23rd Street and Valdez Project CEQA Analysis

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

Date: March 11, 2015

Project Address: 2302-2342 Valdez Street

Case Number: PLN14-340

Zoning: D-BV-1 (Broadway Valdez District Retail Priority Sites

Commercial Zone 1)

General Plan: Central Business District

APNs: 669-2257-009, 010, -012, -013, -014, -015, -016, and -01

Lot Size: 1.26 acre (55,100 sf)

Plan Area: Broadway Valdez District Specific Plan

Applicant: Wood Partners

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EXECUTIVE SUMMARY

Wood Partners (project applicant) is proposing to redevelop eight parcels within the Broadway Valdez District Specific Plan (BVDSP, or Plan) area into a mixed-use development. The 23rd Street and Valdez Project (proposed project) would include the construction of a residential and retail building totaling approximately 328,211 square feet (sf). The proposed project would include a six-story, wood-frame building, plus a basement. Up to 196 multi-family units (approximately 269,639 sf) would be provided with a mix of studios, one-bedroom units, two-bedroom units, and community function spaces, including management/leasing offices and lobbies. Residential parking for approximately 147 spaces would be included in the basement level. The proposed project would provide approximately 31,500 sf of ground-floor and mezzanine retail along Valdez Street and at the corner of 23rd Street/Valdez Street. Approximately 62 parking spaces would be provided for the retail uses in a garage on the ground floor.

The Broadway Valdez District Specific Plan Environmental Impact Report (EIR)¹ analyzed the environmental impacts of adoption and implementation of the BVDSP and, where the level of detail available was sufficient to adequately analyze the potential environmental effects, provided a project-level CEQA review for reasonably foreseeable development. This project-level analysis allows the use of CEQA streamlining and/or tiering provisions for projects developed under the BVDSP.

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ESA (Environmental Science Associates), 2013. Broadway Valdez District Specific Plan, Draft Environmental Impact Report. SCH ESA (Environmental Science Associates), 2014. Broadway Valdez District Specific Plan, Responses to Comments and Final. May. (These documents can be obtained at the Bureau of Planning at 250 Frank Ogawa Plaza #3115, or online at: http://www2.oakland.net.com/Government/o/PBN/OurServices/Application/DOWD009157.)

Applicable CEQA streamlining and/or tiering code sections are described below, each of which, separately and independently, provide a basis for CEQA compliance.

- 1. Community Plan Exemption. Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183 allow streamlined environmental review for projects that are "consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site." Section 15183(c) specifies that "if an impact is not peculiar to the parcel or to the proposed project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards..., then an EIR need not be prepared for the project solely on the basis of that impact."
- 2. Qualified Infill Exemption. Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3 allow streamlining for certain qualified infill projects by limiting the topics subject to review at the project level, if the effects of infill development have been addressed in a planning level decision, or by uniformly applying development policies or standards. Infill projects are eligible if they are located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least 75 percent of the site's perimeter; satisfy the performance standards provided in CEQA Guidelines Appendix M; and are consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy. No additional environmental review is required if the infill project would not cause any new specific effects or more significant effects, or if uniformly applicable development policies or standards would substantially mitigate such effects.
- 3. Addendum. Public Resources Code Section 21166 and CEQA Guidelines Section 15164 state that an addendum to a certified EIR is allowed when minor changes or additions are necessary and none of the conditions for preparation of a subsequent EIR or Negative Declaration pursuant to Section 15162 are satisfied.

The CEQA Checklist provided below evaluates the potential project-specific environmental effects of the proposed project and evaluates whether such impacts were adequately covered by the BVDSP EIR to allow the above-listed streamlining and/or tiering provisions of CEQA to apply. The analysis conducted incorporates by reference the information contained in the BVDSP EIR. Mitigation measures and Standard Conditions of Approval (SCAs) identified in the BVDSP EIR that would apply to the proposed project are listed in Attachment A. The proposed project is legally required to incorporate and/or comply with the applicable requirements of the BVDSP mitigation measures identified in the EIR and with applicable City of Oakland (City) SCAs. Therefore, the measures and SCAs are herein assumed to be included as part of the proposed project (see Attachment A, Standard Conditions of Approval and Mitigation Monitoring and Reporting Program).²

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

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² Note that the SCAs included in the BVDSP EIR have been renumbered for the proposed project. However, for cross-reference purposes, Attachment A includes the SCA numbers from the BVDSP EIR in parenthesis.

- Community Plan Exemption. As stated in Section 1.2.2 of the BVDSP, when development proposals in the BVDSP area are brought before the City, staff and decision-makers use the Specific Plan as a guide for project review. Projects will be evaluated for consistency with the intent of Plan policies and for conformance with development regulations. The environmental review of the BVDSP was intended to expedite the processing of future projects that are consistent with the Plan. Therefore, consistent with Section 1.2.3 of the BVDSP, this CEQA Analysis satisfies the requirements of a community plan exemption based on the analysis conducted in this document. The proposed project is permitted in the zoning district where the project site is located and is consistent with the bulk, density, and land uses envisioned in the BVDSP. The CEQA Checklist included below concludes that the proposed project would not result in significant impacts that (1) are peculiar to the project or project site; (2) were not identified as significant project-level, cumulative, or offsite effects in the BVDSP EIR; or (3) were previously identified as significant effects but are determined to have a more severe adverse impact than discussed in the EIR. Findings regarding the proposed project's consistency with the BVDSP are included as Attachment B to this document.
- Qualified Infill Exemption. The analysis conducted in this document also indicates that the proposed
 project qualifies for a qualified infill exemption. The infill eligibility criteria are evaluated in Attachment C,
 and supported by the CEQA Checklist.
- Addendum. The analysis conducted in this document also indicates that an addendum to the BVDSP EIR applies; therefore, this CEQA Analysis is considered to be the addendum. The BVDSP EIR analyzed the Broadway Valdez Development Program (Development Program), which represents the maximum feasible development that can reasonably be expected to occur in the Plan area over a 25-year planning period, according to the City's projections.3 As shown in Table 1, the proposed project would represent a minor change in the Development Program from what was analyzed in the BVDSP EIR. The project site is within the Valdez Triangle and is within a Retail Priority Site, meaning that there are restrictions on residential activities in favor of development of retail uses. The project site must include at least 45,905 sf of retail before the project can be entitled to a "residential facilities bonus." The project proposes approximately 31,500 sf of retail due to site constraints; therefore, the proposed project requires a Conditional Use Permit (CUP) to grant the allowance of less retail than the minimum requirement and to allow for the proposed number of residential units. Regardless, the slight increase of proposed housing at the project site (up to 196 units) compared to what was accounted for in the BVDSP EIR (118 units) is not significant. Although it would include more dwelling units than anticipated, the proposed project would include substantially less commercial space, resulting in fewer vehicle trips than the Development Program analyzed in the BVDSP EIR, as described in Section 13, Transportation and Circulation, below. The proposed project, therefore, meets the requirements for an addendum, as evidenced in Attachment D to this document.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, as summarized in the CEQA Checklist, the BVDSP EIR adequately analyzed and covered the potential environmental impacts associated with the proposed project, and the streamlining and/or tiering provisions of CEQA apply to the proposed project. Therefore, no further review or analysis beyond the CEQA analysis contained herein is required.

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³ In total, the Development Program includes approximately 3.7 million square feet of development, including approximately 695,000 square feet of office space, 1,114,000 square feet of restaurant/retail space, 1,800 residential units, a new 180-room hotel, approximately 6,500 parking spaces provided by the development program, and approximately 4,500 new jobs.

Development Characteristics	Development Program	Proposed Project
Height	5 stories (65 feet) ¹	6 stories (75 feet)
Residential Units	1182	196
Retail Square Feet (net square feet)	127,733 ²	31,500

Notes:

- ¹ Broadway Valdez Development Program Physical Height Model. Figure 3-11 of the Broadway Valdez District Specific Plan.
- ² Development Program, Subdistrict 2, Project Site #6. Appendix D, Table D.1: Illustrative Development Plan Program.

Sources:

City of Oakland. 2014. Broadway Valdez District Specific Plan. Adopted June.

Wood Partners. 2014. 23rd Street Valdez Project, Oakland, California. Planning Submittal. November 21.

PROJECT DESCRIPTION

Project Location

Project Site Setting. As shown in Figure 1, the project site is in the western portion of the City of Oakland (City) and is generally bounded by residential development along 24th Street immediately to the north, single-family residential development and Waverly Street to the east, a nine-story parking garage and 23rd Street to the south, and Valdez Street the west. Regional access includes Interstate 980 (I-980), approximately 0.45 mile to the west, and I-580, approximately 0.75 mile to the northeast. In addition, the 19th Street-Oakland Bay Area Rapid Transit (BART) Station is less than 0.4 mile southwest of the project site on Broadway, providing daily service between San Francisco, Fremont, Millbrae, and Richmond. The area also benefits from Alameda-Contra Costa (AC) Transit bus service along Broadway.

Although a few, newer mid-rise commercial buildings occupy lots to the south of the project site (south of 23rd Street), the dominant existing land use in the Plan area is auto-oriented retail, including auto-service providers, car dealerships, and surface parking lots. Surface parking lots, some used by auto dealers as display and storage areas, occupy approximately 11 percent of the developable land in the BVDSP area. Together, auto-related sales, service, and parking account for approximately 60 percent of the developable land in the Plan area. The majority of buildings in the Plan area are one to two stories in height, older, and originally designed for utilitarian purposes. However, medium- to high-rise buildings exist in the southern portion of the Plan area and to the south of Grand Avenue.

The Newsom Apartments, constructed in 1910 at 2346 Valdez Street, are directly adjacent to the project site to the north. This building is considered a building of Major Importance according to the City-wide Oakland Cultural Heritage Survey (OCHS). The Waverly Street Residential District is directly adjacent to the south and east of the project site. This collection of Colonial Revival and Craftsman-style residences, centered along Waverly Streets between 23rd and 24th Streets, was constructed between 1900 and 1925. The City does not have a historic designation for this district.⁴ However, the City has identified the Waverly Street Residential District as an Area of Secondary Importance (ASI), indicating that it contains a group of older buildings that, while not considered eligible for the National Register of Historic Places either individually or as a group, may have local importance that is worthy of

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⁴ Environmental Science Associates. 2009. Appendix D: Broadway Valdez Specific Plan Historic Resources Inventory Report. July 2009.





Figure 1
Project Location
23rd Street and Valdez Project

recognition.⁵ Also on the block on the corner of Waverly Street/23rd Street is the nine-story parking garage, which accommodates approximately 380 vehicles and mainly services the office building at 180 Grand Avenue.

Consistent with the dominant uses in the area, the 1.26-acre (55,100-sf) project site includes surface parking lots and automotive services land uses. Two buildings are currently located at the project site. The 12,581-sf building at the corner of 23rd Street/Valdez Street was constructed in 1920. This building and the surface lots to the north are used for parking and are owned and operated by West Coast Properties, LLC. The parking lots are accessible 24-hours per day and are used by occupants of the surrounding commercial buildings. The 3,600-sf building in the northern portion of the site, immediately adjacent to the Newsom Apartments, is a one-story auto detailing shop that was constructed in 1925.

The project site encompasses assessor's parcel numbers (APNs) are 669-2257-009, -010, -012, -013, -014, -015, -016, and -017.

Project Site Land Use and Zoning. The proposed project is within the Plan area of the BVDSP, as depicted in Figure 2. The BVDSP, which was adopted in July 2014, provides a comprehensive vision for the Plan area along with goals, policies, and development regulations to guide the Plan area's future development. The Plan area is divided into two distinct subareas: the Valdez Triangle and the North End. The project site is within the Valdez Triangle and is within a Retail Priority Site, meaning that there are restrictions on residential activities in favor of development of retail uses. The BVDSP EIR analysis considered the following land use maximums within the Valdez Triangle subarea: 1,030 residential units, 794,000 sf of retail, 116,000 sf of office space, 180 hotel rooms, and over 1 million sf of non-residential development.

The majority of the Valdez Triangle subarea, including the project site, is within the Central Business District land use designation. This designation supports the destination retail district envisioned for the area and would, over time, result in larger structures to be built than currently exist. The intent of the Central Business District is to encourage a high-density, mixed-use urban center of regional importance as a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation.

The project site is zoned Broadway Valdez District Retail Priority Sites Commercial Zone 1 (D-BV-1), Retail Priority Zone 5A, which is the most restrictive zoning regarding general uses and ground floor uses in the Plan area. The regulatory framework of D-BV-1 is intended to ensure that larger sites and opportunity areas are reserved primarily for new, larger retail development to accommodate consumer goods retail, at least on the ground floor. Properties zoned as D-BV-1 Retail Priority Sites would only allow residential uses if a project were to include a certain size and type of retail component. Special height regulations apply to this zoning district.

