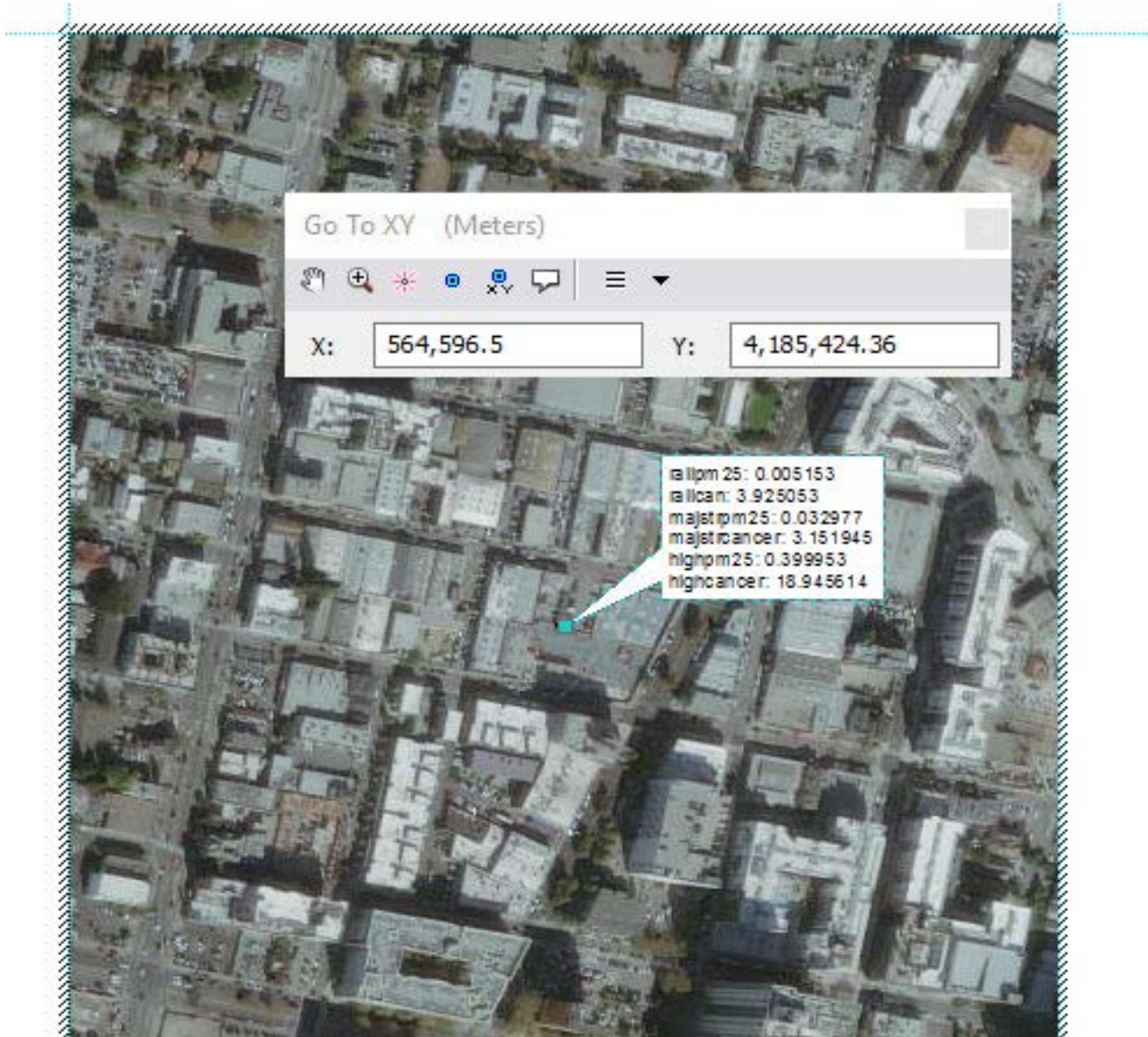
**CUMULATIVE SCREENING ANALYSIS FOR CONSTRUCTION MEIR AT 2401 BROADWAY**

BAAQMD Plant #	Name of Source	Address	Source Type	Screening Risk			Exposure to MEIR			
				Cancer Risk	HI	PM <sub>2.5</sub>	Distance to MEIR (feet)	Adj. Cancer Risk	Adj. HI	Adj. PM <sub>2.5</sub>
<b>BAAQMD Permitted Stationary Sources within 1,000 feet<sup>1,2</sup></b>										
3490	Johnson Plating Works	2526 Telegraph Avenue	Metal processing, surface coating	0.01	0	0	670	0.002	0.000	0.000
14195	State Department of Transportation	111 Grand Avenue	Generators (2), boilers (2)	14.7	0.02	0.02	850	2.55	0.003	0.003
21819	City of Oakland	455 27th St, Fire Station 15	Generators	13.5	0.02	0.04	510	1.48	0.002	0.004
22279	Verizon Wireless	2923 Webster Street	Natural Gas Generator	0	0	0	1500	0.00	0.000	0.000
23098	Royal Coffee Company	2523 Broadway	Coffee Roasters (2)	0.110	0.000	0.180	50	0.09	0.000	0.155
200538	Uptown Body and Fender	401 26th St	Auto body coating	0	0	0	280	0.00	0.000	0.000
200620	BA1 2201 Broadway LLC	2201 Broadway	Generators	2.08	0	0	930	0.11	0.000	0.000
<b>Project Sources<sup>3</sup></b>										
	460 24th Street	Construction						7.1	0.005	0.027
	460 24th Street	Diesel Generator		10.000	0.010	0.0200	125	6.4	0.006	0.013
<b>Proposed Projects within 1,000 feet<sup>4,5</sup></b>										
	24th & Harrison	Diesel Generator	200	4.100	0.001	0.0070	650	1.0	0.000	0.002
	88 Grand	Diesel Generator		10.000	0.010	0.0200	600	0.9	0.001	0.002
	2100 Telegraph	Diesel Generator	300	0.800	0.010	0.0100	1030	0.2	0.002	0.002
	2201 Valley Street	Diesel Generator	120	1.200	0.010	0.0100	905	0.1	0.001	0.001
	2270 Broadway	Diesel Generator		0.800	0.010	0.0100	190	0.3	0.004	0.004
	2305 Webster	Diesel Generator	25	9.500	0.030	0.0200	370	0.2	0.001	0.000
	2401 Broadway	No Generator								
	2424 Webster	Diesel Generator		10.000	0.010	0.0200	200	4.1	0.004	0.008
	2500 Webster	No Generator								
	2600 Telegraph	Diesel Generator		10.000	0.010	0.0200	310	2.5	0.003	0.005
<b>Mobile Sources<sup>6</sup></b>										
	Highway							18.9	--	0.4000
	Major Roadway							3.2	--	0.033
	Rail							3.9	--	0.005
<b>Cumulative Health Risks</b>								<b>53.1</b>	<b>0.033</b>	<b>0.665</b>
City of Oakland Significance Thresholds								100	10	0.8

**NOTES:**

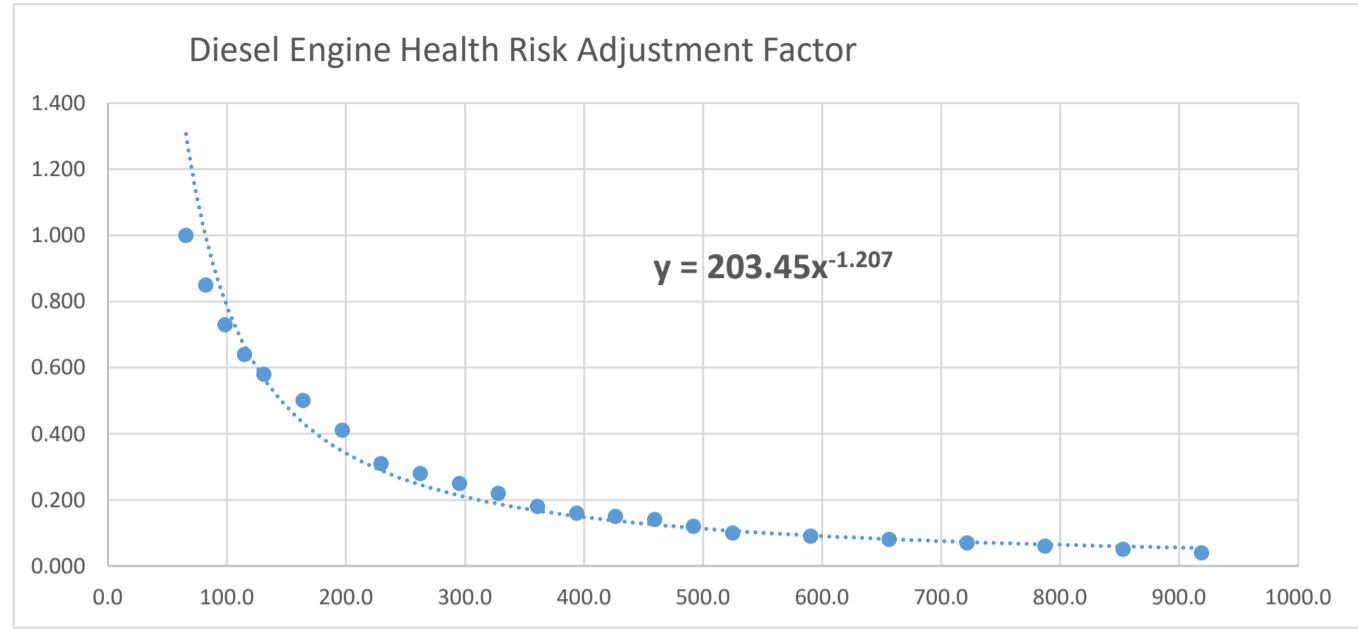
- Health risk screening values obtained from BAAQMD's Permitted Stationary Sources Risk and Hazards web tool; awaiting response to the SSIF.
- Health risks for diesel generators adjusted for distance using the BAAQMD's distance multiplier.
- Based on construction HRA conducted for the Project; operation assumes max permitted risk
- List of proposed projects within 1,000 ft developed by ESA.
- Health risks for diesel generators adjusted for distance using the BAAQMD's distance multiplier.
- Data from BAAQMD.

Background Mobile Health Risks at MEIR (2401 Broadway)



**Distance Multiplier for Diesel Engines - Cancer risk, HI & PM<sub>2.5</sub> concentration**

Distance (feet)	Distance adjustment multiplier
0.0	1.000
16.4	1.000
32.8	1.000
49.2	1.000
65.6	1.000
82.0	0.85
98.4	0.73
114.8	0.64
131.2	0.58
164.0	0.5
196.9	0.41
229.7	0.31
262.5	0.28
295.3	0.25
328.1	0.22
360.9	0.18
393.7	0.16
426.5	0.15
459.3	0.14
492.1	0.12
524.9	0.1
590.6	0.09
656.2	0.08
721.8	0.07
787.4	0.06
853.0	0.05
918.6	0.04



At x = 930 ft      Adj Factor = 0.05314945  
 Reference Risk = 2.08      Reference HI = 0.02      Reference PM<sub>2.5</sub> = 0.04  
**Adj risk = 0.110551      Adj HI = 0.00106299      Adj PM<sub>2.5</sub> = 0.002126**

At x = 200 ft      Risk = 4.1      HI = 0.001      PM<sub>2.5</sub> = 0.007  
 At x = 200 ft      Adj Factor = 0.339715  
 Reference Risk = 12.06895      Reference HI = 0.00294365      Reference PM<sub>2.5</sub> = 0.020606  
 At x = 650 ft,      Adj Factor = 0.081898  
 At x = 650 ft,      **Adj risk = 0.988418      Adj HI = 0.00024108      Adj PM<sub>2.5</sub> = 0.001688**