Project Characteristics

The project would demolish the existing buildings and paved features and construct the proposed new building. Approximately 328,211 sf of mixed-use development would be constructed at the 1.26-acre project site. The proposed project would include up to 196 residential units and approximately 31,500 sf of retail. The proposed project would not demolish or alter the Newsom Apartments or any of the adjacent buildings along Waverly Street.

⁵ Environmental Science Associates. 2013. Broadway Valdez District Specific Plan Draft Environmental Impact Report. September 2013.

Proposed Site Plan. The proposed project would require the demolition of the existing buildings at the project site and would entail the construction of one mixed-use building, parking garages, onsite linkages, private amenities, podium-level and potentially rooftop open space, and landscaping.⁶ Table 2 summarizes the proposed mixed-use development and Figures 3 through 8 depict the proposed site and building plans.

In total, the building would have a footprint of approximately 55,100 sf (100 percent of the project site) and be constructed at a floor area ration (FAR) of 5.95. The building would be six stories and would not exceed 75 feet in height to the top of the roof structure. Parapets, stairs, and elevator penthouses and mechanical structures (including emergency generators) would exceed this height but would be subject to the building standards of the BVDSP.

Table 2. Proposed Development

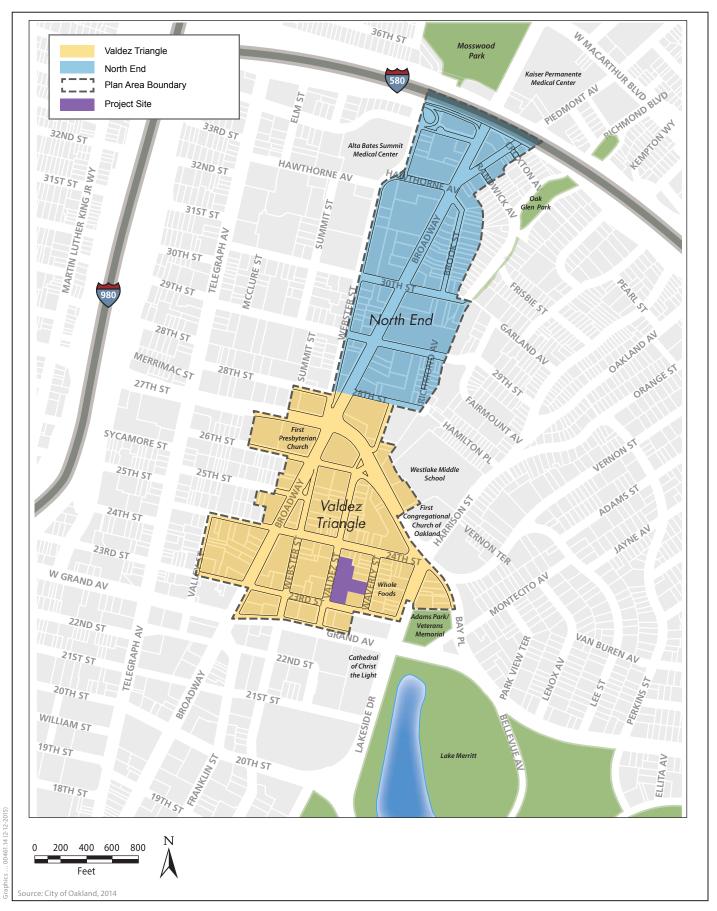
Land Use	Area (sf)
Retail	
Retail (Plus Mezzanine)	31,500 ^a
Retail Loading	585
Retail Parking	26,207
Service	1,047
Total Retail Area	58,572
Residential	
Residential Units	157,927 (up to 196 units)
Amenities	4,100
Circulation	24,190
Open Space/Courtyards/Roof Deck	27,521
Parking	43,929
Service	6,411
Trash	678
Leasing (Plus Office Mezzanine)	2,736
Dog Run	2,417
Total Residential Area	269,639
Total Project Area	328,211 ^a

Source: Wood Partners 2014.

In general, the majority of the building mass would be oriented in a north-south direction and would primarily front onto Valdez Street. A portion of the proposed project would also front on Waverly and 23rd Streets (although retail would only be present on 23rd Street and Valdez Street frontages).

A range of retail square footages could be provided under the Project. However, for the purposes of
this analysis, the conservative scenario of the maximum amount of retail is analyzed (31,500 sf).
Therefore, the total in this table does not add up. Nonetheless, the total square footage of the
residential and retail building is not expected to exceed 328,211 sf.

⁶ Unless otherwise stated, all information from this section is from Wood Partners and Pyatok, 2014.





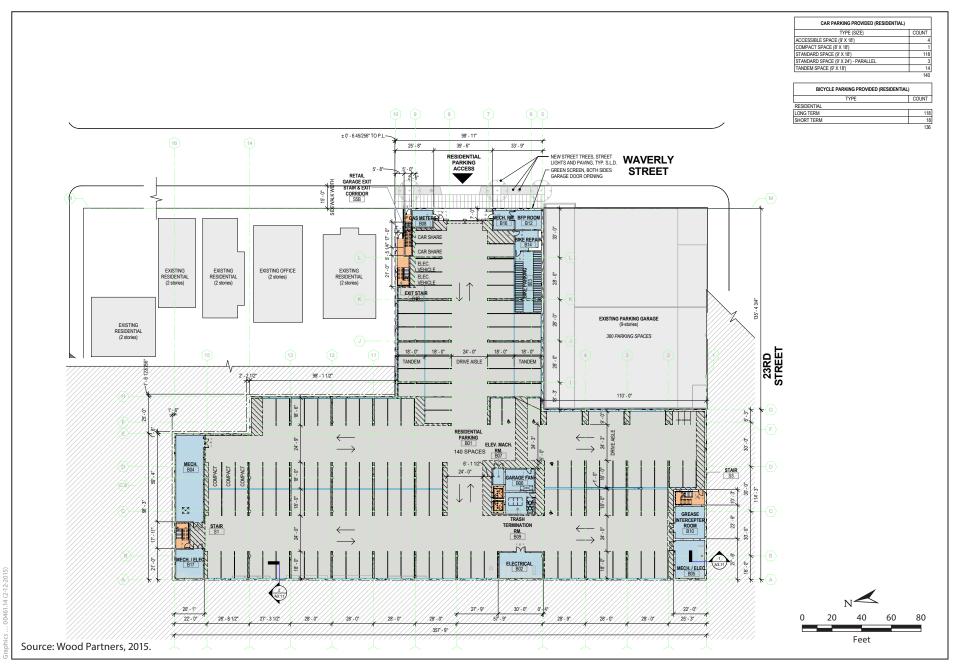




Figure 3
Site Plans – Level B1 (Waverly Street)
23rd Street and Valdez Project

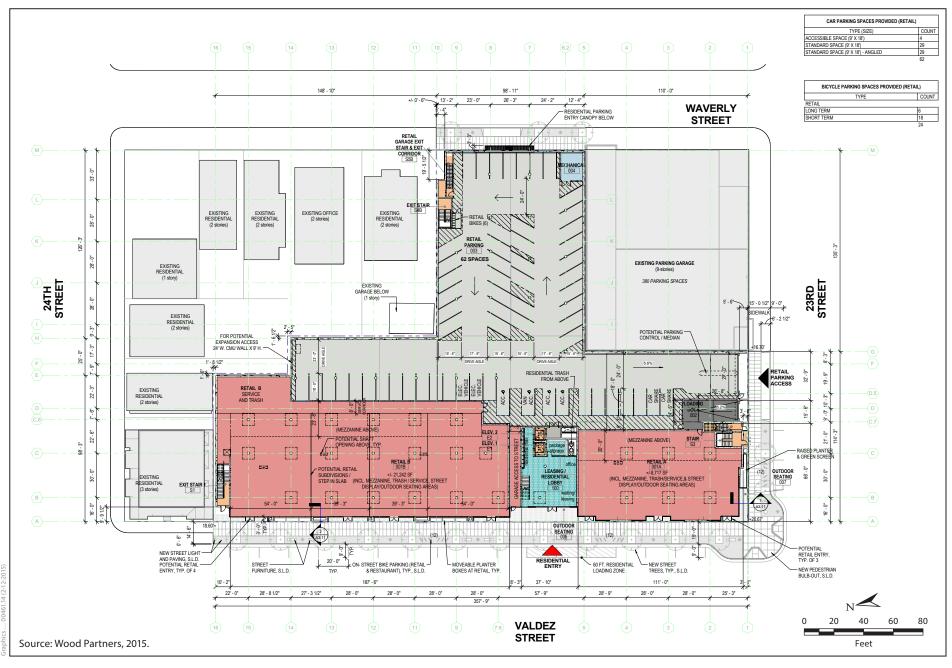




Figure 4
Site Plans – Level 1 (Valdez Street)
23rd Street and Valdez Project

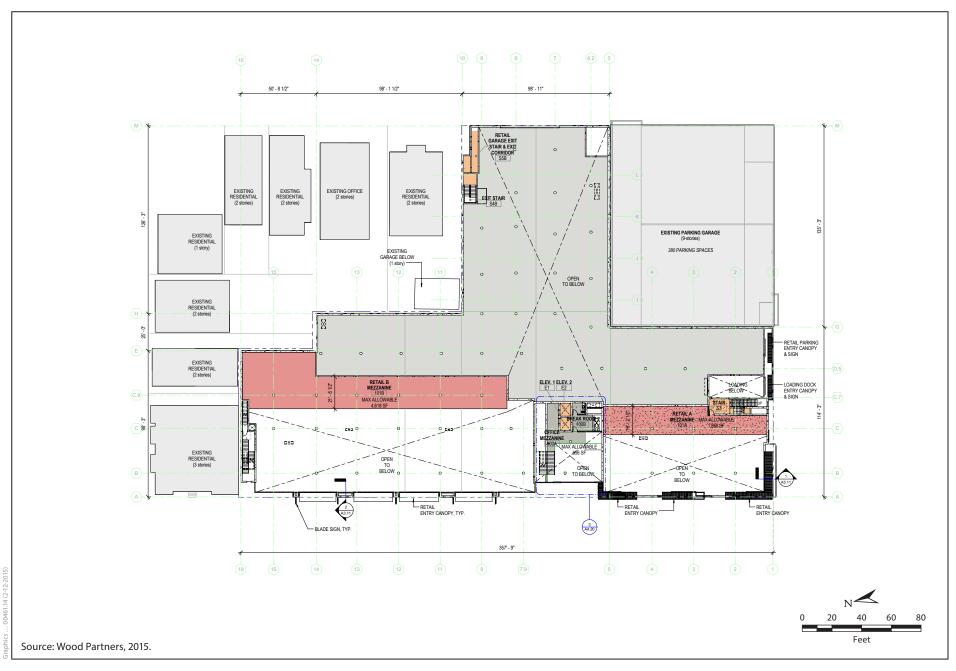




Figure 5
Site Plans – Retail Mezzanine
23rd Street and Valdez Project

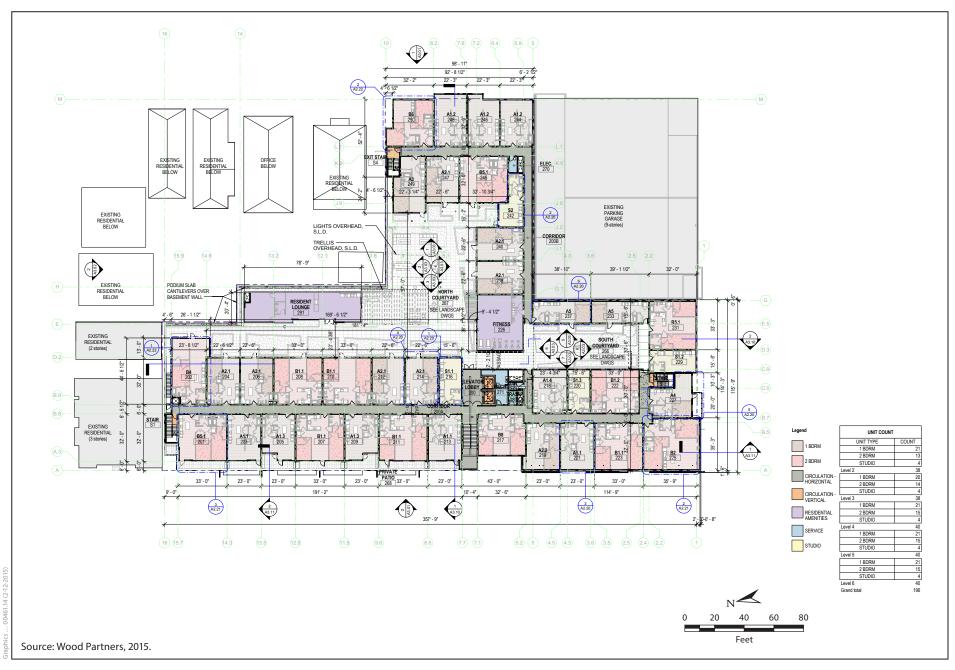




Figure 6
Site Plans – 2nd Floor
23rd Street and Valdez Project





Figure 7
Standard Residential Site Plan – 4th Floor
23rd Street and Valdez Project

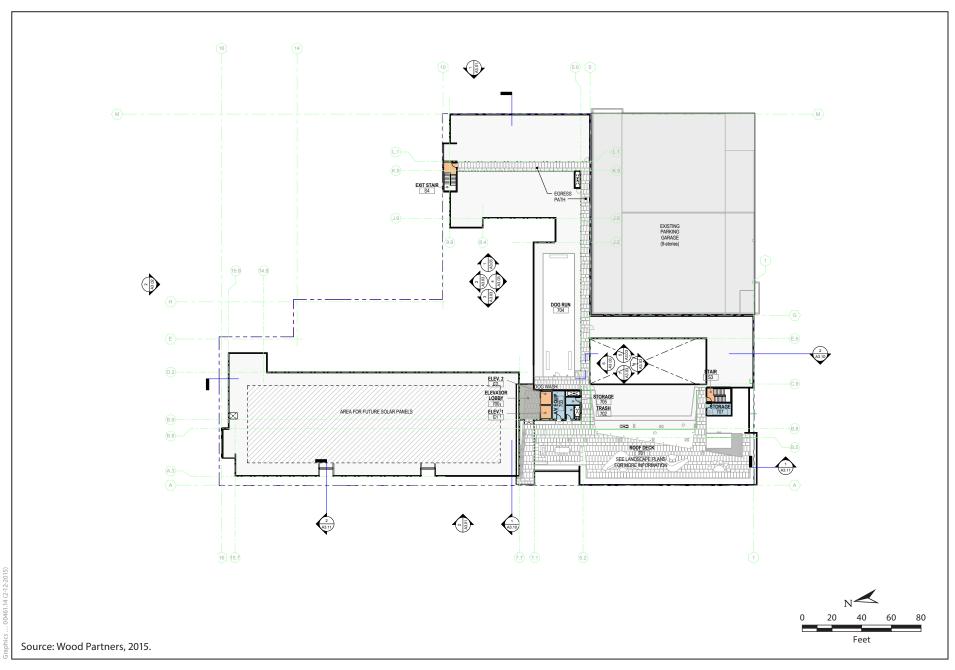




Figure 8
Site Plans – Level 7 (Roof)
23rd Street and Valdez Project

Waverly Street is approximately 11.5 feet lower in elevation than Valdez Street. Consequently, the site would be graded to provide a basement floor parking garage that would be reserved for residents only. This parking garage would be accessible to vehicles via a driveway at Waverly Street and would include approximately 147 parking spaces, secure storage for approximately 84 bicycles, mechanical and trash enclosures, stairwells, elevators, and a lobby. Due to the project site topography, the residential parking is at grade on the Waverly Street frontage but extends to one floor below grade under the Valdez Street frontage.

The ground floor of the building would include approximately 31,500 sf of retail spaces fronting onto Valdez Street and the corner of Valdez Street/23rd Street, along with a parking garage for the retail uses. The retail areas would be designed to allow subdivision into up to five separate store fronts with multiple entries off of Valdez Street and one off of 23rd Street. Mezzanines would be included in each retail space. This variety of retail uses would be open to the public and not restricted to onsite users. In addition, a residential lobby with a stairwell and elevators, plus the leasing office, would be located on the ground floor, fronting onto Valdez Street. A stairwell and exit corridor for the residential area would be located in the northern portion of the building and would connect to Valdez Street. The retail parking garage would be located behind the retail and lobby areas. This 62-space garage, accessible from 23rd Street, would be reserved for retail customers and employees.

Above the ground floor would be approximately 38 residential units, usable private open space along Valdez Street, several podium courtyards, a lobby with elevators, stairwells, interior circulation, and two amenities spaces, including a fitness center. The third floor would include approximately 38 units and associated private balconies. The fourth, fifth, and sixth floors would also include 40 units with associated private balconies, and have the same floor plan. The roof level would include mechanical equipment and potential features such as a roof deck, dog run zone, and area reserved for solar panels.

The proposed building would not exceed 75 feet in height, as depicted in Figures 9 and 10. In total, the proposed project would include up to 196 housing units. As shown in Table 3 (which presents a representative breakdown of units), units would be provided on all floors but the first floor. The proposed project would consist of a mix of residential unit types and, in total, could provide 20 studios, 103 one-bedroom units, and 73 two-bedroom units. The units would average approximately 806 sf.

Table 3. Residential Units by Floor

	Studio (490–556 sf)	1-Bedroom (590–736 sf)	2-Bedroom (793–1,253 sf)	Total
Ground Floor	0	0	0	0
Second Floor	4	20	14	38
Third Floor	4	20	14	38
Fourth Floor	4	21	15	40
Fifth Floor	4	21	15	40
Sixth Floor	4	21	15	40
Total	20	103	73	196
Percent of Total	10%	53%	37%	100%

Source: Wood Partners 2014.

23rd Street/Valdez Project

Vehicular Access and Circulation. The project site would be accessible to vehicles from two separate driveways, depending on the use (residential or retail). Residential access would be provided from Waverly Street via a driveway leading to the basement-level garage. Public access to the residential garage would be restricted by a vehicular sliding gate. Access to retail parking would be provided from 23rd Street via a driveway leading to the garage on the ground floor, at the Valdez Street level. For both the residential and retail garages, egress and ingress would be located at the driveways on Waverly Street and 23rd Street, respectively. A 40-foot residential loading zone would be located on Valdez Street in front of the building's residential lobby.

Bicycle and Pedestrian Circulation. Pedestrian linkages would be included within the parking garages to connect these areas to the rest of the building. On the ground floor, pedestrian garage access from Valdez Street would be located between a retail store and the leasing/residential lobby. The sidewalk along Valdez Street would be improved with new paving, street trees, and a pedestrian bulb-out at Valdez Street/23rd Street. Residential pedestrian circulation would also be provided in the podium courtyards and potentially on the rooftop.

Stacked bicycle parking for residents would be included in the residential garage on the basement level. Approximately 76 bicycles could be accommodated, which exceeds the requirement of 59 spaces. A rack for approximately 7 bikes would be available to retail shoppers within the retail garage. In addition, 10 spaces would be provided along Valdez Street and 23rd Street, which exceeds the requirement of 9 shortand long-term spaces for retail customers.

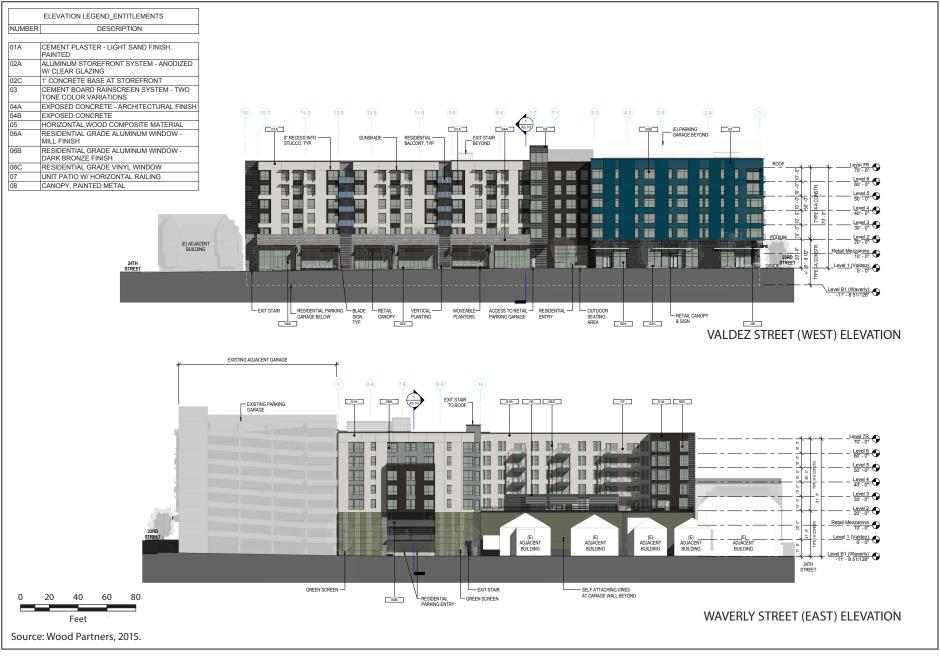
Emergency Access. Fire department connections would be provided on each street frontage (including 23rd Street, 24th Street, and Valdez Street). The fire department connection on the 23rd Street would be located near the loading dock, the fire department connection along Valdez Street would be located near the exit corridor for Stair 1, and the fire department connection along Waverly Street would be located near the exit corridor for Stair 3. Stair 1 would have direct access to the podium through a half-flight of stairs and there would be a half-flight of stairs from Stair 3 to the podium. The proposed project would include sprinklers in compliance with National Fire Protection Association 13.

Parking and Loading. As discussed above, the basement level of the building would provide approximately 147 parking spaces for the proposed residents. This garage would be accessed from Waverly Street. As summarized in Table 4 below, 123 standard spaces would be included, along with 3 parallel spaces, 17 tandem spaces, and 4 accessible spaces. This exceeds the parking requirement of 0.5 spaces per unit. The garage on the ground level would provide approximately 62 parking spaces for the retail customers and employees. Approximately 58 standard and angled spaces would be included, along with 4 accessible spaces. A 585-sf loading area for the retail uses would be included off of 23rd Street, adjacent to the vehicular driveway.

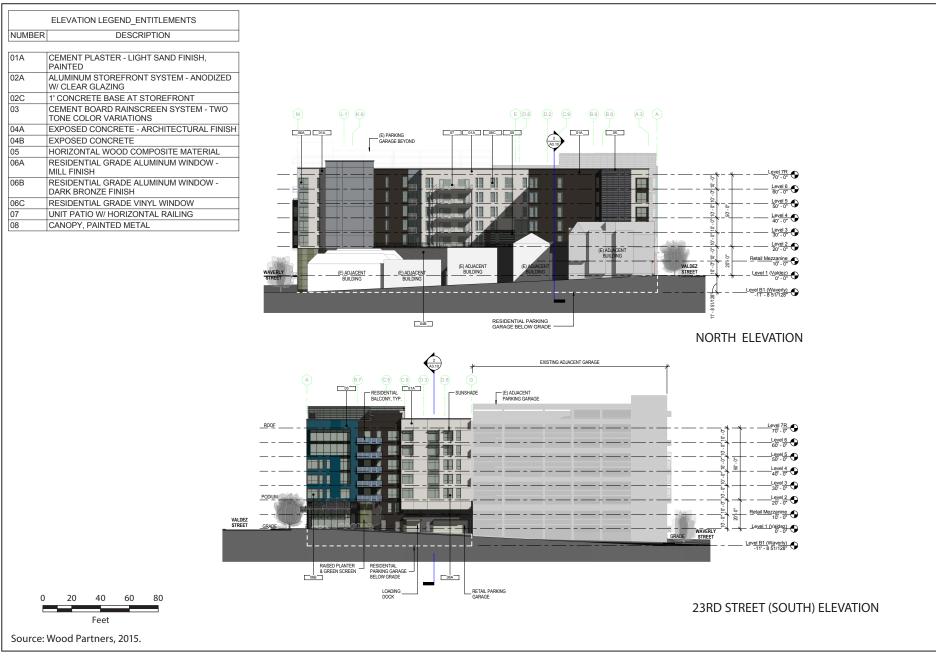
Table 4. Parking

	Residential (Basement)	Retail (Ground Floor)	
Standard Space	123	28	
Standard Space – Parallel	3		
Standard Space – Angled		30	
Tandem Space	17		
Accessible Space	4	4	
Total	147	62	

Source: Wood Partners 2014.









Landscape and Design. The project site is located in an urban setting and currently includes a surface parking lot and buildings. Vegetation is limited to ruderal weeds growing between the cracked pavement and small shrubs along the perimeter adjacent to the residential properties on Waverly Street. The project site is comprised of approximately 55,100 sf of impervious surfaces (100 percent). Implementation of the proposed project would decrease impervious surfaces with increased landscaping. The proposed project would remove the existing limited vegetation and include landscaping on the podium-level courtyards and potentially on the rooftop. Raised infiltration planters for stormwater management would be included in the podium-level courtyards, as needed. A mixture of raised planters, vegetated roof areas, decking pavers on pedestals, and windscreens could be provided on the rooftop areas.

The proposed project would be subject to the *Design Guidelines for the Broadway Valdez Specific Plan Area* (Design Guidelines), a document that includes guidelines and standards related to urban form and visual quality. Pursuant to the Design Guidelines, the shopping streets within the Valdez Triangle (including 23rd Street, 24th Street, and Valdez Street) would be required to support a walkable, pedestrian-oriented shopping district with appropriately scaled and designed streets. This would be achieved by reducing the current right-of-way to widen sidewalks and adding amenities, such as planting, lighting, and seating. The proposed project would include widened sidewalks and amenities, including permeable paving, tree planting areas, lighting, and seating.