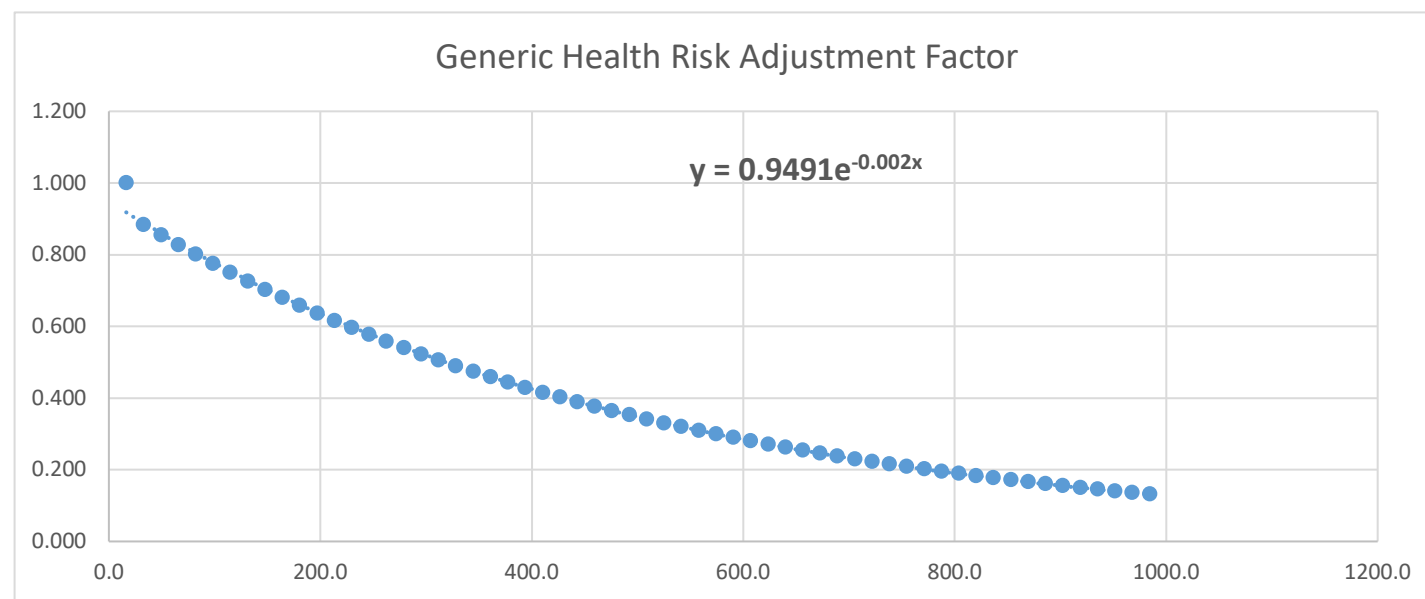
At x = 300 ft      Risk = 0.8      HI = 0.01      PM<sub>2.5</sub> = 0.01  
 At x = 300 ft      Adj Factor = 0.208244  
 Reference Risk = 3.841649      Reference HI = 0.04802061      Reference PM<sub>2.5</sub> = 0.048021  
 At x = 1030 ft,      Adj Factor = 0.046985  
 At x = 1030 ft,      **Adj risk = 0.180501      Adj HI = 0.00225627      Adj PM<sub>2.5</sub> = 0.002256**

At x = 120 ft      Risk = 1.2      HI = 0.01      PM<sub>2.5</sub> = 0.01  
 At x = 120 ft      Adj Factor = 0.629341  
 Reference Risk = 1.906757      Reference HI = 0.01588964      Reference PM<sub>2.5</sub> = 0.01589  
 At x = 905 ft,      Adj Factor = 0.054927  
 At x = 905 ft,      **Adj risk = 0.104732      Adj HI = 0.00087276      Adj PM<sub>2.5</sub> = 0.000873**

At x = 25 ft      Risk = 9.5      HI = 0.03      PM<sub>2.5</sub> = 0.02  
 At x = 25 ft      Adj Factor = 4.17969  
 Reference Risk = 2.272896      Reference HI = 0.00717757      Reference PM<sub>2.5</sub> = 0.004785  
 At x = 650 ft,      Adj Factor = 0.081898  
 At x = 650 ft,      **Adj risk = 0.186145      Adj HI = 0.00058783      Adj PM<sub>2.5</sub> = 0.000392**

Distance Multiplier for Generic Sources - Cancer risk, HI & PM<sub>2.5</sub> concentration

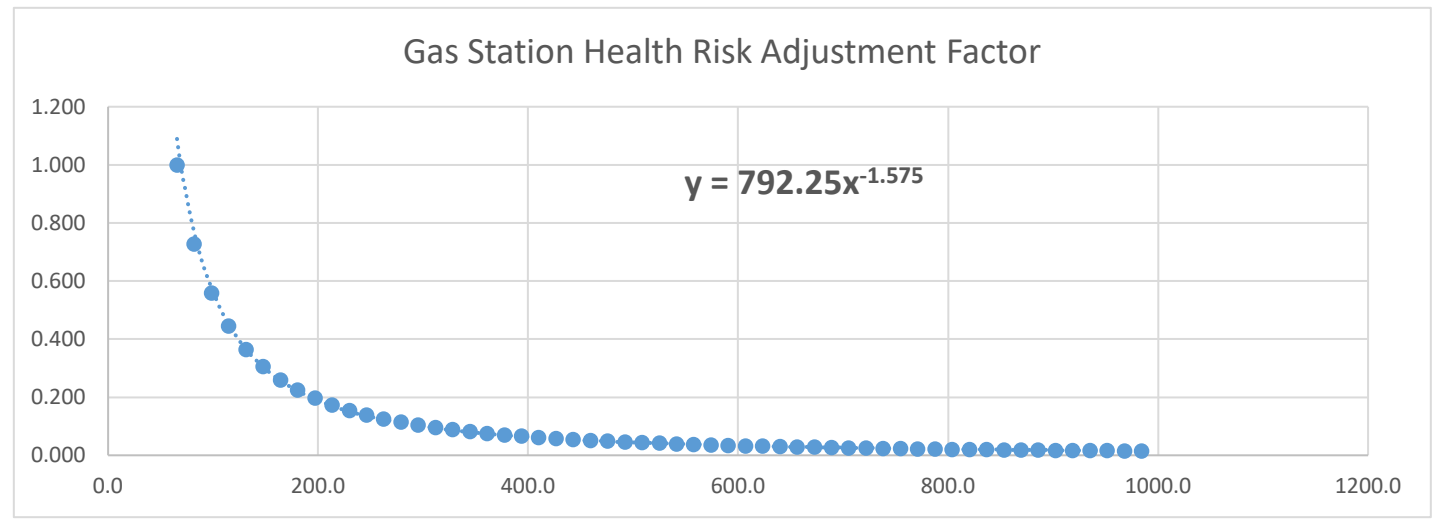
Distance (feet)	Multiplier
0.0	1.000
16.4	1.000
32.8	0.883
49.2	0.855
65.6	0.827
82.0	0.801
98.4	0.775
114.8	0.750
131.2	0.726
147.6	0.702
164.0	0.679
180.4	0.658
196.9	0.636
213.3	0.616
229.7	0.596
246.1	0.577
262.5	0.558
278.9	0.540
295.3	0.523
311.7	0.506
328.1	0.489
344.5	0.474
360.9	0.458
377.3	0.444
393.7	0.429
410.1	0.415
426.5	0.402
442.9	0.389
459.3	0.376
475.7	0.364
492.1	0.353
508.5	0.341
524.9	0.330
541.3	0.319
557.7	0.309
574.1	0.299
590.6	0.290
607.0	0.280
623.4	0.271
639.8	0.262
656.2	0.254
672.6	0.246
689.0	0.238
705.4	0.230
721.8	0.223
738.2	0.216
754.6	0.209
771.0	0.202
787.4	0.195
803.8	0.189
820.2	0.183
836.6	0.177
853.0	0.171
869.4	0.166
885.8	0.160
902.2	0.155
918.6	0.150
935.0	0.145
951.4	0.141
967.8	0.136
984.3	0.132



At x =	50 ft	Adj Factor =	0.858781193
Reference Risk =	0.11	Reference HI =	0
		Reference PM <sub>2.5</sub> =	0.18
Adj risk =	0.094466	Adj HI =	0
		Adj PM <sub>2.5</sub> =	0.154580615

**Distance Multiplier for Gas Stations - Cancer risk, HI & PM<sub>2.5</sub> concentration**

Distance (feet)	Distance adjustment multiplier
0.0	1.000
16.4	1.000
32.8	1.000
49.2	1.000
65.6	1.000
82.0	0.728
98.4	0.559
114.8	0.445
131.2	0.365
147.6	0.305
164.0	0.260
180.4	0.225
196.9	0.197
213.3	0.174
229.7	0.155
246.1	0.139
262.5	0.126
278.9	0.114
295.3	0.104
311.7	0.096
328.1	0.088
344.5	0.082
360.9	0.076
377.3	0.071
393.7	0.066
410.1	0.062
426.5	0.058
442.9	0.055
459.3	0.052
475.7	0.049
492.1	0.046
508.5	0.044
524.9	0.042
541.3	0.040
557.7	0.038
574.1	0.036
590.6	0.034
607.0	0.033
623.4	0.031
639.8	0.030
656.2	0.029
672.6	0.028
689.0	0.027
705.4	0.026
721.8	0.025
738.2	0.024
754.6	0.023
771.0	0.022
787.4	0.022
803.8	0.021
820.2	0.020
836.6	0.020
853.0	0.019
869.4	0.018
885.8	0.018
902.2	0.017
918.6	0.017
935.0	0.016
951.4	0.016
967.8	0.015
984.3	0.015



At x =  ft      Adj Factor = #DIV/0!

Reference Risk =       Reference HI =       Reference PM<sub>2.5</sub> =

Adj risk = #DIV/0!      Adj HI = #DIV/0!      Adj PM<sub>2.5</sub> = #DIV/0!

# Appendix F

## **Project Energy Calculations**

# 460 24th Street Project Fuel Use Calculations

2/15/2021

CO<sub>2</sub> emissions from AQ Calculations:

Conversion	1 MT =	1000 kg
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Construction Diesel Sources		CO <sub>2</sub> Emissions
Off road equipment		183.389 MT
Haul/vendor trucks		58.01 MT
<b>TOTAL Diesel Sources =</b>		<b>241.40 MT</b>
Convert to kilograms		2.41E+05 kg

Diesel fuel combustion<sup>a</sup> = 10.21 kg CO<sub>2</sub>/gallon

Diesel Combustion Rate = 23643.38 gallons (over the 27 month construction period)

Construction Gasoline Sources		CO <sub>2</sub> Emissions
Construction workers		70.6685 MT
Convert to kilograms		7.07E+04 kg

Gasoline fuel combustion<sup>a</sup> = 8.78 kg CO<sub>2</sub>/gallon

Gasoline combustion rate = 8048.80 gallons (over the 27 month construction period)

Operation Diesel Sources		CO <sub>2</sub> Emissions
Emergency generator if diesel		17.65 MT
Convert to kilograms		1.77E+04 kg

Diesel fuel combustion<sup>a</sup> = 10.21 kg CO<sub>2</sub>/gallon

Diesel combustion rate = 1728.70 gallons Per year during operation

Operation Gasoline Sources		CO <sub>2</sub> Emissions
Operational Vehicles		523.2311 MT
Convert to kilograms		5.23E+05 kg

Gasoline fuel combustion<sup>a</sup> = 8.78 kg CO<sub>2</sub>/gallon

Gasoline combustion rate = 59593.52 gallons Per year during operation

Notes: <sup>a</sup> Emissions factors per The Climate Registry 2020 Default Emission Factors (Table 2.1 - US Default CO<sub>2</sub> Emission Factors for Transport Fuels)

# Appendix G.1

## **Equitable Climate Action Plan Consistency Checklist**





# CITY OF OAKLAND

## Equitable Climate Action Plan Consistency Checklist

250 Frank H. Ogawa Plaza, Suite 2114, Oakland, CA 94612-2031

Zoning Information: 510-238-3911

<https://www.oaklandca.gov/topics/planning>

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The purpose of this Equitable Climate Action Plan Consistency Review Checklist is to determine, for purposes of compliance with the California Environmental Quality Act (CEQA), whether a development project complies with the City of Oakland Equitable Climate Action Plan (ECAP) and the City of Oakland's greenhouse gas (GHG) emissions reduction targets. CEQA Guidelines require the analysis of GHG emissions and potential climate change impacts from new development.

- If a development project completes this Checklist and can qualitatively demonstrate compliance with the Checklist items as part of the project's design, or alternatively, demonstrate to the City's satisfaction why the item is not applicable, then the project will be considered in compliance with the City's CEQA GHG Threshold of Significance.
- If a development project cannot meet all of the Checklist items, the project will alternatively need to demonstrate consistency with the ECAP by complying with the City of Oakland GHG Reduction Plan Condition of Approval.
- If the project cannot demonstrate consistency with the ECAP in either of those two ways, the City will consider the project to have a significant effect on the environment related to GHG emissions.

### Application Submittal Requirements

1. The ECAP Consistency Checklist applies to all development projects needing a CEQA GHG emissions analysis, including a specific plan consistency analysis.
2. If required, the ECAP Consistency Review Checklist must be submitted concurrently with the City of Oakland Basic Application.

### Application Information

Applicant's Name/Company: Jamie Choy/ Signature Development Group

Property Address: 460 24<sup>th</sup> Street Oakland, CA 94612

Assessor's Parcel Number: 008-0674-033-1, 008-0674-006, &-007

Phone Number: 510-251-9276

E-mail: jchoy@signaturedevelopment.com

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Equitable Climate Action Plan (ECAP) Consistency Review Checklist

Checklist Item (Check the appropriate box and provide explanation for your answer).			
Transportation & Land Use			
1. Is the proposed project substantially consistent with the City’s over-all goals for land use and urban form, and/or taking advantage of allowable density and/or floor area ratio (FAR) standards in the City’s General Plan? (TLU1)	Yes	No	N/A
	X		
Please explain how the proposed project is substantially consistent with the City’s General Plan with respect to density and FAR standards, land use, and urban form. The Project complies with the applicable land use standards related to density, FAR, land use and urban form and is substantially consistent with the General Plan.			
2. For developments in “Transit Accessible Areas” as defined in the Planning Code, would the project provide: i) less than half the maximum allowable parking, ii) the minimum allowable parking, or iii) take advantage of available parking reductions? (TLU1)	Yes	No	N/A
		X	
Please explain how the proposed project meets this action item. The Project exceeds the minimum parking requirements but is not overparked. It is consistent with the amount of parking allowed under the Planning Code.			
3. For projects including structured parking, would the structured parking be designed for future adaptation to other uses? (Examples include, but are not limited to: the use of speed ramps instead of sloped floors.). (TLU1)	Yes	No	N/A
	X		
Please explain how the proposed project meets this action item. The structured parking would be located within a first-floor garage. Adapting the parking garage to other uses would be physically feasible. The project garage is on the ground level and can be retrofitted for other uses in the future, as it would have flat parking areas, and an approximate 19-foot ceiling height which would allow for future installation of lighting, heating, ventilation and air conditioning systems if needed for future uses.			
4. For projects that <i>are</i> subject to a Transportation Demand Management Program, would the project include transit passes for employees and/or residents? (TLU1)	Yes	No	N/A
	X		
Please explain how the proposed project meets this action item. The project will comply with all TDM requirements, including the mandatory strategy to include a transit fare subsidy.			