The proposed project would undergo the required design review process, pursuant to Section 17.101C.020 of the City's Planning Code, which would ensure consistency with the Design Guidelines. The proposed project would also be designed to meet CALGreen, Title 24, and any amendments required by the City. The proposed project would be contemporary in design, utilizing a variety of materials including, but not limited to, cement plaster, cement panels, metal panels, stone or brick, and concrete, as well as storefront glazing and aluminum windows at the exterior street facades and vinyl windows at the interior courtyard facades. The proposed project would be GreenPoint Rated in compliance with the City's Green Building Ordinance.

Activity/Employment. The proposed project would include a mix of residential and retail uses and would include up to 196 multi-family residential units. Using the generation rate established for the BVDSP area of 1.87 persons per household, the proposed project could generate up to 367 new residents. In addition, the approximately 31,500 sf of retail could generate up to 63⁷ employees.

Utilities. Onsite utility usage would include energy, domestic water, wastewater, and storm drainage. All onsite utilities would be designed in accordance with applicable codes and current engineering practices. The proposed project would not require any water infrastructure improvements. However, the proposed project would pay the Sewer Mitigation Fee, which would either contribute to replacing pipes that will increase capacity to the local collection system or be used to perform inflow and infiltration rehabilitation projects outside of the Plan area, as described in the BVDSP EIR. In addition, a new storm drain main on Valdez Street and Waverly Street could be required.

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⁷ Using a standard generation rate of 500 sf per employee.

Project Construction

Schedule. Project construction would begin with the demolition of the two existing buildings on the project site. Demolition would involve abating any hazards present within either building, demolishing and removing the existing structures, and removing the existing foundation slabs and underground utilities. Project construction is estimated to take about 24 months, beginning in late 2015, with building occupancy planned for late 2017. The project would be constructed in the following phases:

- Demolition of existing buildings and mass excavation: approximately 90 work days
- Construction of the mixed-use building: approximately 490 work days
- Site improvements: approximately 90 work days
- Commissioning, testing, and final inspection: approximately 60 work days

Depending on the construction phase, the number of onsite construction workers could range from approximately 10 to 100 workers per day. The maximum number of workers (100 workers per day) would occur during framing, rough-in, and interior finishes phase as well as the exterior phase (both during the building construction phase). The minimum number of workers (10 workers per day) would occur during the grading and excavation phase as well as the site preparation phase.

Equipment and Staging. Typical equipment that would be used during construction would include an extendable forklift, generators, excavator, loader, dump trucks, tower crane, elevator man/material lift, and extendable lifts. Pile driving could potentially be required for shoring. All construction equipment, employee vehicles, and import material would be staged onsite or nearby.

Spoils, Debris, and Materials. Construction would require demolition and removal of the existing buildings and paved features at the project site. Approximately 3,000 cubic yards (cy) of demolition material would be disposed offsite. Approximately 1.26 acres would be graded during project construction. The proposed project would involve excavation up to 13 feet below grade. Approximately 21,500 cy would be exported offsite and approximately 200 cy of soil would be imported during each phase of project construction.

PROJECT APPROVALS

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

Actions by the City of Oakland

- Planning Commission—Regular Design Review, CEQA determination, Conditional Use Permit, and vesting tentative parcel map.
- Building Bureau—Grading permit and other related onsite and offsite work permits and minor encroachment permit.

Actions by Other Agencies

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

BVDSP and **EIR**

The BVDSP provides a framework for future growth and development in an approximately 95.5-acre area along Oakland's Broadway corridor between Grand Avenue and I-580. Although it does not propose specific private developments, the BVDSP established a Development Program to project the maximum feasible development reasonably expected during the 25-year planning period, which included approximately 3.7 million sf consisting of approximately 695,000 sf of office space, 1,114,000 sf of restaurant/retail space, 1,800 residential units, a new 180-room hotel, approximately 6,500 parking spaces, resulting in approximately 4,500 new jobs. As described above, the BVDSP EIR analyzed the environmental impacts of adoption and implementation of the BVDSP and, where the level of detail available was sufficient to adequately analyze the potential environmental effects, the EIR provided a project-level CEQA review for foreseeable and anticipated development.

On September 20, 2013, the City released for public review a Draft EIR for the BVDSP. The public review and comment period on the Draft EIR extended from September 20, 2013, through November 12, 2013. The Landmarks Preservation Advisory Board (LPAB) and the City of Oakland Planning Commission held hearings on the Draft EIR, and comments received during the public review and comment period were addressed in the Final EIR for the BVDSP. Prior to adoption of the Final EIR, additional public hearings were held by both the LPAB and the Planning Commission. The Final EIR was certified by the Planning Commission on May 21, 2014, and confirmed by the City Council on June 17, 2014.

The Final EIR determined that impacts on the following resources would be less than significant or would be reduced to a less-than-significant level with the implementation of mitigation measures or compliance with the City's SCAs: aesthetics; biology; geology, soils, and geohazards; hazardous materials; hydrology and water quality; land use, plans, and policies; population, housing, and employment; public services and recreational facilities; and utilities and service systems. The Final EIR determined that implementation of the BVDSP would have significant unavoidable effects on the following environmental resources: aesthetics, shadow, and wind; air quality; cultural resources; greenhouse gases (GHGs) and climate change; noise; and transportation. Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations with findings was adopted as part of the BVDSP approval on May 21, 2014, and confirmed by City Council on June 17, 2014.

Summary of Findings

An evaluation of the proposed project is provided in the CEQA Checklist. This evaluation concludes that the proposed project qualifies for an exemption/addendum from additional environmental review. It is consistent with the development density and land use characteristics established by the City in the BVDSP, and any potential environmental impacts associated with its development were adequately analyzed and covered by the analysis in the BVDSP EIR. The proposed project will be required to comply with the applicable mitigation measures identified in the BVDSP EIR, and any applicable City SCAs (see Attachment A, *Standard Conditions of Approval and Mitigation Monitoring and Reporting Program*). With implementation of the applicable mitigation measures and SCAs, the proposed project would not result in a substantial increase in the severity of previously identified significant impacts in BVDSP EIR or in any new significant impacts that were not previously identified in the BVDSP EIR.

In accordance with California Public Resources Code Sections 21083.3, 21094.5, and 21166; CEQA Guidelines Sections 15183, 15183.3, and 15164; and as set forth in the CEQA Checklist, the proposed project qualifies for an exemption/addendum because the following findings can be made:

- The proposed project would not result in significant impacts that (1) are peculiar to the project or project site; (2) were not previously identified as significant project-level, cumulative, or offsite effects in the BVDSP EIR; or (3) were previously identified as significant effects, but which—as a result of substantial new information not known at the time the BVDSP EIR was certified—would increase in severity above that described in the EIR. Therefore, the proposed project is exempt from further environmental review in accordance with Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183.
- The proposed project would not cause any new specific effects on the environment that were not already analyzed in the BVDSP EIR or are more significant than previously analyzed in the BVDSP EIR. The effects of the proposed project have been addressed in the BVDSP EIR, and no further environmental documents are required in accordance with Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3.
- The analyses conducted and the conclusions reached in the BVDSP EIR certified by the Planning Commission on May 21, 2014, and confirmed by the City Council on June 17, 2014, remain valid, and no supplemental environmental review is required for the proposed project. The proposed project would not cause new significant impacts not previously identified in the EIR, or result in a substantial increase in the severity of previously identified significant impacts. No new mitigation measures would be necessary to reduce significant impacts. No changes have occurred with respect to circumstances surrounding the original project that would cause significant environmental impacts to which the proposed project would contribute considerably, and no new information has been put forward that shows that the proposed project would cause significant environmental impacts. Therefore, no supplemental environmental review is required beyond this addendum in accordance with Public Resources Code Section 21166 and CEQA Guidelines Sections 15164.

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

Darin Ranelletti

Environmental Review Officer

Date

CEQA CHECKLIST

Overview

This CEQA Checklist provides a summary of the potential environmental impacts that may result from adoption and implementation of the BVDSP, as evaluated in the BVDSP EIR. Potential environmental impacts of development under the BVDSP were analyzed and covered by the BVDSP EIR, and the EIR identified mitigation measures and SCAs⁸ to address these potential environmental impacts.

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

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

- Equal or Less Severity of Impact Previously Identified in BVDSP EIR;
- Substantial Increase in Severity of Previously Identified Significant Impact in BVDSP EIR; or
- New Significant Impact.

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

- Peculiar to project or project site (pursuant to CEQA Guidelines Sections 15183 or 15183.3);
- Not identified in the previous EIR (BVDSP EIR) (pursuant to CEQA Guidelines Sections 15183 or 15183.3), including offsite and cumulative impacts (pursuant to CEQA Guidelines Section 15183);
- Due to substantial changes in the project (pursuant to CEQA Guidelines Section 15162);
- Due to substantial changes in circumstances under which the project will be undertaken (pursuant to CEQA Guidelines Sections 15162); or
- Due to substantial new information not known at the time the BVDSP EIR was certified (pursuant to CEQA Guidelines Sections 15162, 15183, or 15183.3).

The proposed project is required to comply with applicable mitigation measures identified in the BVDSP EIR, and with the City's SCAs. The project applicant has agreed to incorporate and/or implement the required mitigation measures and SCAs as part of the proposed project. This CEQA Checklist includes references to the applicable mitigation measures and SCAs. A list of the

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These are Development Standards that are incorporated into projects as Standard Conditions of Approval regardless of a project's environmental determination, pursuant, in part, to CEQA Guidelines section 15183. As applicable, the Standard Conditions of Approval are adopted as requirements of an individual project when it is approved by the City and are designed to, and will, substantially mitigate environmental effects. In reviewing project applications, the City determines which of the Standard Conditions of Approval are applied, based upon the zoning district, community plan, and the type(s) of permit(s)/approvals(s) required for the project. Depending on the specific characteristics of the project type and/or project site, the City will determine which Standard Conditions of Approval apply to each project.

mitigation measures and SCAs is included in Attachment A, Standard Conditions of Approval and Mitigation Monitoring and Reporting Program, and is incorporated by reference into the CEQA Checklist analysis.

Attachments

The following attachments are included after the CEQA Checklist:

- A. Standard Conditions of Approval and Mitigation Monitoring and Reporting Program
- B. Project Consistency with Community Plans or Zoning, per CEQA Guidelines Section 15183
- C. Infill Performance Standards, per CEQA Guidelines Section 15183.3
- D. Criteria for Use of Addendum, per CEQA Guidelines Sections 15164 and 15162
- E. 23rd Street/Valdez Project Air Quality Health Risk Screening Analysis per the Broadway Valdez District Specific Plan Environmental Impact Report
- F. 23rd Street/Valdez Project Greenhouse Gases and Climate Change Screening Analysis per the Broadway Valdez District Specific Plan Environmental Impact Report

G. 23rd Street/Valdez Project – Transportation Assessment

23rd Street/Valdez Project CEQA Analysis

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

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

The BVDSP EIR determined that potential impacts on scenic vistas and resources, visual character, and lighting and glare from development under the BVDSP would be less than significant with implementation of SCAs and that no mitigation measures were necessary. The Physical Height Model analyzed in the BVDSP EIR9 represents the conceptual massing for projects to be developed under the BVDSP and served as the basis for massing, view corridor, shadow, and wind analysis performed in the EIR. The Physical Height Model accounted for 65-foot building heights (five stories) at the project site. 10 The EIR found that new structures would partially obstruct views of the sky. However, the EIR determined that such changes would not represent a substantial adverse effect on views because no views considered scenic or unique (as defined by CEQA) and no visual access to protected scenic resources (as defined by the City General Plan) would be obstructed. In addition, while adoption and development under the Specific Plan would create new sources of light or glare, these new sources would be consistent with the existing light and glare conditions in the area. The Plan area is already an urbanized environment with associated light and glare. Changes anticipated under the BVDSP would generally create a more pedestrian-oriented aesthetic in the Plan area, and the Design Guidelines would ensure that development under the BVDSP would be compatible with the existing built form and architectural character of the Plan area as a whole, and compatible with the distinctive visual character of individual areas. Development in the Plan area will be required to comply with SCAs related to landscaping, street frontages, landscape maintenance, utility undergrounding, public right-of-way improvements, and lighting plans.