Equitable Climate Action Plan (ECAP) Consistency Review Checklist

<p>5. For projects that are <i>not</i> subject to a Transportation Demand Management Program, would the project incorporate one or more of the optional Transportation Demand Management measures that reduce dependency on single-occupancy vehicles? (Examples include but are not limited to transit passes or subsidies to employees and/or residents; carpooling; vanpooling; or shuttle programs; on-site carshare program; guaranteed ride home programs) (TLU1 &amp; TLU8)</p>	Yes	No	N/A
<p>Please explain how the proposed project meets this action item. N/A, the project is subject to a TDM program.</p>			X
<p>6. Does the project comply with the Plug-In Electric Vehicle (PEV) Charging Infrastructure requirements (Chapter 15.04 of the Oakland Municipal Code), if applicable? (TLU2 &amp; TLU-5)</p>	Yes	No	N/A
<p>Please explain how the proposed project meets this action item. The project will comply with Section 15.04.3.11.130 of the Oakland Municipal Code and provide the required PEV charging infrastructure requirements.</p>	X		
<p>7. Would the project reduce or prevent the direct displacement of residents and essential businesses? (For residential projects, would the project comply with SB 330, if applicable? For projects that demolish an existing commercial space, would the project include comparable square footage of neighborhood serving commercial floor space.) (TLU3)</p>	Yes	No	N/A
<p>Please explain how the proposed project meets this action item. The project removes 17,405 square feet of industrial storage space which is not an essential business or neighborhood serving commercial floor space.</p>	X		

Equitable Climate Action Plan (ECAP) Consistency Review Checklist

<p>8. Would the project prioritize sidewalk and curb space consistent with the City’s adopted Bike and Pedestrian Plans? (The project should not prevent the City’s Bike and Pedestrian Plans from being implemented. For example, do not install a garage entrance where a planned bike path would be unless otherwise infeasible due to Planning Code requirements, limited frontage or other constraints.) (TLU7)</p>	<p><b>Yes</b></p>	<p><b>No</b></p>	<p><b>N/A</b></p>
<p>Please explain how the proposed project meets this action item. The project will prioritize sidewalk and curb space consistent with the city’s adopted Bike and Pedestrian Plans and including locating vehicular access off 25<sup>th</sup> Street to avoid conflicts with the neighborhood bike route identified for 24<sup>th</sup> Street.</p>			
<p><b>Buildings</b></p>			
<p>9. Does the project not create any new natural gas connections/hook-ups? (B1 &amp; B2)</p>	<p><b>Yes</b></p>	<p><b>No</b></p>	<p><b>N/A</b></p>
<p>Please explain how the proposed project meets this action item. The project will comply with the City's recently enacted electrification ordinance limiting natural gas connections.</p>			
<p>10. Does the project comply with the City of Oakland Green Building Ordinance (Chapter 18.02 of the Oakland Municipal Code), if applicable? (B4)</p>	<p><b>Yes</b></p>	<p><b>No</b></p>	<p><b>N/A</b></p>
<p>Please explain how the proposed project meets this action item. The project would comply with the Green Building ordinance and requirements, such as reduction in indoor and outdoor water use. The 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 project would meet or exceed the implemented Building Energy Efficiency Standards (LEED Silver for new office uses)</p>			
<p>11. For retrofits of City-owned or City-controlled buildings: Would the project be all-electric, eliminate gas infrastructure from the building, and integrate energy storage wherever technically feasible and appropriate? (B5)</p>	<p><b>Yes</b></p>	<p><b>No</b></p>	<p><b>N/A</b></p>
<p>Please explain how the proposed project meets this action item. N/A</p>			

Equitable Climate Action Plan (ECAP) Consistency Review Checklist

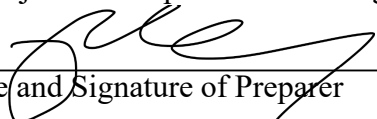
<b>Material Consumption &amp; Waste</b>			
12. Would the project reduce demolition waste from construction and renovation and facilitate material reuse in compliance with the Construction Demolition Ordinance (Chapter 15.34 of the Oakland Municipal Code)? (MCW6)	<b>Yes</b>	<b>No</b>	<b>N/A</b>
	X		
Please explain how the proposed project meets this action item. The project will comply with the Construction Demolition Ordinance.			
<b>City Leadership</b>			
13. For City projects: Have opportunities to eliminate/minimize fossil fuel dependency been analyzed in project design and construction? (CL2)	<b>Yes</b>	<b>No</b>	<b>N/A</b>
			X
Please explain how the proposed project meets this action item. N/A			
<b>Adaptation</b>			
14. For new projects in the Designated Very High Wildfire Severity Zone: Would the project incorporate wildfire safety requirements such creation of defensible space around the house, pruning, clearing and removal of vegetation, replacement of fire resistant plants, as required in the Vegetation Management Plan? (A4)	<b>Yes</b>	<b>No</b>	<b>N/A</b>
			X
Please explain how the proposed project meets this action item. N/A			

Equitable Climate Action Plan (ECAP) Consistency Review Checklist

<b>Carbon Removal</b>			
15. Would the project replace a greater number of trees than will be removed in compliance with the Tree Preservation Ordinance (Chapter 12.36 of the Oakland Municipal Code) and Planning Code if applicable and feasible given competing site constraints?  (CR-2)	Yes	No	N/A
	X		
Please explain how the proposed project meets this action item. The project site preparation would require protection of one existing protected tree on site. The project would add new street trees for a total of seven trees.			
16. Does the project comply with the Creek Protection, Stormwater Management and Discharge Control Ordinance (Chapter 13.16 of the Oakland Municipal Code), as applicable?  (CR-3)	Yes	No	N/A
	X		
Please explain how the proposed project meets this action item. The Project is not subject to the Creek Protection ordinance and will comply with the C.3 Stormwater requirements			

I understand that answering *yes* to all of these questions, means that the project **is in compliance with** the City’s Energy and Climate Action Plan as adopted on to July 28, 2020 and requires that staff apply the Project Compliance with the Equitable Climate Action Plan (ECAP) Consistency Checklist Condition of Approval as adopted by the Planning Commission on December 16, 2020 and all Checklist items must be incorporated into the project

I understand that answering *no* to any of these questions, means that the project **is not in compliance with** the City’s Energy and Climate Action Plan as adopted on to July 28, 2020 and requires that staff apply the Greenhouse Gas (GHG) Reduction Plan Condition of Approval as adopted by the Planning Commission on December 16, 2020 which will require that the applicant prepare a quantitative GHG analysis and GHG Reduction Plan for staff’s review and approval. The GHG Reduction Plan and all GHG Reduction measures shall be incorporated into the project and implemented during construction and after construction for the life of the project.

  
 \_\_\_\_\_  
 Name (and Signature of Preparer)

4/1/22  
 \_\_\_\_\_  
 Date

# Appendix G.2

## **Greenhouse Gas Reduction Plan**

# APPENDIX G.2

## Greenhouse Gas Reduction Plan

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### Introduction

This Greenhouse Gas Reduction Plan (“GHGRP”) has been prepared pursuant to the City’s Standard Condition of Approval (SCA) 42 since the Project does not commit to implementing all the GHG emission reduction strategies detailed in the City’s 2030 Equitable Climate Action Plan (ECAP) consistency checklist as adopted by the Planning Commissions on December 16, 2020.

### Project Overview

The Project would result in demolition of one existing structure and portions of four other existing structures at the site and construct 86,100 square feet of office space and 12,620 square feet of retail uses. The Project construction period is estimated to last approximately 27 months.

### City of Oakland 2030 Equitable Climate Action Plan

In July 2020, via Resolution 88267, the Oakland City Council adopted the 2030 Equitable Climate Action Plan, a comprehensive plan to achieve the 2030 greenhouse gas (GHG) reduction target and increase Oakland’s resilience to the impacts of the climate crisis, both through a deep equity lens.<sup>1</sup> Alongside the 2030 ECAP, the Council also adopted a goal to achieve community-wide carbon neutrality no later than 2045.

The ECAP calls for ambitious reductions in carbon emissions intended to achieve a 36 percent reduction in total GHG emission as compared to the 2005 baseline by the year by 2020, a 56 percent reduction by the year 2030, and an 83 percent reduction in GHG emission as compared to 2005 emissions by the year 2050. To achieve these ambitious targets, GHG emission reductions are needed throughout all sectors, but with a particular emphasis on new development and the transportation sectors. As stated in the ECAP, “by implementing all Actions in the ECAP, Oakland can reduce GHG emissions by at least 60 percent by 2030, and 84 percent by 2050.”

The 2030 ECAP includes a set of 40 Actions that lay the foundation for the City to meet these emission reductions. Actions are split into seven sectors:

- Transportation and Land Use
- Buildings
- Material Consumption and Waste
- Adaptation
- Carbon Removal
- City Leadership

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<sup>1</sup> City of Oakland, 2020. Oakland 2030 Equitable Climate Action Plan, July 2020.



- Port of Oakland

The Transportation and Land Use Action-2, calls for better aligning the City's permit and project approval process with ECAP priorities:

**ECAP Action Transportation + Land Use (TLU)-2:** Amend Standard Conditions of Approval (SCAs), as well as mitigation measures and other permit conditions to align with the City's GHG reduction priorities stated in this ECAP. Explore, through the Planning Commission, adoption of a threshold of significance for GHG impacts to align with this ECAP. In applying conditions on permits and project approvals, ensure that all cost-effective strategies to reduce GHG emissions from buildings and transportation are required or otherwise included in project designs, including infrastructure improvements like bicycle corridor enhancements, wider sidewalks, crossing improvements, public transit improvements, street trees and urban greening, and green stormwater infrastructure. Where onsite project GHG reductions are not cost-effective, prioritize local projects benefiting frontline communities."

The City's recently updated the Standard Conditions of Approval for GHG consistent with Action TLU-2 of the ECAP, effective as of December, 2020.

## **ECAP Checklist**

The City has developed the ECAP Consistency Checklist to determine, for purposes of compliance with the California Environmental Quality Act (CEQA), whether a development project complies with the ECAP and the City of Oakland's GHG emissions reduction targets. The ECAP Consistency Checklist includes a series of design measures and infrastructure systems that, if implemented, would systematically achieve cost-effective GHG emission reductions intended to meet ECAP emission reduction targets. As part of a new development's analysis of GHG emissions and potential climate change impacts required under CEQA, if the project completes this Checklist and can qualitatively demonstrate compliance with the Checklist items as part of the project's design, or alternatively, demonstrate to the City's satisfaction why the item is not applicable, then the project will be considered to be in compliance with the City's ECAP and by extension the City's GHG reduction targets.

If a development project cannot meet all of the Checklist items, the project will alternatively need to demonstrate consistency with the ECAP by complying with the City of Oakland GHG Reduction Plan Condition of Approval.

If the project cannot demonstrate consistency with the ECAP in either of those two ways, the City will consider the project to have a significant effect on the environment related to GHG emissions.

## **Standard Condition of Approval 42**

SCA 42 applies to projects under two scenarios:

**Scenario A:** Projects which involve a land use development (i.e., a project that does not require a permit from the Bay Area Air Quality Management District [BAAQMD] to operate), and do not

commit to all of the GHG emissions reductions strategies described on the ECAP Consistency Checklist, as originally adopted by the Planning Commission on December 16, 2020

**Scenario B:** Projects which involve a stationary source of GHG (i.e., a project that requires a permit from BAAQMD to operate) and after a GHG analysis is prepared would produce total GHG emissions of more than 10,000 metric tons of CO<sub>2</sub>e annually [MT CO<sub>2</sub>e per year].

For projects that do not comply with all emission reduction strategies in the ECAP checklist, the City of Oakland's SCA 42 requires that the project applicant shall retain a qualified air quality consultant to develop a GHGRP for City review and approval and shall implement the approved GHG Reduction Plan.

The goal of the GHGRP shall be to reduce GHG emissions by at least the amount that would be achieved by committing to all of the emissions reductions strategies identified on the ECAP Consistency Checklist as the City's project-level implementation of its ECAP.