Shadow (Criteria 1b through 1d)

The EIR determined that development under the BVDSP would result in less-than-significant impacts from shading, with the exception of potential shading on historic resources such that the new shadow would materially impair the resource's historic significance, including historic places of worship. The Seventh Church of Christ, Scientist, located at 2333 Harrison Street, is within the vicinity of the project site. New shadows would occur during the winter morning hours, and noon and afternoon hours year-round. However, based on observations, this church contains a relatively small amount of glass on the eastern façade, and their shading would not negatively affect the building's historic status. Therefore, no mitigation is required. Overall, new shading generated from buildout of the BVDSP would result in less-than-significant shadow impacts with the exception of potential shading on Temple Sinai, which is located over 0.25 mile northwest of the project site. Even with implementation of Mitigation Measure AES-4, shading impacts on this building would conservatively remain significant and unavoidable. To address potential cumulative impacts, Mitigation Measure AES-6 in the BVDSP requires implementation of Mitigation Measure AES-4 and AES-5 (described below) and applies to those projects to address

⁹ The Broadway Valdez Development Program represents the maximum feasible development that the City has projected can reasonably be expected to occur in the Plan Area over the next 25 years, and is thus the level of development envisioned by the Specific Plan and analyzed in the BVDSP EIR. The Broadway Valdez Development Program, together with the BVDSP height limits, maximum base heights, and step-back requirements inform the Physical Height Model, which provides the basis for analysis within the BVDSP EIR.

Note that the heights in the Physical Height Model differ from the maximum building heights for the zoning districts. The Physical Height Model, which forms the basis of the EIR analysis, shows heights that are more reasonably foreseeable than the height maximums allowed by zoning. These heights and general building envelopes depicted in the Physical Height Model are conservative in that they include slightly more building area than would be required to accommodate the maximum feasible development assumed in the EIR analysis. The D-BV-1 zoning district permits a maximum height of up to 45 feet. However, with a retail height bonus, the proposed project could be constructed to a height of 85 feet.

significant cumulative aesthetics and wind impacts. The EIR concluded that, even with implementation of Mitigation Measure AES-6, cumulative impacts would remain conservatively significant and unavoidable.

Wind (Criterion 1e)

The BVDSP EIR determined that development under the BVDSP that has a height of 100 feet or greater, and is in the portion of the Plan area designated as Central Business District (which extends north from downtown to 27th Street), could result in adverse wind conditions. Under the BVDSP EIR, Mitigation Measure AES-5: Wind Analysis, applies to those projects in the Central Business District portion of the Plan area that are over 100 feet in height. Even with implementation of Mitigation Measure AES-5, impacts would conservatively remain significant and unavoidable. To address potential cumulative impacts, Mitigation Measure AES-6 in the BVDSP requires implementation of Mitigation Measures AES-4 and AES-5 and applies to those same projects and addresses significant cumulative wind and aesthetics impacts. Even with implementation of Mitigation Measure AES-6, cumulative impacts would conservatively remain significant and unavoidable.

Project Analysis and Conclusion

The proposed project's massing would be generally within the building envelope modeled in the BVDSP EIR. The Physical Height Model accounted for 65-foot building heights (five stories) at the project site. ¹¹ The proposed project includes a building height of 75 feet (six stories). Although the proposed project would be slightly taller than analyzed in the EIR, this building would be in an area where mid- and high-rise buildings already exist to the south (both within and outside of the Plan area) and where new buildings are not expected to adversely affect views within or through the Plan area. Because the longest shadows are cast to the west of the project towards Waverly Street, the 10-foot increase in project height over the BVDSP EIR analysis would not result in substantial changes from what was modeled in the EIR. The proposed project is outside the area identified in the BVDSP EIR as having potential shading impacts on Temple Sinai and is not over 100 feet in height. For these reasons, Mitigation Measures AES-4, AES-5, and AES-6, identified in the BVDSP EIR would <u>not</u> apply.

The proposed project would be subject to the Design Guidelines. Pursuant to the Design Guidelines, the shopping streets within the Valdez Triangle (including 23rd Street, 24th Street, and Valdez Street) would be required to support a walkable, pedestrian-oriented shopping district with appropriately scaled and designed streets. This would be achieved by reducing the current right-of-way to widen sidewalks and adding amenities, such as planting, lighting, and seating. The Project would include widened sidewalks and amenities, including permeable paving, tree planting areas, lighting, and seating.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would neither substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to aesthetics, shadow, and wind that were not identified in the BVDSP EIR. In addition, no mitigation measures from the BVDSP EIR

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Note that the heights in the Physical Height Model differ from the maximum building heights for the zoning districts. The Physical Height Model, which forms the basis of the EIR analysis, shows heights that are more reasonably foreseeable than the height maximums allowed by zoning. These heights and general building envelopes depicted in the Physical Height Model are conservative in that they include slightly more building area than would be required to accommodate the maximum feasible development assumed in the EIR analysis. The D-BV-1 zoning district permits a maximum height of up to 45 feet. However, with a retail height bonus, the proposed project could be constructed to a height of 85 feet.

23rd Street/Valdez Project CEQA Analysis

related to aesthetics, shadow, and wind are necessary for the proposed project. The proposed project would be required to implement SCAs related to landscaping, street frontages, landscape maintenance, utility undergrounding, public right-of-way improvements, and lighting plans (SCA-AES-1 through SCA-AES-9), as identified in Attachment A, Standard Conditions of Approval and Mitigation Monitoring and Reporting Program.

23rd Street/Valdez Project CEQA Analysis

2.	Air Quality Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a.	During project construction result in average daily emissions of 54 pounds per day of ROG, NOx, or PM2.5 or 82 pounds per day of PM10; 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; result in maximum annual emissions of 10 tons per year of ROG, NOx, or PM2.5, or 15 tons per year of PM10; or			
b.	For new sources of Toxic Air Contaminants (TACs), during either project construction or project operation expose sensitive receptors to substantial levels of TACs under project conditions resulting in (a) an increase in cancer risk level greater than 10 in one million, (b) a noncancer risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average PM2.5 of greater than 0.3 microgram per cubic meter; or, under cumulative conditions, resulting in (a) a cancer risk level greater than 100 in a million, (b) a noncancer risk (chronic or acute) hazard index greater than 0.8 microgram per cubic meter; or expose new sensitive receptors to substantial ambient levels of Toxic Air Contaminants (TACs) resulting in (a) a cancer risk level greater than 100 in a million, (b) a noncancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average PM2.5 of greater than 10.0 in a million, (b) a noncancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average PM2.5 of greater than 0.8 microgram per cubic meter.			

Construction and Operational Emissions (Criterion 2a)

The BVDSP EIR determined that construction activities associated with development of projects under the BVDSP would generate air emissions from the use of heavy construction equipment; vehicle trips hauling materials, construction workers traveling to and from the project sites, and application of architectural coatings, such as paints, and would result in significant impacts. An SCA related to construction air pollution controls would reduce emissions from construction equipment, control fugitive dust, and reduce emissions from architectural coatings. Even with implementation of the SCA, regional emissions were conservatively estimated to exceed the BAAQMD daily significance thresholds for reactive organic gases (ROG), resulting in a significant and unavoidable impact.

The BVDSP EIR also determined operational activities associated with development in the Plan area would result in an increase in criteria air pollutant and precursor emissions from mobile on-road sources and onsite area sources, such as natural gas combustion for space and water heating and landscape maintenance, which would have a significant impact. Operational emissions of ROG, oxides of nitrogen (NOx), and particulate matter less than or equal to 10 microns in diameter (PM10) would exceed significance thresholds. An SCA that requires development of a Parking and Transportation Demand Management would reduce vehicular trips and operational emissions. Even with implementation of the SCA, this impact would conservatively remain significant and unavoidable for emissions of ROG, NOx, and PM10.

Toxic Air Contaminants (Criterion 2b)

The BVDSP EIR determined that development under the BVDSP could generate substantial levels of Toxic Air Contaminants (TACs), resulting in significant impacts from construction activities and project operations. New operational sources, such as backup diesel generators, could result in significant impacts on new and existing receptors. SCAs would reduce potential air quality impacts related to TACs by reducing construction source impacts on new and existing receptors, and requiring a Health Risk Assessment of surrounding offsite sources on new onsite sensitive receptors. The EIR also identified Mitigation Measure AIR-4: Risk Reduction Plan, which would reduce the impacts associated with new operational sources on existing sensitive receptors. Even with the SCA and Mitigation Measure AIR-4, the EIR determined that these impacts conservatively would remain significant and unavoidable.

Project Analysis and Conclusion

Construction of the proposed project would occur over approximately 24 months, and would include excavation and off-haul of up to 21,500 cy of soil. The proposed project would have a total of approximately 328,211 sf and up to 196 residential units—generating approximately 74 net new vehicle trips during the weekday a.m. peak hour (22 inbound and 52 outbound), and approximately 138 net new vehicle trips during the weekday p.m. peak hour (78 inbound and 60 outbound), as described in the Transportation and Circulation section of this CEQA Checklist. The proposed project would be required to comply with applicable SCAs related to parking demand, and construction and operation source emissions. Recommended Measures AIR-1 and AIR-2 from the BVDSP EIR would also apply, as reproduced below.¹²

The proposed project would introduce new sensitive receptors (residents) to the project site. It also would have a backup generator, thereby introducing new sources of TACs. A screening-level analysis was completed (included as Attachment E of this document), assessing the proposed project's emissions of TACs on adjacent sensitive receptors, and impacts of nearby sources of TACs on the proposed project's new residential sensitive receptors.¹³ Based on that analysis, SCAs related to construction related emissions would apply.

The proposed project would construct new residential uses, and is within 1,000 feet of stationary and roadway sources of TACs. As a result, a screening analysis was conducted to assess the cumulative cancer risk to the proposed project's receptors. Based on conservative assumptions, the cumulative cancer

Note that Recommended Measures could be incorporated as Conditions of Approval and, therefore, are not included in Attachment A.

¹³ ICF International, 2014. 23rd & Valdez Project – Air Quality Screening Analysis per the Broadway Valdez District Specific Plan Environmental Impact Report Technical Memorandum. December.

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risk would be less than 100 in one million; and the risk from the project sources, when combined with local cancer risks from cumulative sources within 1,000 feet, would be less than 100 in one million. As a result, the SCA related to preparation of a Health Risk Assessment and development and adoption of further risk reduction strategies under Mitigation Measure AIR-4 are <u>not</u> required.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to air quality that were not identified in the BVDSP EIR. Recommended Measures AIR-1 and AIR-2 from the BVDSP EIR could apply to the proposed project as a condition of approval (below), as would SCAs related to construction-related emissions controls and development Parking and Transportation Demand Management plans. The SCAs are identified in Attachment A, *Standard Conditions of Approval and Mitigation Monitoring and Reporting Program* (for reference, these are SCA-AIR-1 and SCA-TRANS-2).

Recommended Measure AIR-1: During construction, the project applicant shall require the construction contractor to use prefinished materials and colored stucco, as feasible.

Recommended Measure AIR-2: The following measures identified in the 2012 BAAQMD CEQA Guidelines for specific development projects in excess of 50,000 square feet or 325 dwelling units are recommended to be considered and if determined feasible, implemented for those projects:

- Establish a dedicated employee transportation coordinator for each specific development as a condition of occupancy permit/tenancy contract;
- Increase building energy efficiency by 20 percent beyond 2008 Title 24 (reduces NOX related to natural gas combustion);
- Require use of electrically powered landscape equipment;
- Require only natural gas hearths in residential units as a condition of final building permit;
- Use low VOC architectural coatings in maintaining buildings;
- Require smart meters and programmable thermostats; and
- Install solar water heaters for all uses.

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

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

As described in the BVDSP EIR, the Plan area is within and surrounded by a fully developed urban environment, and impacts of development on biological resources under the BVDSP would be less than significant. Few special-status animals are present in and around the Plan area, and no aquatic habitats or jurisdictional waters that could support migratory fish or birds are present. In addition, the Project area is not part of an established native resident or migratory wildlife corridor. There are no natural sensitive communities in the Plan area, and the nearest riparian habitat is at Glen Echo Creek, between 28th and

30th streets along the eastern boundary of the Plan area. Potential increases in transmittal of hazardous materials from construction activities via runoff from the impermeable surfaces of the site could result in adverse impacts on wetlands and/or other waters within the Plan area. The BVDSP EIR identified landscape trees in the Plan area as potential nursery sites for nesting birds. In addition, projects developed under the BVDSP could cause harm to birds by increasing bird collisions with buildings.

Development in the Plan Area will be required to comply with SCAs related to removal and replacement of trees, including trees on creekside properties; protection of nesting birds during the breeding season, which would protect natural resources from potential degradation that could result from construction of development projects under the Plan area; and tree protection during construction. SCAs pertaining to landscaping and vegetation management on creekside properties; protection of creeks from construction vibration, dewatering, and diversion; hazard materials management; and stormwater and erosion control would ensure that development under the BVDSP is in compliance with all aspects of the Creek Protection Ordinance, reduce the potential impacts on water quality, and minimize potential indirect impacts from pollution in Glen Echo Creek. An SCA pertaining to reducing bird collisions with buildings would reduce potential impacts on birds by constructing features in compliance with best management practice (BMP) strategies to limit bird strikes.

Project Analysis and Conclusion

The project site is located in an urban setting and currently includes a surface parking lot and buildings. Vegetation is limited to ruderal weeds growing between the cracked pavement and small shrubs along the perimeter adjacent to the residential properties on Waverly Street. The project site is comprised of approximately 55,100 sf of impervious surfaces (100 percent). Implementation of the proposed project would decrease impervious surfaces with increased landscaping. The proposed project would remove the existing limited vegetation and include landscaping on the podium-level courtyards and potentially on the rooftop. Raised infiltration planters for stormwater management would be included in the podium-level courtyards as needed. A mixture of raised planters, vegetated roof areas, decking pavers on pedestals, and windscreens would be provided on the rooftop areas. In addition, the sidewalk along Valdez Street would be improved with new street trees.

The project site is not adjacent to the Glen Echo Creek corridor. However, potential increases in transmittal of oil, diesel fuel, transmission fluids, and other toxic materials from construction activities via runoff from the impermeable surfaces of the site, could result in significant adverse impacts on waters within the Plan area.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would neither substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to biological resources that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any mitigation measures related to biological resources, and none would be needed for the proposed project. SCAs related to tree removal and replacement, bird protection, erosion control, stormwater management, and hazardous materials (SCA-BIO-1 through SCA-BIO-4, SCA-HAZ-12, and SCA-HYD-5 through SCA-HYD-8), identified in Attachment A, Standard Conditions of Approval and Mitigation Monitoring and Reporting Program, would apply to the proposed project, thereby reducing impacts to a less-than-significant level.

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

Historical Resources (Criterion 4a)

The BVDSP EIR found that development under the BVDSP could result in the physical demolition, destruction, relocation, or alteration of historical resources that are listed in or may be eligible for listing in the federal, state, or local registers of historical resources, which would be considered a significant impact. The Plan area contains 20 individual properties, including two in an Area of Primary Importance (API)¹⁴ that are considered historical resources for CEQA purposes. There are also many older buildings that possess architectural merit, located in Areas of Secondary Importance (ASI)¹⁵ or that stand alone and that contribute to the variety and texture of the Plan area. In addition to the proposed land use changes represented in the Physical Height Model analyzed in the EIR, three parcels

¹⁴ Area of Primary Importance is an area or district that appears eligible for the National Register of Historic Places and is considered a historical resource under CEQA.

¹⁵ Area of Secondary Importance is an area or district that is of local interest but is not eligible for the National Register of Historic Places and is not considered a historical resource under CEQA.

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having CEQA historical resources—the Connell Building at 3903 Broadway; the Seventh Church of Christ, Scientist at 2333 Harrison Street; and the Newsom Apartments at 2346 Valdez Street—are specifically analyzed in the EIR. The demolition or substantial alteration of these properties, resulting from adoption of and development under the BVDSP, was identified as a significant impact under CEQA.

Although directly adjacent to the Newsom Apartments, none of the buildings at the project site was included in the historical resources inventory completed for the BVDSP EIR. In addition, the City has identified the Waverly Street District, which is also adjacent to the project site, as an ASI, indicating that it contains a group of older buildings that, while not considered eligible for the National Register of Historic Places either individually or as a group, may have local importance that is worthy of recognition. The Newsom Apartments is a contributor to this district.¹⁶

The EIR identified Mitigation Measure CUL-1 to reduce the impacts on historical resources throughout the Plan area, as well as the site-specific impacts associated with the demolition of individual historical resources. The EIR determined that if demolition or substantial alteration of historically significant resources is identified by the City as the only feasible option for development in the Plan area, impacts would be significant and unavoidable, even after implementation of Mitigation Measure CUL-1. In addition, the EIR concluded that incompatible new construction immediately adjacent to historical resources, as well as inappropriate reuse of such resources, could result in significant impacts in the Plan area. Implementation of Plan policies such as LU-10.7, which encourages sensitive integration of new development in the immediate vicinity of historic buildings, would reduce impacts on adjacent historic resources to a less-than-significant level. However, for new development on parcels across Webster Street, northeast of the Temple Sinai, shadows could impact the historic integrity of this building, resulting in significant and unavoidable impacts.

The BVDSP EIR determined that significant cumulative impacts on historical resources could result from development of projects under the BVDSP, and identified Mitigation Measure CUL-5, which would require implementation of Mitigation Measure CUL-1. However, even with implementation of Mitigation Measure CUL-5, the EIR determined that cumulative impacts would remain significant and unavoidable.

Archaeological and Paleontological Resources (Criteria 4b and 4c)

No known archaeological resources have been recorded in the Plan area; however, the EIR found that the Plan area is potentially sensitive for archaeological and buried sites that are not visible due to urban development. The EIR determined that implementation of an SCA, which would ensure that resources are recovered and that appropriate procedures are followed in the event of accidental discovery, would minimize potential risk of impact on archaeological resources to a less-than-significant level.

The Plan area was also identified as having low to moderate paleontological sensitivity, and it is possible that fossils would be discovered during excavation in the Plan area. Implementation of an SCA, which would require a qualified paleontologist to document a discovery and that appropriate procedures be followed in the event of a discovery, would ensure that the potential impact on fossils discovered in the rock units would be less than significant.

¹⁶ Environmental Science Associates. 2013. Broadway Valdez District Specific Plan Draft Environmental Impact Report. September 2013.

Human Remains (Criterion 4d)

Although the BVDSP EIR did not identify any locations of buried human remains in the Plan area, the inadvertent discovery of human remains during ground-disturbing activities cannot be entirely discounted. In the event that human remains are discovered during excavation, implementation of an SCA, which would ensure that the appropriate procedures for handling and identifying the remains are followed, would reduce impacts to a less-than-significant level.

Project Analysis and Conclusion

Historic Architectural Resources. The proposed project would not include the demolition or substantial alteration of any historic buildings, as identified in the BVDSP EIR. Although the existing buildings at the project site were constructed in 1920 and 1925, these buildings were not listed as CEQA resources in the Broadway Valdez Specific Plan Historic Resources Inventory, conducted in 2009. Although this inventory was conducted a few years ago, the buildings were already 50 years at the time of the inventory and nothing of historical significance has occurred at these buildings since. Therefore, demolition of the existing buildings would not result in a significant impact and Mitigation Measures CUL-1 and CUL-5, as outlined in the BVDSP EIR would not buildings would not buildings would not result in a significant impact and Mitigation Measures CUL-1 and CUL-5, as outlined in the BVDSP EIR would not buildings would <a href="mailto:not b

However, as described above, the project would be constructed adjacent to the Newsom Apartments (a historic resource under CEQA) and the Waverly Street District (an ASI). Therefore, SCA 57 would apply since it requires the protection of adjacent historic structures from vibration impacts. In addition, as stated in the BVDSP, implementation of Plan Policies such as LU-10.7, which encourages sensitive integration of new development in the immediate vicinity of historic buildings, would reduce impacts on adjacent historic resources to a less-than-significant level. Therefore, with implementation of SCA 57 and LU-10.7, the proposed project would result in less-than-significant impacts on historic resources.

Archaeological and Paleontological Resources and Human Remains. The proposed project would entail excavation up to approximately 13 feet below grade, as described in the Project Description, above. Based on the results of the Geotechnical Report prepared for the proposed project,¹⁷ the underlying geology of the project site comprises two to five feet of fill (silt, sand, and clay mixtures) on top of medium-dense to very dense silty and clayey sand and medium stiff to had silt and clay with varying amounts of sand and gravel. Based on the BVDSP, the geology at the Project site includes Pleistocene bay terrace deposits. In the San Francisco Bay Area, such soils have been found to contain often deeply buried prehistoric archaeological resources, therefore, are considered to be of elevated archaeological sensitivity. However, implementation of SCAs associated with archaeological and paleontological resources and human remains would reduce impacts to a less-than-significant level.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to cultural resources that were not identified in the BVDSP EIR. The project would be required to implement SCAs related to vibration adjacent to historic structures, and accidental discovery of archeological and paleontological resources and human remains, as identified in Attachment A, Standard Conditions of Approval and Mitigation Monitoring and Reporting Program (for reference, these SCA-CUL-1 through SCA-CUL-4).

¹⁷ Langan Treadwell Rollo. 2014. Subsurface Conditions and Liquefaction Potential. Memorandum to Wood Partners. November 5.

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

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

The BVDSP EIR determined that very strong ground shaking and associated liquefaction in certain soils could expose people to injury or harm during earthquakes. In addition, the soils in the Plan Area are largely composed of artificial fill material overlying natural deposits of Bay Mud. The northern half of the Plan Area is primarily underlain by streambed deposits. The BVDSP identified the artificial fills and expansive soils underlying the Plan Area as presenting a potential hazard due to the possibility of shrinkswell behavior and soil compression.

Development proposed under the BVDSP would avoid and minimize potential geologic impacts through compliance with local and state regulations governing design and construction practices, such as the Seismic Hazards Mapping Act (in liquefaction hazard zones), the California Building Code (CBC), and the SCAs. Implementation of SCAs that require the preparation of soils and geotechnical reports specifying generally accepted and appropriate engineering techniques, would reduce potential impacts to less-than-significant levels.

The BVDSP EIR identified no impacts related to substantial soil erosion or loss of topsoil, because the Plan Area is in a developed urban area that is paved or landscaped, and served by a storm drain system. In addition, implementation of SCAs to reduce soil erosion during construction would prevent excessive rilling or rutting of soil on construction sites.

Project Analysis and Conclusion

The proposed project would require excavation of up to 21,500 cy of soil. A grading permit would be required because the proposed project would entail excavation of more than 500 cy of soil. The proposed project would be required to comply with local and state construction requirements in the design and building of the proposed project, including the CBC.

A memorandum was prepared to present a summary of the subsurface conditions at the project site as well as analyze the liquefaction potential at the project site.¹⁸ Four borings (designated A-1 through A-4) were drilled at the project site to depths of 35 feet below ground surface (bgs). The field investigation indicated the project site is blanketed by approximately 2 to 5 feet of fill, which is comprised of silt, sand, and clay mixtures. The fill is generally underlain by interlayered medium dense to very dense silty and clayey sand and medium stiff to hard silt and clay with varying amounts of sand and gravel. Gravel was encountered intermittently. In the northeastern portion of the project site, a thick layer of medium stiff to very stiff sandy silt to silty clay was encountered at depths of 13 and 18 feet to the maximum depth explored of 50 feet bgs, which was distinctly different than the other layers of the onsite material. Groundwater was encountered in each of the previously installed groundwater monitoring wells at the project site at various depths ranging from 13.5 bgs to 16 feet bgs. Groundwater was encountered in borings A-1 through A-4 at 18, 16, 18, and 8 feet bgs (elevation 1 to 5 feet), respectively.¹⁹ With respect to liquefaction potential, the memorandum determined that settlement on the order of 2.75 inches could occur in the northeastern portion of the project site.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to geology, soils, and geohazards that were not identified in the BVDSP EIR. As stated in the EIR, for areas located in a liquefaction hazards zone (such as the northeastern portion of the project site), new development would be required to comply with the Seismic Hazards Mapping Act and the CBC. Therefore, application of current seismic design criteria required under the CBC would reduce potential impacts associated with liquefaction. The BVDSP EIR did not identify any mitigation measures related to geology, soils, and geohazards, and none would be needed for the proposed project. SCAs related to erosion, grading, and sedimentation control (SCA-GEO-1, SCA-GEO-2, and SCA-HYD-5), as identified in Attachment A, Standard Conditions of Approval and Mitigation Monitoring and Reporting Program, would apply.

 $^{^{18} \}quad Langan\ Treadwell\ Rollo.\ 2014.\ Subsurface\ Conditions\ and\ Lique faction\ Potential.\ Memorandum\ to\ Wood\ Partners.\ November\ 5.$

¹⁹ Elevations are based on the City of Oakland datum.

6.	Greenhouse Gas and Climate Change Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, specifically: • For a project involving a land use			
	development, produce total emissions of more than 1,100 metric tons of CO ₂ e annually AND more than 4.6 metric tons of CO ₂ e per service population annually. The service population includes both the residents and the employees of the project. The project's impact would be considered significant if the emissions exceed BOTH the 1,100 metric tons threshold and the 4.6 metric tons threshold. Accordingly, the impact would be considered less than significant if the project's emissions are below EITHER of these thresholds.			
b.	Conflict with applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.			

Greenhouse Gas Emissions (Criterion 6a and 6b)

The BVDSP EIR evaluated impacts related to GHG emissions from construction and operation anticipated under the BVDSP. The EIR identified motor vehicle use, water, gas, electrical use, loss of vegetation, and construction activities as contributing to generation of GHG emissions under the implementation of the BVDSP. Future projects and development implemented under the BVDSP would be required to be consistent with the *City of Oakland Energy and Climate Action Plan* (CAP) and other applicable plans, policies, or regulations adopted for the purpose of reducing greenhouse gas emissions. In addition, future development would also be required to adhere to the SCAs that would reduce GHG emissions during construction and operation of projects. Even with implementation of SCAs, the BVDSP EIR determined that GHG impacts would conservatively remain significant and unavoidable.