As specified by SCA 42, the GHG Reduction Plan shall include:

1. A detailed quantified GHG emissions inventory for the project taking into consideration energy efficiencies included as part of the project (including proposed mitigation measures, project design features, those strategies being implemented and other City requirements),
2. For each ECAP Consistency Checklist strategy that the project will not meet, a quantified calculation of the additional GHG emission reductions that would have occurred had it implemented the GHG emissions reduction measure consistent with the ECAP Consistency Checklist,
3. A quantified strategy for achieving a GHG emission reduction equivalent to the reduction that would have resulted from complying with the ECAP Consistency Checklist strategy, and
4. Requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented.

## Project GHG Emissions Inventory

The Project would generate GHG emissions during both construction and operation. To provide a conservative analysis, existing emissions from the Kia service and parts center in operation at the time the Notice of Preparation (NOP) was released (January 2020) were not discounted. The Kia service and parts center is no longer a tenant, and the Project site is fully vacant as of March 2022. Project-specific GHG modeling results are also attached.

### ***Construction***

Construction activities at the Project site would consist of demolition, site preparation, grading and excavation, building construction, paving, and application of architectural coatings for finishing interiors and exteriors of the Project building. The Project would require the excavation and off haul of approximately 3,389 cubic yards of earth from the Project site, in addition to demolition rubble from 34,254 square feet of existing structures on the site. No soils are anticipated to be imported to the site.

GHG emissions would be generated from combustion of fuel in construction equipment used on-site and vehicles transporting workers, equipment and materials to and from the site and is presented in **Table G.2-1**. Consistent with City methodology, construction emissions are amortized over a project life of 40 years for consideration with operational emissions discussed below.

**TABLE G.2-1  
PROJECT GHG EMISSIONS FROM CONSTRUCTION**

<b>Year</b>	<b>MT CO<sub>2e</sub></b>
2022	129
2023	150
2024	28
Project Total	307
Project Life	40
Annual Emissions Amortized Over Project Life	7.7

### ***Operation***

Operation of the Project would generate direct GHG emissions from vehicle trips generated to and from the Project, testing and maintenance of the proposed emergency generator and to a smaller extent from area sources such as landscaping activities. Additionally, GHGs would be generated indirectly by increased electrical and water demand, and increased wastewater and solid waste generation.

Operational emissions as estimated using CalEEMod version 2020.4.0 are presented in **Table G.2-2**.

**TABLE G.2-2  
PROJECT GHG EMISSIONS**

<b>Source</b>	<b>MT CO<sub>2e</sub> per year</b>
Area Sources	<0.1
Electricity Use	157
Mobile Emissions	432
Solid Waste	47
Water and Wastewater	22
Total Operational Emissions	659
Amortized Construction Emissions (Over 40 Years)	8
Total Project GHG Emissions	667

Emissions from the proposed diesel emergency generator were estimated assuming a maximum of 50 hours per year of operation for non-emergency purposes of testing and maintenance consistent with BAAQMD permitting requirements for emergency generators. **Table G.2-3** compares the estimated GHG emissions from the generator to the City’s threshold of 10,000 metric tons of CO<sub>2</sub>e for stationary sources.

**TABLE G.2-3  
STATIONARY SOURCE GHG EMISSIONS**

Source	MT CO <sub>2</sub> e per year
Emergency Generator	18
City of Oakland Stationary Source Threshold	10,000

### **Quantification of GHG Reductions from ECAP Measure the Project would not comply with**

Based on the ECAP checklist completed by the Applicant (see Appendix G.1), the Project would not comply with the following transportation and land use strategy in the ECAP checklist hence necessitating the preparation of this GHGRP:

2. For developments in “Transit Accessible Areas” as defined in the Planning Code, would the project provide: i) less than half the maximum allowable parking, ii) the minimum allowable parking, or iii) take advantage of available parking reductions?

While parking provided by the Project is consistent with the amount of parking allowed under the Planning Code, it exceeds the minimum parking requirements by 26 spaces.

From a transportation standpoint, it is generally assumed that off-site parking is available in downtown Oakland; so even if project has no on-site parking, it is conservatively assumed that it would not affect trip generation or vehicle miles traveled (VMT) because there is other parking available nearby. However, for a conservative analysis of the GHG impacts of this measure for the purposes of this GHGRP, it is assumed that each parking space eliminated would result in one fewer employee driving to the Project site and therefore a reduction in VMT associated with that employee.

Once operational, the Project would employ 407 employees. Assuming VMT from employee commute is about 90 percent of the total VMT generated by the Project, eliminating one parking space would reduce VMT by 0.2 percent ( $1 / 407 * 0.9$ ). So eliminating 26 spaces would reduce VMT by approximately 5.8 percent. This would translate to a GHG reduction of approximately 25 MT CO<sub>2</sub>e per year from mobile sources.

## Equivalent GHG Reduction from Other Measures

Had the Project implemented all measures in the ECAP consistency checklist, the Project would have achieved a total quantifiable reduction of approximately 24.9 MT CO<sub>2e</sub> per year from mobile sources. This section identifies equivalent reduction in GHG emissions that the Project would achieve through other offsets.

The greatest source of Project-generated GHG emissions is attributed to mobile sources. As shown in Table G.2-2, mobile sources account for 432 MT CO<sub>2e</sub> per year or approximately 65 percent of the total GHG emissions from the Project. Therefore, this GHGRP targets the following specific reductions in mobile source emissions as the best opportunity to reduce VMT, offset emissions, and satisfy SCA 42's requirements for consistency with the ECAP checklist:

1. **Plug-In Electric Vehicle (PEV) - Only Parking:** When vehicles are powered by grid electricity rather than fossil fuel, direct GHG emissions from fuel combustion are replaced with indirect, but lower GHG emissions associated with the electricity used to power the vehicles. CAPCOA presents a method for calculating the resulting GHG emission reductions.<sup>2</sup>

City SCA 81: Plug-In Electric Vehicle Charging Infrastructure already applicable to the Project requires the Project applicant to provide an accessible conduit capable of serving 10 percent of proposed parking spaces, and an electric panel capacity sufficient to supply 20 percent parking spaces (per Section 15.04.3.11.130 of the Oakland Municipal Code). This amounts to 14 PEV-capable parking spaces as required by the Municipal Code. To further incentivize the use of electric vehicles at the Project site and thereby achieve additional GHG emission reductions, the Project applicant intends to increase the number of PEV-capable parking spaces restricted to parking of electric vehicles, to 20 percent of the total proposed parking, which amounts to 27 PEV-capable spaces. Using the CAPCOA methodology, this would result in an additional reduction of 19.3 MT CO<sub>2e</sub> per year from mobile sources.

2. **Provision of End-of-Trip Bicycle Facilities:** The Project applicant intends to provide end-of-trip bicycle facilities within the building at the 24<sup>th</sup> and 25<sup>th</sup> Street site as a mobile source GHG emissions offset. Based on the CAPCOA methodology, providing end-of-trip facilities including bike lockers, showers, and personal lockers will reduce an additional 2.7 percent in GHG reduction amounting in an additional reduction of 11.8 MT CO<sub>2e</sub> per year.
3. **Bike Repair Station:** As an option for further mobile source GHG emissions offset, the provision of a bicycle repair station in a designated and clearly marked, secure area within the Project's Community Room (or elsewhere at a location easily accessible to Project

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<sup>2</sup> California Air Pollution Control Officers Association, Sacramento Metropolitan Air Quality Management District, Caltrans, 2021. Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, August 2021.

users), where bicycle maintenance tools and supplies are readily available on a permanent basis and offered in good condition would encourage bicycling thereby reducing vehicle trips. According to the City of San Francisco's TDM Program Standards - Appendix A<sup>3</sup>, such a bike repair station can achieve an approximate one percent reduction in the Project's total estimated VMT, or a commensurate one percent reduction in mobile source GHG emissions, equivalent to a 4.32 MT CO<sub>2</sub>e/year GHG emissions offset.

By implementing the Project's proposed GHRP, the Project will achieve a reduction of up to 35.4 MT CO<sub>2</sub>e per year, greater than what would be achieved by meeting all of the criteria of the ECAP Consistency Checklist.

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<sup>3</sup> City of San Francisco, TDM Measures, Appendix A – TDM Program Standards, updated June 2018, Option Active-5A, Bicycle Repair Station.

# Appendix H

## **Construction Noise Management Plan**

# Construction Noise Management Plan – 460 24th Street Project

## Introduction

This Construction Noise Management Plan (“CNMP”) presents project-specific measures for construction contractors to include in the construction contracts to ensure that construction activities are conducted pursuant to City of Oakland Standard Condition of Approval (SCA) NOI-3 identified in the 460 24<sup>th</sup> Street Project Initial Study, to which this CNMP is incorporated as Appendix G. Qualified consultants of ESA prepared this CNMP concurrent with the CEQA Analysis.

## Project Overview

As described in the Initial Study for the Project, the Project would result in demolition of one existing structure and portions of four other existing structures at the site and construct 86,100 square feet of office space and 12,620 square feet of retail uses. The Project construction period is estimated to begin in February 2022, and last approximately 27 months. Construction activities on the Project site would consist of demolition, site preparation, grading and excavation, building construction, paving, and application of architectural coatings for finishing interiors and exteriors of the Project building. The Project would require the excavation and off haul of approximately 3,389 cubic yards of earth from the Project site, in addition to demolition rubble from 34,254 square feet of existing structures on the site. No soils are anticipated to be imported to the site.

The CEQA analysis for the Project concluded that, with implementation of SCA NOI-1, Construction Days/Hours; SCA NOI-2, Construction Noise; SCA NOI-3, Extreme Construction Noise; and SCA NOI-4, Construction Noise Complaints, the Project would result in less than significant impacts during construction.

## Project Location and Noise Sensitive Receptors

The Project located at 460 24th Street, on a 0.92-acre site located primarily at 460 24<sup>th</sup> Street, northeast of Uptown Oakland and northwest of Lake Merritt. The Project site is generally bounded by 25<sup>th</sup> Street to the north, retail and vacant light industrial buildings to the east, 24<sup>th</sup> Street to the south, and a construction site for a future hotel/residential mixed-use development to the west. A multifamily apartment building abuts the western boundary of the Project site. Residential uses are located to the south across 24<sup>th</sup> Street. The off-site lot is bounded by residential lofts to the north, residential uses and a parking tower to the east, and residential uses to the south and west.



## Project-specific Construction Noise Reduction Measures

Pursuant to SCA NOI-3, this Project-specific CNMP has been prepared concurrent with environmental review for the Project. This CNMP is appropriate for the Project's proposed construction methods and the type and proximity of noise-sensitive receptors to the Project site. Construction activities known to generate extreme noise levels such as drilling, impact pile driving, and blasting would not be required for the Project; however, work involving concrete saws would be required which could generate noise levels upwards of 90 dBA. Due to the proximity of sensitive receptors, certain measures included in this CNMP are "potential attenuation measures" identified in SCA NOI-3 (City SCA 63), which addresses extreme construction noise, to the extent they may be appropriate to the Project and its context.

The Project shall implement the following site-specific noise attenuation measures to further reduce construction noise impacts. All construction contractors on the Project shall adhere to these measures, which shall be included within their construction contracts.

Measures that are already required by other Oakland SCAs are not included, except those measures that are tailored and required for the Project:

1. Erect temporary plywood noise barriers around the construction site, particularly along the western boundary adjacent to the apartment building.
2. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site.
3. Monitor the effectiveness of noise attenuation measures by monitoring noise levels.
4. Use back-up beepers only when required by law. Spotters or flaggers should be used in lieu of back-up beepers to direct backing operations when allowable.
5. Use electric forklifts.
6. Minimize truck traffic idling along 24<sup>th</sup> Street.
7. Minimize drop height when loading excavated materials onto trucks. Minimize drop height when unloading or moving materials on-site.
8. Sequence the noisiest activities to coincide with the noisiest ambient hours.
9. Locate noisy equipment within the building structure once the exterior facade is installed.
10. Notify adjacent property owners within 300 feet of the project site, at least 10 days prior to commencement of activities.

## 11. Project-Specific Complaint Response Mechanisms

- a. **Designation of Enforcement Manager.** Any complaints received with respect to construction noise shall be forwarded to the Compliance Manager:  
\_\_\_\_\_. Contact Number: \_\_\_\_\_.
- b. **Signage.** A large on-site sign shall be placed 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. Example signage provided as **Attachment A**.
- c. **Complaints.** The noise and Compliance Enforcement Manager for the Project shall ensure response and corrective action to complaints within the same working day if the complaint is received during the noise-related incident and within 48 hours if the complaint is received after working hours. A complaint log shall be maintained by the Compliance Enforcement Manager indicating the date and time of each received noise complaint, the noise source of concern, and how the issue was resolved. Example complaint log provided as **Attachment B**.

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## **Attachment A: Example Signage for Noise Complaints**

### **SIGN REQUIREMENTS FOR POSTING CONSTRUCTION HOURS**

Contractor shall post a sign at all entrances to the construction site upon commencement of construction. Sign(s) shall be posted in a conspicuous place visible from the public right-of-way near the entrance to the job site, at least five feet (5') above ground level, and shall be of a white background, with legible black lettering. Lettering shall be a minimum of one and one-half inches (1 1/2") in height. The sign shall read as follows:

**Address: 8750 Mountain Boulevard**

**CONSTRUCTION HOURS (includes any and all deliveries)**

MONDAY--FRIDAY 7:00 a.m. to 7:00 p.m.