Project Analysis and Conclusion

A GHG screening analysis was prepared to determine whether the SCA requiring a GHG reduction plan applies to the proposed project. The GHG reduction plan SCA applies to projects of a certain minimum size that produce total GHG emissions exceeding one or both of the Bay Area Air Quality Management District (BAAQMD) CEQA thresholds; and that would potentially result in a significant impact. The screening analysis (included as Attachment F of this document) determined that the proposed project would not fall under any of the three scenarios that would require development of a GHG reduction plan

under the SCA.²⁰ The proposed project would, therefore, be consistent with the City's CAP, as well as the BVDSP, and a GHG reduction plan is not required. The project would also not conflict with current City Sustainability Programs, or General Plan policies or regulations regarding GHG reductions and other local, regional, and statewide plans, policies, and regulations that are related to reduction of GHG emissions.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would neither substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to GHGs and climate change that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any mitigation measures related to GHGs, and no mitigation measures are necessary for the proposed project. In addition, no SCAs related to GHGs are necessary for the proposed project.

²⁰ ICF International. 2014. 23rd Street/Valdez Project – Final Greenhouse Gases and Climate Change Screening Analysis per the Broadway Valdez District Specific Plan Environmental Impact Report. December.

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

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

The BVDSP EIR determined that development under the BVDSP could result in construction activities that use hazardous materials, as well as ongoing commercial activities that employ hazards or involve the use of hazardous chemicals. Construction activities could generate chemical wastes that, if not properly managed, could flow into the storm drainage system or nearby surface water bodies, which are listed as impaired water bodies by the State Water Resources Control Board (State Water Board). Therefore, adoption and development under the BVDSP could potentially result in impacts from hazards or hazardous materials. All hazardous materials would be transported to the Plan area in accordance with applicable hazardous materials shipping regulations. Hazardous materials and waste would be

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delivered, stored, and handled in accordance with the Hazardous Materials Management Plan and Inventory (HMMP). In addition, ongoing commercial, retail and residential activities in the Plan area involve the use of chemical compounds and products that are considered hazardous materials. Therefore, adoption and development under the BVDSP could require the transportation, use, and storage of additional quantities of hazardous materials to new businesses and entities.

Adoption and development under the BVDSP could require construction activities that would use certain hazardous materials such as fuels, oils, lubricants, solvents, and glues. Inadvertent release of large quantities of these materials into the environment could adversely impact soil, surface waters, or groundwater quality. Compliance with standards set forth in the Oakland Urban Land Redevelopment Program would ensure any developed site undergoes risk-based corrective action. In addition, the BVDSP EIR determined that demolition under the BVDSP could result in disturbance of hazardous building materials, such as lead-based paint, asbestos, and polychlorinated biphenyls (PCBs). Potential exposure to these hazardous building materials would be reduced through appropriate identification, removal and disposal according to applicable regulations.

Implementation of SCAs pertaining to BMPs for hazardous materials; removal of asbestos and lead-based paint; and other hazardous materials and wastes, including those found in the soil and groundwater, would reduce impacts to less-than-significant levels.

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

There are no schools in the Plan area. However, there are five schools or daycare facilities within 0.25 mile of the Plan area. Development under the BVDSP would be required to comply with the City of Oakland's Ordinances and General Plan Policies, which require hazardous material handlers within 1,000 feet of a school or other sensitive receptor to prepare a Hazardous Materials Assessment Report and Remediation Plan. In addition, those handling or storing hazardous materials would be required to prepare a HMMP and Hazardous Materials Business Plan, as required by Alameda County and an SCA. Preparation of these plans would reduce impacts to less-than-significant levels.

Emergency Access Routes (Criterion 7c)

The BVDSP EIR determined that construction under the BVDSP that would result in temporary road closures, which would require traffic control plans to ensure at least two emergency access routes are available for streets exceeding 600 feet in length, pursuant to City of Oakland's Ordinances and General Plan Policies. Compliance with all applicable requirements would reduce potential impacts to a less-than-significant level.

Project Analysis and Conclusion

A review of available environmental databases was conducted for the proposed project.^{21,22,23} The review indicated that the site of the existing building at the corner of 23rd Street/Valdez Street was a leaking underground storage tank (LUST) site, which posed a risk for groundwater contamination. The two underground storage tanks (USTs) were removed from the property in February 1988 and the site received regulatory closure from Alameda County Department of Environmental Health Services in 1998 for the current site use. Constituents identified during subsurface investigation in 2014 were well below

²¹ Environmental Data Resources, Inc. 2014. The EDR Radius Map Report with GeoCheck. November 14.

²² Langan Treadwell Rollo. 2014. "Phase I Environmental Site Assessment: 2342 Valdez Street, Oakland, California." November 13.

²³ Langan Treadwell Rollo. 2014. "Environmental Site Characterization: 2302-2332 Valdez Street and 2321-2335 Waverly Street, Oakland, California." October 22.

the criteria supporting closure in 1998 and are commonly associated with LUSTS.²⁴ As of October 16, 2014, a Site Cleanup Program case began providing regulatory oversight for the site to review current site conditions and land use restrictions that were placed on the site at the time of a fuel leak case at the site in July 1998.²⁵ The proposed project would be required to comply with the determinations of the Site Cleanup Program.

The Phase I ESA conducted for the project site notes that at the time of closure the final levels of contamination consist of 655 parts per billion (ppb) or micrograms per liter (µg/L) of total petroleum hydrocarbons (TPH) as gasoline (TPHg) and 630 ppb, 49 ppb, 21 ppb, and 130 ppb of benzene, toluene, ethylbenzene, and xylenes (BTEX), respectively. It should be noted that the 665 ppb TPHg concentration detected in groundwater was reported incorrectly in the case closure summary and the correct TPHg concentration detected in groundwater was 3,500 ppb. The Phase I ESA went on to recommend that a Phase II subsurface investigation be completed in order to evaluate the current subsurface site conditions.²⁶ Therefore, the project sponsor conducted a Phase II ESA in compliance with the Phase I ESA recommendations and in accordance with SCA-HAZ-3.

The Phase II ESA found soluble lead concentrations in fill material exceeding the State of California waste criteria at a depth of between 1.5 and 5.0 bgs. Considering that the proposed project's projected excavation depth would be approximately ten feet below grade, this contamination in the shallow material is expected to be excavated and disposed as Class I hazardous waste. The remaining fill and native material to be excavated would likely be disposed of as unrestricted waste. Soil vapor and sub-slab vapor tests were also conducted with benzene being the only compound detected above its residential environmental screening level (ESL). Based on the proposed soil excavation, the singular soil vapor exceedance, and the design plan for the project site, a vapor mitigation system (VMS), is not required. Groundwater samples in the project area were found to contain TPHg, TPHd, benzene, and naphthalene exceeding RWQCB ESLs. However, after additional groundwater purging and sampling, the concentrations of TPHg and TPHd levels were reduced and benzene and naphthalene were no longer detected. Based on the soil and groundwater results in the Phase II ESA, and past monitoring events, the previously approved remediation activities at the project site have removed the primary source of petroleum hydrocarbons, although low levels still exist off-site.

Because hazardous materials were detected at the project site, the Phase II concludes that a soil management plan (SMP) and a health and safety plan (HASP) shall be prepared prior to construction. The SMP would provide recommended measures to mitigate the long-term environmental or health and safety risks caused by the presence of hazardous materials in the soil. The SMP would also contain contingency plans to be implemented during soil excavation if unanticipated hazardous materials are encountered. The HASP would outline proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction.²⁷ The project sponsor would implement the recommendations in the Phase II ESA, per SCA-HAZ-5.

The review of available environmental databases indicated that the project site was not identified on any other databases. The proposed project would not substantially change the surrounding streets or roadways, or limit emergency access or plans. Any temporary roadway closures required during construction of the proposed project would be subject to City review and approval, to ensure consistency

Locke & Lord, LLP. Memorandum from Elizabeth Mack to Brian Pianca. "Wood Partners" ("Wood Partners"): 2302-2332 Valdez Street and 2321-2335 Waverly Street, Oakland, CA (the "Site") UPDATED." December 17, 2014.

²⁵ Alameda County Health Care Services Agency. 2014. New Site Cleanup Program Case No. RO0003149, Tribune Site Reuse, 2302 Valdez Street, Oakland, CA 94612. October 16.

²⁶ Langan Treadwell Rollo. 2014. "Phase I Environmental Site Assessment: 2342 Valdez Street, Oakland, California." November 13.

²⁷ Langan Treadwell Rollo. 2014. "Environmental Site Characterization: 2302-2332 Valdez Street and 2321-2335 Waverly Street, Oakland, California." October 22.

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with City requirements. Adoption and development under the BVDSP, including the proposed project, would not impede an emergency access routes, result in permanent road closures, or physically interfere with emergency response or evacuation plans. However, the design of the two project driveways may not provide adequate sight distance between exiting motorists and pedestrians on adjacent sidewalks.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would neither substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to hazards and hazardous materials that were not identified in the BVDSP EIR. Although the project site is not listed in the BVDSP EIR as a LUST site due to the programmatic nature of the analysis, the SCAs as outlined in the BVDSP EIR would be applicable to the project site and reduce any potential impacts to less than significant. In particular, SCA-HAZ-3 requires a Phase I and Phase II (if needed) Environmental Site Assessment (ESA), which would make recommendations for remedial action. SCA-HAZ-5 requires consultation with appropriate agencies and approval of remediation actions.

No additional mitigation measures would be needed for the proposed project with regard to hazardous materials. SCAs related to asbestos removal; lead-based paint/coatings; PCBs; Environmental Site Assessment reports and remediation; health and safety plans; groundwater and soil contamination; hazardous materials business plans; and site review by the Fire Services Division (SCA-HAZ-1 through SCA-HAZ-12), as identified in Attachment A, Standard Conditions of Approval and Mitigation Monitoring and Reporting Program, would apply to the proposed project. The transportation and circulation recommendations in Attachment G are recommended (although not required) and would reduce potential driveway visibility hazards; these are expected to be implemented as a condition of approval.

23rd Street/Valdez Project CEQA Analysis

8.	Hydrology and Water Quality Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a.	Violate any water quality standards or waste discharge requirements; Result in substantial erosion or siltation on- or off-site that would affect the quality of receiving waters; Create or contribute substantial runoff which would be an additional source of polluted runoff; Otherwise substantially degrade water quality; Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect hydrologic			
b.	resources. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or proposed uses for which permits have been granted);			
c.	Create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems; Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course, or increasing the rate or amount of flow, of a creek, river, or stream in a manner that would result in substantial erosion, siltation, or flooding, both on- or off-site			
d.	Result in substantial flooding on- or off-site; Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, that would impede or redirect flood flows; Place within a 100-year flood hazard area structures which would impede or redirect flood flows; or Expose people or structures to a substantial risk of loss, injury, or death involving flooding.			

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

The BVDSP EIR determined that development in the Plan area would result in construction activities that would require ground disturbance, resulting in impacts on hydrology and water quality. The BVDSP EIR identified several SCAs that would reduce impacts to a less-than-significant level by minimizing runoff and erosion, as well as sedimentation and contamination to stormwater and surface water during construction activities.

Use of Groundwater (Criterion 8b)

Potable water is supplied to the Plan area through imported surface water by EBMUD, and groundwater is generally not used in the Plan area. The Plan area is primarily developed and covered in impervious surfaces, and the amount of water able to infiltrate the aquifer in the East Bay Plain groundwater basin would not substantially decrease with development under the BVDSP. Additionally, compliance with the C.3 provisions of the National Pollutant Discharge Elimination System Municipal Stormwater Permit for the Alameda County Clean Water Program would require that recharge rates at a project site be equivalent to the recharge rate at the site prior to development.

Flooding and Substantial Risks from Flooding (Criterion 8d)

The BVDSP EIR identified a small area by the easternmost part of the Plan area along Glen Echo Creek as being located within the 100-year flood zone, with the rest of the Plan area lying outside of the 100-year flood zone. SCAs that require regulatory permits prior to construction within a floodway or floodplain, along with preparation of hydrological calculations that ensure that structures will not interfere with the flow of water or increase flooding, would reduce impacts to less-than-significant levels. In addition, the Plan area would not be susceptible to mudflow, and seiche waves would not be a risk in the Plan area because the relatively shallow depth of water within Lake Merritt would not result in significant seicherelated impacts during a seismic event. The Plan area is located in an inland area that is not susceptible to tsunamis. However, strong ground shaking caused by an earthquake could damage a local dam or reservoir, resulting in failure and downstream flooding. As shown in Figure 4.8-2 of the BVDSP EIR, the eastern portion of the Plan area could experience flooding if up to two of the EBMUD reservoirs experience dam failure. However, impacts on future project would be less than significant.