SATURDAY 9:00 a.m. to 5:00 p.m.

SUNDAY/HOLIDAYS Prohibited

**Responsible Party Contact: "Sean Lennan" "925-449-5764"**

This sign and construction hours posting requirement is for the purpose of informing all contractors and subcontractors, their employees, agents, material, men and all other persons at the construction site. Construction includes: alteration, demolition, maintenance of construction equipment, deliveries of materials or equipment, or repair activities.

### **NOISE LIMITS**

The construction site noise level at any point outside of the construction property line shall not exceed ninety (90) dBA. Violation of the construction hours and/or noise limits may be enforced as either an infraction or a misdemeanor punishable by fines or jail time or both or by an administrative citation with a fine, or by a civil action with a monetary penalty, injunction and/or other remedies.



# Appendix I

## **Transportation Impact Review Memorandum**

# Draft Memorandum

Date: February 20, 2021  
To: Jill Feyk-Miney, ESA  
From: Sam Tabibnia, Fehr & Peers  
Subject: **460 24th Street – Transportation Impact Review (Non-CEQA)**

OK19-0344

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This memorandum discusses transportation-related topics for the proposed 460 24th Street Project that are not considerations under the California Environmental Quality Act (CEQA) but are evaluated to inform decision makers and the public. Some information in the CEQA document is repeated in this memorandum to provide context for the non-CEQA analysis. The information provided in this memorandum is based on the City of Oakland's Transportation Impact Review Guidelines (TIRG) published in April 2017. Sections in this memorandum include:

- Project Description (page 1)
- Trip Generation and Study Intersection Selection (page 2)
- Site Access and Circulation Analysis (page 4)
- Collision History Analysis (page 11)
- Conclusion and Summary of Recommendations (page 15)

## Project Description

The proposed Project site is located midblock on 24th and 25th Streets between Broadway and Telegraph Avenue in Oakland. The Project site is currently occupied by mostly vacant buildings with limited storage uses.

The Project would consist of a six-story building providing about 86,100 square feet of office and about 11,980 square feet of ground-level retail. The Project would also include 640 square feet of craft stalls located just south of the Project site along Valley Street. This analysis assumes these craft stalls as part of the retail component of the Project. Overall, the Project would include a total of 12,620 square feet of retail space.



A pedestrian walkway along the west side of the Project and just east of Valley Street would extend between 24th and 25th Streets. The Project would provide a ground-level parking garage accommodating 132 vehicles with a full-access driveway on 25th Street. The Project would also provide 11 long-term and 12 short-term bicycle parking spaces.

## Trip Generation and Study Intersection Selection

### Automobile Trip Generation

Trip generation is the process of estimating the number of vehicles that would likely access the Project on any given day. **Table 1** summarizes the trip generation for the Project. Trip generation data published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual (10th Edition)* was used as a starting point to estimate the vehicle trip generation.

**Table 1: Automobile Trip Generation**

Land Use	ITE Code	Size <sup>1</sup>	Daily	Weekday AM Peak Hour		Weekday PM Peak Hour	
				In	Out	Total	Total
Office <sup>2</sup>	710	86.1 KSF	920	15	107	16	83
Retail <sup>3</sup>	820	12.6 KSF	480	5	12	23	25
ITE Trip Generation Subtotal			1,400	99	20	119	39
Non-Auto Reduction <sup>4</sup>			-660	-46	-10	-56	-18
<b>Adjusted Total Project Trips</b>			<b>740</b>	<b>53</b>	<b>10</b>	<b>63</b>	<b>21</b>
							<b>57</b>
							<b>78</b>

Notes:

1. KSF = 1,000 square feet
2. ITE Trip Generation (10th Edition) land use category 710 (General Office Building, General Urban/Suburban):  
Daily:  $\ln(T) = 0.97 * \ln(X) + 2.5$   
AM Peak Hour:  $T = 0.94 * X + 26.49$  (86% in, 14% out)  
PM Peak Hour:  $\ln(T) = 0.95 * \ln(X) + 0.36$  (16% in, 84% out)
3. ITE Trip Generation (10th Edition) land use category 820 (Shopping Center, General Urban/Suburban):  
Daily:  $T = 37.75 * X$   
AM Peak Hour:  $T = 0.94 * X$  (62% in, 38% out)  
PM Peak Hour:  $T = 3.81 * X$  (48% in, 52% out)
4. Reduction of 46.9% assumed, based on City of Oakland TRG, using Census data for an urban environment within 0.5 miles of a BART station.  
Source: Fehr & Peers, 2021.

The ITE's data is primarily based on data collected at 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 Project is about 0.4 miles from the 19th Street BART Station, this analysis reduces the ITE-based trip generation by 47 percent to account for the non-vehicular trips. This adjustment is consistent with the City of Oakland's TRG and is based on US Census commute data for Alameda County from the 2014 5-Year Estimates of





the American Community Survey (ACS), which shows that the non-automobile mode share for urban areas within 0.5 miles of a BART Station is about 47 percent.

As summarized in Table 1, the Project is estimated to generate about 740 daily, 63 AM peak hour, and 78 PM peak hour automobile trips.

### Non-Vehicular Trip Generation

Consistent with the City of Oakland's TIRG, **Table 2** presents the Project trip generation estimates for all travel modes.

**Table 2: Trip Generation by Travel Mode**

Mode	Mode Share Adjustment Factors <sup>1</sup>	Daily	Weekday AM Peak Hour	Weekday PM Peak Hour
Automobile	0.531	740	63	78
Transit	0.297	410	35	44
Bike	0.051	70	6	7
Walk	0.105	150	12	15
<b>Total Trips</b>		<b>1,370</b>	<b>116</b>	<b>144</b>

Notes:

1. Based on the City of Oakland *Transportation Impact Review Guidelines* assuming project site is in an urban environment within 0.5 miles of a BART Station. Percentages do not add to 100%.

Source: Fehr & Peers, 2021

### Study Intersection Selection

According to the City of Oakland's TIRG, the criteria for the intersections to be studied in a transportation impact study include the following:

- All intersection(s) of streets adjacent to project site;
- All signalized intersections, all-way stop-controlled intersections, or roundabouts where 100 or more peak hour trips are added by the project;
- All signalized intersections with 50 or more peak-hour trips and the existing intersection operations are at Level of Service D, E, or F; and
- Side-street stop-controlled intersection(s) where 50 or more peak hour trips are added by the project to any individual movement other than the major-street through movement.

Following these criteria, the following four intersections are selected because they are adjacent to the Project site:



1. Telegraph Avenue/25th Street (north)
2. Broadway/25th Street/Webster Street
3. Telegraph Avenue/24th Street (north)
4. Broadway/24th Street

The Project would not add 50 or more peak hour trips trip to any signalized or all-way stop-controlled intersection or to the stop-controlled movement of a side-street stop-controlled intersection. Thus, no additional intersections would meet the study intersection selection criteria.

Due to changes in travel patterns resulting from the ongoing COVID-19 pandemic and mandatory shelter-in-place orders for Alameda County starting on March 16, 2020, current turning movement counts do not accurately reflect typical conditions. Instead, the following count data collected in the study area within the past five years were used for this analysis:

- The 2424 Webster Street Project (published January 2021) conducted counts at the Broadway/25th Street/Webster Street and Broadway/24th Street intersections in February 2020.
- City of Oakland collected various count data along Telegraph Avenue in February 2020. These count data, along with the volumes on 24th and 25th Streets from the counts at the intersections along Broadway described above were used to estimate the traffic volumes at the Telegraph Avenue/25th Street (north) and Telegraph Avenue/24th Street (north) intersections.

## Site Access and Circulation Analysis

Fehr & Peers reviewed the Project site plan dated November 18, 2019 and the existing street network adjacent to the Project site to evaluate safety, access, and circulation for all travel modes. This analysis provides recommendations to improve access and circulation, including relevant improvements identified in recent transportation assessments for nearby developments.

### Automobile Access and Circulation

The Project would provide a ground-level parking garage with 132 parking spaces, 125 of which would be accommodated in three-level mechanical lifts, including 70 tandem spaces. According to City of Oakland Code Section 17.116.240, tandem parking for office uses is permitted if a full-time parking attendant supervises the parking arrangements at all times when the activities served are in active operation.

**Recommendation 1:** While not required to address a CEQA impact, the following should be considered as part of the final design for the Project at the discretion of the City of Oakland Planning staff:

- Develop a parking management plan for managing and operating the attended parking at the garage, including locations for staging areas.



Automobiles would access the garage via a 24-foot wide driveway on 25th Street about 425 feet west of Broadway. The Project driveway would provide adequate sight distance between exiting motorists and pedestrians on the adjacent sidewalk. Adequate sight distance is defined as a clear line-of-sight between a motorist ten feet back from the sidewalk and a pedestrian 10 feet away on each side of the driveway.

The parking garage would provide adequate internal circulation for vehicles. Internal circulation in the garage would be provided by a two-way drive aisle with parking on both sides. Section 17.116.210 of the Oakland Municipal Code requires a minimum drive aisle width of 23 feet for non-residential facilities with perpendicular parking. The drive aisle would be 26 feet wide, exceeding code requirements.

### Automobile Parking Requirements

The City of Oakland Municipal Code establishes minimum parking requirements for commercial activities. According to Section 17.116.080, commercial activities in the CC-3 zone are required to provide a minimum of one automobile parking space for each 600 square feet of ground floor space and one automobile parking space for each 1,000 square feet of non-ground floor space. No maximum requirements apply to the Project.

**Table 3** presents the off-street automobile parking requirements for the Project. The Project is required to provide a minimum of 107 off-street parking spaces. The Project would provide 132 off-street parking spaces, which exceed the City of Oakland Municipal Code minimum requirements.

**Table 3: Automobile Parking Requirements**

Land Use	Size <sup>1</sup>	Required Off-Street Parking Supply		Provided Off-Street Parking Supply	Within Range?
		Minimum	Maximum		
Ground-Level Commercial <sup>2</sup>	12.0 KSF	20	-	-	-
Non-Ground-Level Commercial <sup>2</sup>	86.1 KSF	86	-	-	-
<b>Total</b>	<b>98.1 KSF</b>	<b>106</b>	<b>-</b>	<b>132</b>	<b>Yes</b>

Notes:

1. KSF = 1,000 square feet
2. Per City of Oakland Municipal Code Section 17.116.080 for the CC-3 zone, commercial activities have a minimum off-street parking requirement of 1.0 spaces per 600 square feet of ground floor area and 1.0 spaces per 1,000 square feet of floor area above the ground floor.

Source: Fehr & Peers, 2021.



## Off-Street and On-Street Loading

City Municipal Code Section 17.116.140 requires two off-street loading spaces with minimum dimensions of 33 feet long, 12 feet wide, and 14 feet high for commercial uses with between 60,000 and 160,000 square feet of floor area. The Project would not provide any off-street loading spaces, which would not meet code requirements.

The City of Oakland provides the following on-street loading designations:

- Commercial loading spaces with yellow curb paint, which allow loading and unloading of passengers and materials between 7:00 AM and 6:00 PM Monday through Saturday. Passenger loading and unloading operations are limited to three minutes; commercial loading is limited to 30 minutes for vehicles with commercial license plates.
- Passenger loading spaces with white curb paint, which allow loading and unloading of passengers between 7:00 AM and 6:00 PM Monday through Sunday. Passenger loading and unloading operations are generally limited to three minutes. In some places, such as adjacent to public assembly spaces, white curb parking restrictions are always in effect.

No on-street commercial (yellow curb) or passenger (white curb) loading spaces are currently provided along the curb adjacent to the Project site on 24th, 25th, or Valley Streets, and the Project site plan does not designate areas for commercial or passenger loading. Adjacent to the Project site, unrestricted on-street parking is currently provided along the frontages on the north side of 24th Street and south side of 25th Street. Parking is prohibited along the Project frontage on Valley Street. The Project would eliminate two existing curb-cuts on 24th Street.

**Recommendation 2:** While not required to address a CEQA impact, the following should be considered as part of the final design for the Project at the discretion of the City of Oakland Planning staff:

- Provide two off-street loading spaces that meet City Code requirements for loading spaces or consider designating 40 feet of curb on 25th Street along the Project frontage as yellow curb to accommodate commercial loading.
- Designate 40 feet of curb on 24th Street along the Project frontage as white curb to accommodate passenger loading.

## Bicycle Access and Bicycle Parking

In the Project vicinity, existing bicycle facilities include:

- Class 4 parking-protected bikeways on both directions of Telegraph Avenue
- Class 2 bicycle lanes on both directions of Broadway north of 25th Street
- Class 2 bicycle lane on southbound Webster Street and a Class 3 bicycle route on northbound Webster Street



The City’s 2019 Oakland Bike Plan (*Let’s Bike Oakland*, May 2019) proposes the following in the Project vicinity:

- Neighborhood Bike Route on 24th Street between Telegraph Avenue and Harrison Street
- Protected bicycle lanes on Broadway, 27th Street, and Grand Avenue

The nearest Bay Wheels bikeshare station is located about 0.2 miles southwest of the Project site, on Telegraph Avenue just north of 23rd Street. No bicycle parking is currently provided along the Project frontages.

Chapter 17.117 of the City of 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. **Table 4** presents the long-term and short-term bicycle parking requirements for the Project. The Project is required to provide a minimum of 11 long-term and seven short-term bicycle parking spaces. The Project would provide 11 long-term and 12 short-term bicycle parking spaces, meeting Code requirements.

**Table 4: Bicycle Parking Requirements**

Land Use	Size <sup>1</sup>	Long-Term		Short-Term	
		Spaces per Unit <sup>2</sup>	Spaces	Spaces per Unit <sup>2</sup>	Spaces
Office	86.1 KSF	1:10 KSF	9	1:20 KSF	4
Retail	12.6 KSF	1:12 KSF (min 2)	2	1:5 KSF	3
Total Bicycle Spaces Required			11		7
Total Bicycle Spaces Provided			11		12
<b>Bicycle Parking Met?</b>			<b>Yes</b>		<b>Yes</b>

Notes:

1. KSF = 1,000 square feet
2. Based on Oakland Municipal Code Section 17.117.110.

Source: Fehr & Peers, 2021.

Short-term bicycle parking would be provided in the form of an in-street bicycle corral along the Project frontage on 24th Street, bicycle racks within the Project garage, and bicycle racks in-set along the Project frontage on 25th Street. Long-term bicycle parking would be provided in a bicycle room adjacent to the craft stalls on Valley Street. City of Oakland Municipal Code Section 17.117.070 allows long-term bicycle parking to be located off-site within 500 feet of the main building entrance. The proposed long-term bicycle parking room would be about 250 feet from the main building entrance, meeting code requirements. However, the location of the bicycle room adjacent to the Valley Street stalls may be inconvenient for Project users.



**Recommendation 3:** While not required to address a CEQA impact, consider relocating all or some of the long-term bicycle parking from the Valley Street craft stalls to the main building.

### **Pedestrian Access and Circulation**

The primary pedestrian access for the Project office uses would be through the building's main lobby on 24th Street, about 120 feet east of Valley Street. The lobby would connect directly to the parking garage and provide access to office levels via two elevators and a main stairwell. Three other stairwells would connect the parking garage, the pedestrian walkway on the west side of the main building, and 25th Street to the upper office levels. The Project would also widen the sidewalk on 24th Street along the main lobby frontage by eliminating on-street parking.

The retail component of the Project would be along the building frontages on 24th and 25th Streets, with direct access on these streets. The Project would also include several craft stalls, which would be located along the pedestrian walkway on the west side of the main building and on Valley Street south of 24th Street.

Pedestrian facilities at the intersections nearest to the site include:

- The Telegraph/25th Street (north) intersection is a side-street stop-controlled T-intersection with a stop sign on the westbound 25th Street approach. The intersection provides a high-visibility crosswalk with a painted median on the north approach and a standard crosswalk on the east approach. Directional curb ramps with truncated domes are provided on the northeast corner and on the west side of Telegraph Avenue at the north crosswalk. The southeast corner provides a diagonal curb ramp with truncated domes.
- The Broadway/25th Street/Webster Street intersection is a signalized intersection with standard crosswalks on the west, south, and east approaches. The east approach includes a right-turn slip lane and a pork chop island. Diagonal curb ramps are provided on all four corners, and truncated domes are provided on the curb ramp at the northwest corners. Pedestrian signal heads and audible signals are provided in all directions of marked crossings, with pedestrian countdown signal heads and push-buttons on the south approach.
- The Telegraph/24th Street (north) intersection is a side-street stop-controlled T-intersection with a stop sign on the westbound 24th Street approach. The intersection provides a high-visibility crosswalk on the north approach and a standard crosswalk on the east approach. A directional curb ramp with truncated domes is provided on the west side of Telegraph Avenue at the north crosswalk. The northeast and southeast corners provide diagonal curb ramps with truncated domes.
- The Valley Street/24th Street intersection is a side-street stop-controlled T-intersection with a stop sign on the northbound Valley Street approach. There are no marked crosswalks



- at this intersection. On the north side of 24th Street, a directional curb ramp with truncated domes is provided for the east approach and a driveway is present at the west approach. The southeast and southwest corners provide diagonal curb ramps and the southwest corner curb ramp has truncated domes. Red curb on both sides of Valley Street and along the south side of 24th Street provide for adequate sight distance for both pedestrians and vehicles at the intersection.
- The Broadway/24th Street intersection is a stop-controlled intersection with stop signs on the 24th Street approaches. The intersection provides a high-visibility crosswalk with rectangular rapid flashing beacons (RRFBs) on the south approach and a standard crosswalk on the east approach. Advanced yield markings are provided on the northbound and southbound approaches. Diagonal curb ramps with truncated domes are provided at the southwest, southeast, and northeast corners.

The City of Oakland's 2017 Pedestrian Plan (*Oakland Walks!*) identifies Telegraph Avenue in the Project vicinity as a high-injury corridor with an associated plan and funding source. The ongoing Telegraph Avenue Complete Streets Project proposes the following pedestrian improvements at the Telegraph/24th Street and Telegraph/25th Street intersections:

- Installation of advance yield lines and advance stop lines at pedestrian crossings
- Replacement of all diagonal curb ramps with directional curb ramps
- Replacement of remaining standard crosswalks with high-visibility crosswalks
- Formalization of painted buffers and medians in concrete

The *Broadway Valdez District Specific Plan* (2014) identifies the following improvements at the Broadway/Webster Street/25th Street intersection:

- Alteration of existing intersection geometry to provide improved alignment and allow westbound vehicle through movement
- Installation of curb extensions at all but the northwest corner
- Removal of the channelized island on Webster Street
- Installation of crosswalk marking at the north approach of Broadway

**Recommendation 4:** While not required to address a CEQA impact, the following should be considered as part of the final design for the Project at the discretion of the City of Oakland Planning staff:

- Explore the feasibility and, if determined feasible by City of Oakland staff, contribute to the proposed improvements at the Broadway/Webster Street/25th Street intersection identified in the Broadway Valdez District Specific Plan (This recommendation is also identified in the TIR for the 2424 Webster Street Project).
- Explore the feasibility and, if determined feasible by City of Oakland staff, contribute to the proposed improvements at the Telegraph Avenue/24th Street



and Telegraph Avenue/25th Street intersections identified in the Telegraph Avenue Complete Streets Project.

- Explore the feasibility and, if determined feasible by City of Oakland staff, install the following at the Valley Street/24th Street intersection:
  - Bulb-out at the northeast corner of the intersection
  - Marked crosswalk across the east approach of the intersection
  - Curb-ramps with truncated domes at the southwest, southeast, and northeast corners of the intersection

### Transit Access

Transit service providers in the Project vicinity include Bay Area Rapid Transit (BART) and Alameda Contra Costa Transit District (AC Transit). BART provides regional rail service throughout the East Bay and across the San Francisco Bay. The Project is located approximately 0.4 miles from the 19th Street Oakland BART Station. The nearest station portal to the Project site is on the north side of Thomas L Berkeley Way, just east of Broadway.

AC Transit is the primary bus service provider in the City of Oakland, and the City of Oakland Free Broadway Shuttle (“Free B”) also operates in the vicinity of the Project. **Table 5** summarizes the AC Transit and the Broadway Shuttle stops nearest to the Project site.

The *Broadway Valdez District Specific Plan* proposes relocating the northbound bus stop on Broadway at 25th Street from near-side (south of 25th Street) to far-side (north of 25th Street). However, the relocation is not recommended at this time because the existing bus stop is currently used by the Broadway Shuttle (night service) and the Shuttle would not be able to use relocated bus stop.

**Recommendation 5:** While not required to address a CEQA impact, the following should be considered as part of the final design for the Project:

- Coordinate with City of Oakland and AC Transit to explore the feasibility and, if determined feasible by City of Oakland staff, install bus stop amenities such as benches and trash receptacles at the northbound and southbound bus stops on Broadway at 25th Street. (This recommendation is also identified in the TIR for the 2424 Webster Street Project).





**Table 5: AC Transit and Broadway Shuttle Stops**

Stop Location	Distance to Project Site <sup>1</sup>	Lines Served	Stop Amenities
Broadway at 25th Street	0.1 miles	51A, 851, Broadway Shuttle (night service only)	Southbound: no amenities Northbound: trash receptacle
Broadway at 27th Street	0.2 miles	51A, 851, Broadway Shuttle (night service only)	No amenities
Broadway at Grand Avenue	0.2 miles	51A, 851, Broadway Shuttle (night service only)	Southbound: bench, trash receptacle Northbound: shelter, bench, trash receptacle
Telegraph Avenue at 24th Street	<0.1 miles	6, 800	Bus boarding island
Telegraph Avenue at 27th Street	0.2 miles	6, 800	Bus boarding island

Notes:

1. Distance shown is walking distance between bus stop and main Project entrance.

Source: Fehr & Peers, 2021.

## Collision History Analysis

A five-year history (January 1, 2015 to December 31, 2019) of collision data in the Project vicinity was obtained from the Statewide Integrated Traffic Records System (SWITRS) and was evaluated for this collision analysis. **Table 6** summarizes the collision data by type and location and **Table 7** summarizes the collision data by severity and location.

Both 24th Street and 25th Street have offset intersections with Telegraph Avenue that result in two separate but adjacent locations. The TIR focuses on the northern intersection of each pair. However, SWITRS collision data does not differentiate between the two intersections with the same name, so this analysis conservatively includes the collisions at both locations for the Telegraph Avenue/24 Street and Telegraph Avenue/25th Street intersections. Although the Valley Street/24th Street intersection was not selected as a study intersection, no collisions were reported at this intersection.

As shown in Table 6, 28 collisions were reported during this five-year period at the study intersections and along 24th and 25th Streets between Telegraph Avenue and Broadway. The most common collision type was sideswipe (25%). Bicycle and pedestrian involved collisions were each about 21% of the reported collisions. The most common primary collision factors were unsafe speed (20%), improper turning (20%), and violation of pedestrian right-of-way (17 percent). As shown in Table 7, of the 28 reported collisions, 14 (50%) resulted in injuries and none resulted in fatalities.



**Table 6: Collisions by Type<sup>1</sup>**

Location	Head-on	Sideswipe <sup>2</sup>	Rear-End	Broadside <sup>2</sup>	Hit Object	Pedestrian-Involved	Bicycle-Involved <sup>2</sup>	Other	Total
<b>Intersection</b>									
Telegraph Avenue/25th Street	0	1	2	0	1	2	1	0	7
Broadway/25th Street/Webster Street	0	1	1	0	1	0	0	0	3
Telegraph Avenue/24th Street	0	0	1	1	0	0	3	0	5
Broadway/24th Street	0	0	0	3	0	3	2	0	8
<b>Roadway Segment</b>									
24th Street (between Telegraph Avenue and Broadway)	0	3	0	0	0	0	0	0	3
25th Street (between Telegraph Avenue and Broadway)	0	0	0	0	0	1	0	1	2
<b>Total</b>	<b>0</b>	<b>7</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>28</b>

Notes:

1. Based on SWITRS five-year collision data reported from January 1, 2015 to December 31, 2019.
2. At the Telegraph Avenue/24th Street intersection, one bicycle-involved collision was classified as a broadside collision, and one bicycle-involved collision was classified as a sideswipe collision. At the Broadway/24th Street intersection, one bicycle-involved collision was classified as a broadside collision. These collisions are only counted as bicycle-involved for this table.

Source: Fehr & Peers, 2021



**Table 7: Summary of Injuries<sup>1</sup>**

Location	Property Damage Only Collisions	Injury Collisions	Fatality Collisions	Total	Person-Injuries			
					Bike	Ped	Driver/ Passenger	Total
<b>Intersection</b>								
Telegraph Avenue/25th Street	4	3	0	7	1	1	1	3
Broadway/25th Street	1	2	0	3	0	0	4	4
Telegraph Avenue/24th Street	2	3	0	5	3	0	0	3
Broadway/24th Street	2	6	0	8	1	3	2	6
<b>Roadway Segment</b>								
24th Street (between Telegraph Avenue and Broadway)	3	0	0	3	0	0	0	0
25th Street (between Telegraph Avenue and Broadway)	1	1	0	2	0	1	0	1
<b>Total</b>	<b>13</b>	<b>14</b>	<b>0</b>	<b>28</b>	<b>5</b>	<b>5</b>	<b>7</b>	<b>17</b>

Notes:

1. Based on SWITRS five-year collision data reported from January 1, 2015 to December 31, 2019.

Source: Fehr & Peers, 2021



The Highway Safety Manual (HSM, Predictive Method - Volume 2, Part C) provides a methodology to predict the number of collisions for intersections and street segments based on their specific characteristics, such as vehicle and pedestrian volume, number of lanes, signal phasing, on-street parking, and number of driveways. **Table 8** presents the predicted collision frequencies for the four study intersections and two study segments using the HSM Predictive Method for Urban and Suburban Arterials and compares the predicted collision frequencies with the actual reported collision frequencies. **Appendix A** provides the detailed predicted collision frequency calculation sheets based on the HSM methodology.

Intersections or roadway segments with collision frequencies greater than the predicted frequency are identified as locations that should be evaluated in greater detail for collision trends and potential modifications. As shown in Table 8, all study locations had a lower reported collision frequency than predicted by the HSM.

**Table 8: Predicted and Actual Crash Frequencies**

Location	Predicted Crash Frequency <sup>1</sup> (per year)	Actual Crash Frequency <sup>2</sup> (per year)	Difference	Higher Than Predicted?
Telegraph Avenue/25th Street	1.4	1.4	0.0	No
Broadway/25th Street/Webster Street	2.3	0.6	-1.7	No
Telegraph Avenue/24th Street	1.1	1.0	-0.1	No
Broadway/24th Street	1.7	1.6	-0.1	No
<b>Roadway Segment</b>				
24th Street (between Telegraph Avenue and Broadway)	1.0	0.6	-0.4	No
25th Street (between Telegraph Avenue and Broadway)	0.9	0.4	-0.5	No

Notes:

1. Based on the Highway Safety Manual Predictive Method (Volume 2, Part C)
  2. Based on SWITRS five-year collision data reported from January 1, 2015 to December 31, 2019.
- Source: Fehr & Peers, 2021



## Conclusion and Summary of Recommendations

Based on our review of the Project site plan and conditions on the surrounding streets, the Project would have adequate automobile, bicycle, pedestrian, and transit access and circulation with the inclusion of the following recommendations:

**Recommendation 1:** While not required to address a CEQA impact, the following should be considered as part of the final design for the Project at the discretion of the City of Oakland Planning staff:

- Develop a parking management plan for managing and operating the attended parking at the garage, including locations for staging areas.

**Recommendation 2:** While not required to address a CEQA impact, the following should be considered as part of the final design for the Project at the discretion of the City of Oakland Planning staff:

- Provide two off-street loading spaces that meet City Code requirements for loading spaces or consider designating 40 feet of curb on 25th Street along the Project frontage as yellow curb to accommodate commercial loading.
- Designate 40 feet of curb on 24th Street along the Project frontage as white curb to accommodate passenger loading.

**Recommendation 3:** While not required to address a CEQA impact, consider relocating all or some of the long-term bicycle parking from the Valley Street craft stalls to the main building.

**Recommendation 4:** While not required to address a CEQA impact, the following should be considered as part of the final design for the Project at the discretion of the City of Oakland Planning staff:

- Explore the feasibility and, if determined feasible by City of Oakland staff, contribute to the proposed improvements at the Broadway/Webster Street/25th Street intersection identified in the Broadway Valdez District Specific Plan (This recommendation is also identified in the TIR for the 2424 Webster Street Project).
- Explore the feasibility and, if determined feasible by City of Oakland staff, contribute to the proposed improvements at the Telegraph Avenue/24th Street and Telegraph Avenue/25th Street intersections identified in the Telegraph Avenue Complete Streets Project.
- Explore the feasibility and, if determined feasible by City of Oakland staff, install the following at the Valley Street/24th Street intersection:
  - Bulb-out at the northeast corner of the intersection



- Marked crosswalk across the east approach of the intersection
- Curb-ramps with truncated domes at the southwest, southeast, and northeast corners of the intersection

**Recommendation 5:** While not required to address a CEQA impact, the following should be considered as part of the final design for the Project:

- Coordinate with City of Oakland and AC Transit to explore the feasibility and, if determined feasible by City of Oakland staff, install bus stop amenities such as benches and trash receptacles at the northbound and southbound bus stops on Broadway at 25th Street. (This recommendation is also identified in the TIR for the 2424 Webster Street Project).

Please contact Sam Tabibnia ([stabibnia@fehrandpeers.com](mailto:stabibnia@fehrandpeers.com) or 510-835-1943) with questions or comments.

## **ATTACHMENTS**

Appendix A – Predicted Crash Frequency Calculation Sheets

# Appendix J

## **Transportation and Parking Demand Management Plan**

# Draft Memorandum

Date: February 20, 2021  
To: Jill Feyk-Miney, ESA  
From: Sam Tabibnia, Fehr & Peers  
Subject: **460 24th Street – Transportation and Parking Demand Management Plan**

OK19-0344

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Transportation and Parking Demand Management (TDM) plans are a requirement of the City of Oakland's Standard Conditions of Approval (Department of Planning and Building, Bureau of Planning, Revised December 16, 2020 – Section 78) for all land use projects generating more than 50 net new peak hour vehicle trips, as described in the City of Oakland's *Transportation Impact Study Guidelines* (TIRG) dated April 2017. Since the proposed 460 24th Street Project (the Project) would generate between 50 and 99 net new peak hour trips, it is required to prepare a TDM Plan with a goal of achieving a 10 percent vehicle trip reduction (VTR). This memorandum describes the Project and setting and lists the mandatory TDM strategies that the Project shall implement to achieve the 10 percent VTR.

## Project Description

The Project is located midblock on 24th and 25th Streets between Broadway and Telegraph Avenue in Oakland. The Project would consist of approximately 86,100 square feet of office space and approximately 12,600 square feet of ground-level retail space on a site currently containing mostly vacant buildings with limited storage uses. The Project would provide a ground-level parking garage with 132 parking spaces.

## Project Location

The Project is near Downtown Oakland, a high-density, transit-rich, pedestrian-friendly area with limited parking supply. Pedestrian, bicycle, and transit access between the site and nearby commercial areas is good: there are continuous sidewalks throughout the area, and bikeways connect the Project site to adjacent commercial areas. The Project is about 0.4 miles north of the 19th Street Oakland BART Station and about 0.1 miles from AC Transit's trunk routes 6 and 51A, on Telegraph Avenue and Broadway, respectively. The Oakland Free Broadway shuttle ("Free B") also





operates along Broadway, with the nearest stop at 25th Street. Telegraph Avenue provides separated bicycle lanes, further encouraging the use of non-automobile modes of travel.

The Project’s location is expected to result in a relatively high rate of pedestrian, bicycle, and transit trips. **Table 1** shows the Project trip generation by travel mode as summarized in the Project Transportation Impact Review (TIR) Memorandum per the City of Oakland’s TIRG. The automobile trips generated by the Project are estimated to be slightly more than half of all trips generated by a typical suburban development. Similarly, as discussed in the Project environmental document, the VMT per worker in the Project area is about 78 percent of the regional VMT per worker, with about 17.0 average VMT for the Project area, compared to the regional average of 21.8.

**Table 1: Project Trip Generation by Travel Mode**

Mode	Mode Share Adjustment Factors <sup>1</sup>	Daily	AM Peak Hour	PM Peak Hour
Automobile	0.531	740	63	78
Transit	0.297	410	35	44
Bike	0.051	70	6	7
Walk	0.105	150	12	15
<b>Total Trips</b>		<b>1,370</b>	<b>116</b>	<b>144</b>

Notes:

1. Based on *City of Oakland TIRG*, for an urban environment within 0.5 miles of a BART station.

Source: Fehr & Peers, 2021.

## Mandatory TDM Strategies

This section describes the mandatory strategies that shall be implemented at the Project as well as Project features that would reduce the automobile trips generated by the Project. Some of these strategies shall be directly implemented by the building management and others shall be implemented by individual tenants. The City of Oakland Standard Conditions of Approval lists infrastructure and operational strategies that must be incorporated into a TDM plan based on Project location and development characteristics. **Table 2** presents these strategies and indicates their applicability to the proposed Project.



**Table 2: Mandatory TDM Program Components as Required by the Oakland TIRG**

TDM Strategy	Required When	Required for Project?
Bus boarding bulbs or islands	<ul style="list-style-type: none"> <li>• A bus boarding bulb or island does not already exist, and a bus stop is located along the project frontage; and/or</li> <li>• A bus stop along the project frontage serves a route with 15 minutes or better peak hour service and has a shared bus-bike lane curb</li> </ul>	No, a bus stop is not located along the Project frontage
Bus shelter	<ul style="list-style-type: none"> <li>• A stop with no shelter is located within the project frontage, or</li> <li>• The project is located within 0.10 miles of a flag stop with 25 or more boardings per day</li> </ul>	<p><b>Yes, although a bus stop is not located along the Project frontage, the Project may provide bus shelters at the northbound and southbound bus stops on Broadway at 25th Street based on a determination through design and permit review by City of Oakland staff</b></p>
Concrete bus pad	<ul style="list-style-type: none"> <li>• A bus stop is located along the project frontage and a concrete bus pad does not already exist</li> </ul>	No, a bus stop is not located along the Project frontage
Curb extensions or bulb-outs	<ul style="list-style-type: none"> <li>• Identified as an improvement within site analysis</li> </ul>	<p><b>Yes, the Project may contribute to potential improvements, which may include curb extensions at the Broadway/Webster Street/ 25th Street, Telegraph Avenue/ 24th Street, Telegraph Avenue/ 25th Street, and Valley Street/ 24th Street intersections (Measures A4, A5, and A6)</b></p>
Implementation of a corridor-level bikeway improvement	<ul style="list-style-type: none"> <li>• A buffered Class 2 or Class 4 bikeway facility is in a local or county adopted plan within 0.10 miles of the project location; and</li> <li>• The project would generate 500 or more daily bicycle trips</li> </ul>	No, the Project would not generate 500 or more daily bicycle trips
Implementation of a corridor-level transit capital improvement	<ul style="list-style-type: none"> <li>• A high-quality transit facility is in a local or county adopted plan within 0.25 miles of the project location; and</li> <li>• The project would generate 400 or more peak period transit trips</li> </ul>	No, the Project would not generate 400 or more peak period transit trips



**Table 2: Mandatory TDM Program Components as Required by the Oakland TIRG**

TDM Strategy	Required When	Required for Project?
Installation of amenities such as lighting; pedestrian-oriented green infrastructure, trees, or other greening landscape; and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan	<ul style="list-style-type: none"> <li>Always required</li> </ul>	<p><b>Yes, the Project would upgrade the pedestrian amenities adjacent to the site</b></p>
Installation of safety improvements identified in the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.)	<ul style="list-style-type: none"> <li>When improvements are identified in the Pedestrian Master Plan along project frontage or at an adjacent intersection</li> </ul>	<p><b>Yes, although improvements were not identified along the Project frontage in the Pedestrian Master Plan, the Project may contribute to upgrades at the Broadway/ Webster Street/25th Street intersection and on Telegraph Avenue (Measures A4 and A5)</b></p>
In-street bicycle corral	<ul style="list-style-type: none"> <li>A project includes more than 10,000 square feet of ground floor retail, is located along a Tier 1 bikeway, and on-street vehicle parking is provided along the project frontages.</li> </ul>	<p><b>Yes, although the Project is not located along a Tier 1 bikeway, it would provide a bicycle corral along the Project frontage on 24th Street.</b></p>
Intersection improvements, including but not limited to visibility improvements, shortening corner radii, pedestrian safety islands, accounting for pedestrian desire lines.	<ul style="list-style-type: none"> <li>Identified as an improvement within site analysis</li> </ul>	<p><b>Yes, the Project may contribute to potential improvements at the Broadway/Webster Street/25th Street, Telegraph Avenue/24th Street, Telegraph Avenue/25th Street, and Valley Street/24th Street intersections (Measures A4, A5, and A6)</b></p>
New sidewalk, curb ramps, curb and gutter meeting current City and ADA standards	<ul style="list-style-type: none"> <li>Always required</li> </ul>	<p><b>Yes, the Project would upgrade the sidewalks along Project frontage</b></p>
No monthly permits and establish minimum price floor for public parking	<ul style="list-style-type: none"> <li>If proposed parking ratio exceeds 1:1000 sf (commercial)</li> </ul>	<p><b>Yes, the Project would not offer monthly permits and would establish a minimum price floor (Measure E)</b></p>
Parking garage is designed with retrofit capability	<ul style="list-style-type: none"> <li>Optional if proposed parking ratio exceeds 1:1.25 (residential) or 1:1000 sf (commercial)</li> </ul>	<p><b>Yes, the Project garage is on the ground level and can be retrofitted for other uses</b></p>



**Table 2: Mandatory TDM Program Components as Required by the Oakland TIRG**

TDM Strategy	Required When	Required for Project?
Parking space reserved for car share	<ul style="list-style-type: none"> <li>If a project is providing parking and a project is located within downtown. One car share space reserved for buildings between 50 – 200 units, then one car share space per 200 units.</li> </ul>	<p><b>Yes, the Project would offer to provide two on-site car-share spaces (Measure H)</b></p>
Paving, lane striping or restriping (vehicle and bicycle), and signs to midpoint of street section	<ul style="list-style-type: none"> <li>Typically required</li> </ul>	<p><b>Yes, the Project would update the paving and striping along the Project frontage to midpoint of the street section</b></p>
Pedestrian crossing improvements, pedestrian-supportive signal changes, including but not limited to reducing signal cycle lengths to less than 90 seconds to avoid pedestrian crossings against the signal, providing a leading pedestrian interval, provide a “scramble” signal phase where appropriate.	<ul style="list-style-type: none"> <li>Identified as an improvement within site analysis</li> <li>Identified as an improvement within operations analysis</li> </ul>	<p><b>Yes, the Project may contribute to potential improvements at the Broadway/Webster Street/25th Street intersection, which may include signal improvements (Measure A4)</b></p>
Real-time transit information system	<ul style="list-style-type: none"> <li>A project frontage block includes a bus stop or BART station and is along a Tier 1 transit route with 2 or more routes or peak period frequency of 15 minutes or better</li> </ul>	<p>No, the Project is not adjacent to a BART station or a bus stop</p>
Relocating bus stops to far side	<ul style="list-style-type: none"> <li>A project is located within 0.10 mile of any active bus stop that is currently near-side</li> </ul>	<p>No, the Project TIR did not recommend relocated the existing near-side bus stop on northbound Broadway at 25th Street.</p>
Signal upgrades, including typical traffic lights, pedestrian signals, bike actuated signals, transit only signals	<ul style="list-style-type: none"> <li>Project size exceeds 100 residential units, 80,000 sf of retail, or 100,000 sf of commercial; and</li> <li>Project frontage abuts an intersection with signal infrastructure older than 15 years</li> </ul>	<p>No, the Project frontage does not abut an intersection and Project provides less than 80,000 sf of retail, or 100,000 sf of commercial space</p>
Transit queue jumps	<ul style="list-style-type: none"> <li>Identified as a needed improvement within operations analysis of a project with frontage along a Tier 1 transit route with 2 or more routes or peak period frequency of 15 minutes or better</li> </ul>	<p>No, the Project does not have frontage along any transit routes</p>



**Table 2: Mandatory TDM Program Components as Required by the Oakland TIRG**

TDM Strategy	Required When	Required for Project?
Trenching and placement of conduit for providing traffic signal interconnect	<ul style="list-style-type: none"> <li>• Project size exceeds 100 units, 80,000 sf of retail, or 100,000 sf of commercial; and</li> <li>• Project frontage block is identified for signal interconnect improvements as part of a planned ITS improvement; and</li> <li>• A major transit improvement is identified within operations analysis requiring traffic signal interconnect</li> </ul>	No, major transit improvements have not been identified in an operations analysis requiring traffic signal interconnect
Unbundled parking	<ul style="list-style-type: none"> <li>• If proposed parking ratio exceeds 1:1.25 (residential)</li> </ul>	No, the Project is not residential

Sources: City of Oakland Standard Conditions of Approval as of December 2020 and summarized by Fehr & Peers, 2021.

**Table 3** lists the mandatory TDM strategies, the responsible party for implementation, and the effectiveness of each strategy primarily based on available sources, including the research compiled in *Quantifying Greenhouse Gas Mitigation Measures* (California Air Pollution Control Officers Association (CAPCOA), August 2010). This report is a resource for local agencies to quantify the benefit, in terms of reduced travel demand, of implementing various TDM strategies.

The mandatory strategies in Table 3 are generally targeted at employees. While some of the mandatory operational strategies would also affect the travel behavior of retail customers and office visitors, these groups are not directly targeted with TDM programs. Most of the retail customers would likely be local residents and workers who would walk or bike to the site, and most office visitors would visit the Project too infrequently to be aware of the TDM benefits or to make them cost effective. Limited parking would be provided for Project retail or the public. The TDM program also includes infrastructure improvements that would benefit all site residents, employees, and visitors, as well residents, employees, and visitors in the surrounding areas.

The VTR ranges in Table 3 represent conservative assumptions about potential trip reduction at the low end of the range. Due to the Project location in an area that has good transit, bicycle, and pedestrian access, it is expected that the high end of the VTR range would be achieved with this TDM program.



**Table 3: Mandatory TDM Program Components**

TDM Strategy	Responsible Party	Estimated Trip Reduction <sup>1</sup>
A. Infrastructure Improvements	Building Management	NA <sup>2</sup>
B. Alternative Work Schedule/ Flexible Hours/Telecommuting	Project Tenants	1%
C. Pre-Tax Commuter Benefits	Project Tenants	1%
D. Transit Fare Subsidy	Building Management and Project Tenants	3-6% <sup>3</sup>
E. Parking Management	Building Management	1-5%
F. Carpool and Ride-Matching Assistance	Building Management	1-3%
G. Preferential Parking for Carpools	Building Management	
H. Designate On-Site Car-Share Spaces	Building Management	1%
I. Bicycle Facility Monitoring	Building Management	NA <sup>2</sup>
J. Guaranteed Ride Home	Project Tenants	NA <sup>2</sup>
K. TDM Coordinator	Building Management and Project Tenants	NA <sup>2</sup>
L. TDM Marketing and Employee Education	Building Management and Project Tenants	2%
<b>Estimated Vehicle Trip Reduction</b>		<b>10-19%</b>

Notes:

1. The focus of the CAPCOA document is reductions to VMT but the research used to generate the reductions also indicates vehicle trip reductions are applicable as well. For the purposes of this analysis the VTR is assumed to equal the VMT reduction. See the cited CAPCOA research for more information and related information on page 8 of the BAAQMD *Transportation Demand Management Tool User's Guide* (June 2012).
2. The effectiveness of this strategy cannot be quantified at this time. This does not necessarily imply that the strategy is ineffective. It only demonstrates that at the time of the CAPCOA report development, existing literature did not provide a robust methodology for calculating its effectiveness. In addition, many strategies are complementary to each other and isolating their specific effectiveness may not be feasible.
3. This strategy assumes that 50% of employees would receive a transit subsidy of \$3.00 per day (value to employee and not necessarily the cost).

Sources: Fehr & Peers, 2021.

The TDM strategies include both one-time physical infrastructure improvements and on-going operational strategies. Physical improvements will be implemented as part of the Project and thus are anticipated to have a one-time capital cost. Some level of ongoing maintenance cost may also be required for certain measures. Operational strategies provide on-going incentives and support for the use of non-auto transportation modes. These TDM measures have monthly or annual costs and will require on-going management.

A more detailed description of the TDM measures that comprise the mandatory TDM program is provided below:



- A. *Infrastructure Improvements* – the following infrastructure improvements in the Project vicinity, which were identified in the Transportation Impact Review (Non-CEQA) Memorandum would improve the bicycling, walking, and transit systems in the area and further encourage the use of these modes:
1. Provide two off-street loading spaces that meet City Code requirements for loading spaces or consider designating 40 feet of curb on 25th Street along the Project frontage as yellow curb to accommodate commercial loading.
  2. Designate 40 feet of curb on 24th Street along the Project frontage as white curb to accommodate passenger loading.
  3. Consider relocating all or some of the long-term bicycle parking from the Valley Street craft stalls to the main building.
  4. Potential contribution to the proposed improvements at the Broadway/Webster Street/25th Street intersection identified in the Broadway Valdez District Specific Plan.
  5. Potential contribution to the proposed improvements at the Telegraph Avenue/24th Street and Telegraph Avenue/25th Street intersections identified in the Telegraph Avenue Complete Streets Project.
  6. Potential installation of a bulb-out at the northeast corner, marked crosswalk across the east approach, and curb-ramps with truncated domes at the southwest, southeast, and northeast corners of the Valley Street/24th Street intersection.
  7. Potential installation of bus stop amenities such as benches and trash receptacles at the northbound and southbound bus stops on Broadway at 25th Street.
- B. *Alternative Work Schedule/Flexible Hours/Telecommuting* – Encourage Project employees to offer alternative work schedules, flexible hours, and/or telecommuting, which can eliminate employee trips or shift them to non-peak periods.
- C. *Pre-tax Commuter Benefits* – Encourage Project tenants to enroll in WageWorks or other service to help with pre-tax commuter savings. This strategy allows employees to deduct monthly transit passes or other amount using pre-tax dollars. This can help to lower payroll taxes and allows employees to save on transit.
- D. *Transit Fare Subsidy* – Building management shall either provide or require Project tenants to provide free or reduced cost transit for their employees in order to increase transit mode share. Options include:
1. Employers can offer a monthly commuter check (or alternatively Clipper Card, which is accepted by BART, AC Transit, and other major transit providers in the Bay Area) to employees to use public transit. Note that as of 2021, IRS allows up to \$270 per employee per month.
  2. Employers can participate in AC Transit's EasyPass program, which enables employers to purchase annual bus passes for their employees in bulk at a deep discount. The passes allow unlimited rides on all AC Transit buses for all employees. For more information, see [www.actransit.org/rider-info/easypass](http://www.actransit.org/rider-info/easypass).



Based on the CAPCOA report, a transit fare subsidy of about \$3.00 per employee per day (value to rider) available to 50 percent of the site employees would translate to an approximately three to six percent reduction in driving trips generated by the Project employees.

- E. *Parking Management* – Building management shall charge for all parking spaces in the Project garage unless noted in other strategies, remove the cost of parking from the lease agreements, and set the fee for daily, and/or hourly parking to be the same or higher than other nearby garages.
- F. *Carpool and Ride-Matching Assistance Program* – The building management shall offer personalized ride-matching assistance to pair employees interested in forming commute carpools. As an enhancement, building management may consider using specific services such as ZimRide, ComoVee, or 511.org RideShare.
- G. *Preferential Parking for Carpoolers* – The building management shall offer free or discounted preferential carpool parking for eligible commuters. To be eligible for carpool parking, the carpool shall consist of three or more people. The building management shall monitor and provide adequate carpool spaces to meet and exceed potential demand. Considering the limited parking supply in Downtown Oakland, all or some of the unoccupied parking spaces designated for carpool shall be available for general use after 10:00 AM.
- H. *Car-Share Spaces* – Offer to designate at least two on-site parking spaces for car-sharing (such as Getaround, Zip Car, etc.) for free. Monitor the usage of the car sharing spaces and adjust if necessary. As an additional strategy, encourage Project tenants to provide free/subsidized car-share membership to their employees.
- I. *Bicycle Facility Monitoring* – The Project would provide 11 long-term and 12 short-term bicycle parking spaces, which would meet the City of Oakland Planning Code requirements. Building management shall monitor the usage of these facilities and provide additional bicycle parking if necessary.
- J. *Guaranteed Ride Home* – Encourage Project employees to register for the Guaranteed Ride Home (GRH) program. Employees may be hesitant to commute by any other means besides driving alone since they lose the flexibility of leaving work in case of an emergency. GRH programs encourage alternative modes of transportation by offering free rides home in the case of an illness or crisis, if the employee is required to work unscheduled overtime, if a carpool or vanpool is unexpectedly unavailable, or if a bicycle problem arises. The Alameda County Transportation Commission offers a GRH service for all registered permanent employees who are employed within Alameda County, live within 100 miles of their worksite, and do not drive alone to work. The GRH program is offered at no cost to the employer, and employers are not required to register for their employees to enroll in and use the program.
- K. *TDM Coordinator* – Each tenant shall designate a staff person as their TDM coordinator to coordinate, monitor, and publicize TDM activities. Building management shall also designate a “Building TDM coordinator.”





L. *TDM Marketing and Tenant/Employee Education* - Building management shall provide tenants and employees information about various transportation options in the Project area and the TDM strategies provided by the building. This information would also be posted at central location(s) and be provided to each building employee. The information shall be updated as necessary. Marketing strategies can promote alternative trips by making commuters aware of the options and incentives of using non-automobile transportation. Implementing commute trip reduction strategies with a complementary marketing strategy can increase the overall effectiveness of the program. This information shall include:

1. *Commuter Benefits Program* – Provide information on the Bay Area Commuter Benefits Program to all building employees. As of September 30, 2014, Bay Area employers with 50 or more full-time employees within the Bay Area Air Quality Management District (BAAQMD, or Air District) geographic boundaries are required to register and offer commuter benefits to their employees in order to comply with Air District Regulation 14, Rule 1, also known as the Bay Area Commuter Benefits Program. Employers must select one of four Commuter Benefit options to offer their employees: a pre-tax benefit, an employer-provided subsidy, employer-provided transit, or an alternative commute benefit. (Information about Commute Benefits Program is at [511.org/employers/commuter/overview](http://511.org/employers/commuter/overview).)
2. *Transit Routes* – Promote the use of transit by providing user-focused maps. These maps provide employees with wayfinding to nearby transit stops and transit-accessible destinations and are particularly useful for those without access to portable mapping applications. The Project should consider installing TransitScreen real-time transit information in a visible location in the building lobby to provide employees with up-to-date transit arrival and departure times.
3. *Transit Fare Discounts* – Provide information about local discounted fare options offered by BART and AC Transit, including discounts for youth, elderly, persons with disabilities, and Medicare cardholders.
4. *Ridesharing* – Provide employees with phone numbers and contact information for ride sharing options including Uber, Lyft, and Oakland taxicab services.
5. *Carpooling* – Provide employees with phone numbers and contact information for carpool matching services such as the Metropolitan Transportation Commission's 511 RideMatching.
6. *Walking and Biking Events* – Provide information about local biking and walking events, such as Bike to Work Day, as events are planned.
7. *Bikeshare* – Educate employees about nearby bike sharing station locations and membership information. The nearest Bay Wheels Bike Stations are on Telegraph Avenue, at 23rd and 27th Streets.

## TDM Compliance Monitoring

According to the City of Oakland's *Standard Condition of Approval #78*, projects generating more than 100 net new peak hour trips are required to submit an annual compliance report for the first five years following completion of the project for review and approval by the City. Since the proposed Project would generate fewer than 100 net peak hour automobile trips, the Project applicant is not required to submit an annual compliance report to the City.

Please contact Sam Tabbina ([stabbina@fehrandpeers.com](mailto:stabbina@fehrandpeers.com) or 510-835-1943) with questions or comments.