Project Analysis and Conclusion

The project site is located in an urban setting and currently includes a surface parking lot and buildings. Vegetation is limited to ruderal weeds growing between the cracked pavement and small shrubs along the perimeter adjacent to the residential properties on Waverly Street. The project site is comprised of approximately 55,100 sf of impervious surfaces (100 percent). The Project would remove the existing limited vegetation and include landscaping on the podium-level courtyards and potentially on the rooftop. Raised infiltration planters for stormwater management in compliance with the C.3 provisions of the National Pollutant Discharge Elimination System Municipal Stormwater Permit would be included in the podium-level courtyards as needed. A mixture of raised planters, vegetated roof areas, decking pavers on pedestals, and windscreens would be provided on the rooftop areas. In addition, the sidewalk along Valdez Street would be improved with new street trees.

As shown in Figure 4.8-1 of the BVDSP EIR, the project site would be outside of the 100-year flood zone; therefore, no impacts are expected to result. However, the project site is within an area that could experience flooding if up to two EBMUD reservoirs experience dam failure. The Safety Element of the General Plan policies state that the City will "minimize further the relatively low risks from non-storm-

related forms of flooding" by requesting from the state Division of Safety of Dams (DSOD) a timeline for the maintenance inspection of all operating dams in the City and reviewing procedures adopted by the City pursuant to the Dam Safety Act for the emergency evacuation of areas located below major water-storage facilities. DSOD requires all dam operators to comply with annual inspections and seismic standards that minimize the potential for a catastrophic failure of the dam. Due to DSOD regulatory oversight, monitoring, and design review, the potential for the catastrophic failure of a properly designed and constructed dam is minimal, whether caused by a seismic event, flood event, unstable slope conditions, or damage from corrosive or expansive soils. Continued compliance with the City General Plan policies would reduce potential flooding related to dam failure to a less-than-significant level.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to hydrology and water quality that were not identified in the BVDSP EIR. The BVDSP EIR identified no mitigation measures related to hydrology and water quality, and no mitigation measures would be required for the proposed project. The proposed project would be required to implement SCAs related to stormwater, drainages and drainage patterns, and water quality (SCA-HYD-1 through SCA-HYD-8), as identified in Attachment A, *Standard Conditions of Approval and Mitigation Monitoring and Reporting Program*.

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

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

The BVDSP EIR determined that adoption and implementation of the BVDSP would have less-thansignificant land use impacts related to the division of an established community, potential conflicts with nearby land uses, or applicable land use plans, policies, and regulations. The Plan area is in Oakland's Downtown Showcase District, an area intended to promote a mixture of vibrant and unique uses with around-the-clock activity, continued expansion of job opportunities, and growing residential population.

Project Analysis and Conclusion

The proposed project would include up to 196 residential units and approximately 31,500 sf of retail; therefore, it is within the development maximums analyzed in the BVDSP, which considered 1,030 residential units and 794,000 sf of retail in the Valdez Triangle subarea. However, for the specific project site, the proposed project would not be developed as outlined in the BVDSP. As mentioned above, the project site is within the Valdez Triangle and within a Retail Priority Site, meaning that there are restrictions on residential activities in favor of development of retail uses. The project site must include at least 45,905 sf of retail before the project can be entitled to a "residential facilities bonus." The Project proposes approximately 31,500 sf of retail due to site constraints; therefore, the Project requires a Conditional Use Permit (CUP) to grant the allowance of less retail than the minimum requirement and to allow for the proposed number of residential units.

The proposed project would be consistent with the allowed development in the D-BV-1 zoning district with application of the residential facilities bonus. The permitted FAR is 8.0 for the non-residential areas. The proposed building would be constructed at a 5.95 FAR. In general, maximum heights are permitted to 45 feet. However, with a retail height bonus, the proposed project could be constructed to a height of 85 feet. Therefore, since the project proposes a height of 75 feet, the height and FAR is consistent with the allowed development in the D-BV-1 zoning district.

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Although a CUP would be required for the amount of housing, amount of retail, and the height, based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR. In addition, the proposed project would not result in new significant impacts related to land use, plans, and policies that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any SCAs or mitigation measures related to land use, and no SCAs or mitigation measures are necessary for the proposed project.

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10.	Noise Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a.	Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding construction noise, except if an acoustical analysis is performed that identifies recommend measures to reduce potential impacts. During the hours of 7 p.m. to 7 AM on weekdays and 8 p.m. to 9 a.m. on weekends and federal holidays, noise levels received by any land use from construction or demolition shall not exceed the applicable nighttime operational noise level standard; Generate noise in violation of the City of Oakland nuisance standards (Oakland Municipal Code Section 8.18.020) regarding persistent construction-related noise;			
b.	Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding operational noise;			
c.	Generate noise resulting in a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or, if under a cumulative scenario where the cumulative increase results in a 5 dBA permanent increase in ambient noise levels in the project vicinity without the project (i.e., the cumulative condition including the project compared to the existing conditions) and a 3-dBA permanent increase is attributable to the project (i.e., the cumulative condition including the project compared to the cumulative baseline condition without the project);			
d.	Expose persons to interior L _{dn} or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories and long-term care facilities (and may be extended by local legislative action to include single-family dwellings) per California Noise Insulation Standards (CCR Part 2, Title 24); Expose the project to community noise in conflict with the land use compatibility guidelines of the Oakland General Plan after incorporation of all applicable Standard Conditions of Approval (see Figure 1); Expose persons to or generate noise levels in excess of applicable standards established by a regulatory agency (e.g., occupational noise standards of the Occupational Safety and Health Administration [OSHA]); or			

10.	Noise Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
e.	During either project construction or project operation expose persons to or generate groundborne vibration that exceeds the criteria established by the Federal Transit Administration (FTA).			

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

Overall, the BVDSP EIR determined that noise impacts related to construction and operations of development under the BVDSP would be less than significant. Construction-related activities associated with development under the BVDSP would temporarily increase ambient noise levels and vibration. Implementation of SCAs would minimize construction noise impacts by limiting hours of construction activities; require best available noise control technology; require vibration monitoring for activities adjacent to historic structures; and require a project applicant and/or its contractors to notify any local residents of construction activities, and to track and respond to noise complaints.

During operations, mechanical equipment used in projects developed under the BVDSP would generate noise; however, equipment would be standardized and required to comply with the City of Oakland Noise Ordinance. Potential impacts would be reduced with implementation of SCAs that would require that project design achieve acceptable interior noise levels for buildings, limit groundborne vibration at the project site, and require mechanical equipment comply with applicable noise performance standards.

As described in the BVDSP EIR, noise measurements taken at various locations in the Plan area indicate that the ambient noise environment in the Plan area would be in the conditionally acceptable category for residential uses and in the normally acceptable category for commercial uses, except for 24th Street, 25th Street, and Brooks Street in the Plan area. At these three locations, the noise environment would be in the normally acceptable category for residential uses. The BVDSP EIR identified an SCA that would ensure that project components are appropriately sound-rated to meet land use compatibility requirements throughout the Plan area.

Traffic Noise (Criterion 10c)

The BVDSP EIR determined that development under the BVDSP would increase noise levels adjacent to nearby roads due to additional vehicles traveling throughout the Plan area. The increase in traffic noise from the existing plus project scenario as compared to existing conditions would increase peak hour noise levels by less than 5 A-weighted decibels (dBA) at all studied roadway segments, with the exception of 24th Street east of Broadway and 26th Street east of Broadway, where the increase in roadside noise would be 6.4 and 5.1 dBA, respectively. In addition, the increase in traffic noise between the Cumulative No Project (2035) and cumulative plus project (2035) scenarios would be 5.3 dBA along 24th Street east of Broadway and 4.9 dBA along 26th Street east of Broadway. The cumulative increases in traffic-generated noise could also combine with stationary noise sources, such as rooftop mechanical equipment and back-up generators, to result in significant cumulative impacts. The BVDSP EIR determined that no feasible mitigation measures are available and that these impacts would remain significant and unavoidable.

Project Analysis and Conclusion

Project construction would begin with the demolition of the two existing buildings on the project site. Demolition would involve abating any hazards present within either building, demolishing and removing the existing structures, and removing the existing foundation slabs and underground utilities. Project construction is estimated to take place for about 24 months. The proposed project would be constructed in the following phases: demolition of existing buildings and mass excavation; construction of the mixed-use building; site improvements; and commissioning, testing, and final inspection. Construction of the proposed project would result in a temporary increase in ambient noise levels and vibration, similar to other development under the BVDSP.

During operation, the proposed project would use mechanical equipment (including emergency generators) and would result in the increase of traffic on nearby roadways, including 24th Street. As stated above, development under the BVDSP would result in traffic noise along 24th Street, which would exceed the City of Oakland's CEQA threshold. The proposed project, on its own, would not cause an exceedance of this threshold but would contribute to the overall noise increases expected to occur with buildout of the BVDSP. Regardless, the noise increases associated with the proposed project were considered in the BVDSP EIR. The proposed project would not further increase the severity of the significant and unavoidable traffic noise impact along 24th Street analyzed in the BVDSP EIR.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would neither increase the severity of significant impacts identified in the EIR, nor would it result in new significant impacts related to noise that were not identified in the EIR. The BVDSP EIR did not identify any mitigation measures related to noise, and no mitigation measures would be necessary for the proposed project. The proposed project would be required to implement SCAs to reduce construction noise and vibration, achieve interior noise standards, and require mechanical equipment to meet applicable noise performance standards (SCA-NOI-1 through SCA-NOI-6 and SCA-CUL-4), as identified in Attachment A, Standard Conditions of Approval and Mitigation Monitoring and Reporting Program.

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

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

The BVDSP EIR determined that impacts related to population growth and displacement of housing and people would be less than significant. Development under the BVDSP would add up to 1,800 housing units and 3,230 residents to the Plan area. This would represent approximately 2 percent of the total population growth projected for Oakland between 2010 and 2035 and would not be considered substantial. Although adoption and development under the BVDSP could require the demolition of existing housing units, existing regulations such as Housing Element policies, the Ellis Act (Government Code Sections 7060 through 7060.7), and the City of Oakland's Ellis Act Ordinance (Oakland Municipal Code Sections 8.22.400 through 8.22.480) would prevent significant impacts.

Project Analysis and Conclusion

The proposed project would demolish the two existing buildings at the project site, one of which is currently used for parking and the other used as an auto detailing shop. Therefore, the proposed project would not demolish or displace any existing housing units. The proposed project would include up to 196 residential units and approximately 31,500 sf of retail. The project proposes slightly more housing units than what was accounted for in the BVDSP EIR at the project site (118 units). However, the proposed project is still within the projections analyzed in the BVDSP EIR for the area, which include the assumption of up to 1,800 housing units within the Plan Area and 1.114 million sf of restaurant/retail space, and is not significant enough to trigger any additional impacts. Rather, the proposed project, along with other development in the Plan area, would contribute to population growth expected in Oakland in the future.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would neither substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to population and housing that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any mitigation measures or SCAs related to population and housing, and no SCAs or mitigation measures would be required for the proposed project.

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

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

The BVDSP EIR determined that impacts related to fire and police protection, schools, and other public facilities would be less than significant. Although development under the BVDSP would increase density and population in and around the Plan area, any corresponding increase in crime and need for police protection would likely be counteracted by the revitalization of the area as envisioned by the BVDSP. The BVDSP EIR identified SCAs that would reduce the potential impacts related to the increased need for fire protection by requiring all projects to implement safety features, and to comply with all applicable codes and regulations. Adoption and development under the BVDSP is assumed to include up to 1,800 new residential units within the Plan area, likely increasing the student enrollment at local schools. Pursuant to Senate Bill 50, applicants for individual development projects would be required to pay school impact fees established to offset potential impacts from new development on school facilities, which is deemed full and complete mitigation. Any increases in need for police protection, fire protection, schools, or other public facilities would be mitigated by adherence to City General Plan policies N.12.1, N.12.2, N.12.5, FI-1, and FI-2.

No additions or expansions of parks or recreational facilities are proposed under the BVDSP, and no new parks or recreational facilities, or expansion of existing parks or recreational facilities, were determined to be required under the BVDSP. Adherence to the City General Plan's Open Space, Conservation and Recreation Element policies 3.1, 3.3, and 3.10 would reduce potential impacts on recreational facilities.

Project Analysis and Conclusion

The proposed project's increase in demand for public services was addressed in the BVDSP EIR because development of the proposed project is accounted for in the BVDSP development projections. In addition, the proposed project would provide usable private open space along Valdez Street and several podium courtyards, as well as a potential roof deck on the roof level, as described in the *Project Description*, above. In total, up to 27,521 sf of open space, courtyards, and roof decks could be provided.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would neither substantially increase the severity of significant impacts identified in the EIR, nor would it result in new significant impacts related to the provision of public services and parks and recreation facilities that were not identified in the EIR. The BVDSP EIR did not identify any mitigation measures related to public services or parks and recreation, and no mitigation measures or SCAs would be required for the proposed project.

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13.	Transportation and Circulation Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
the trav	nflict with an applicable plan, ordinance, or policy circulation system, taking into account all modes wel and relevant components of the circulation system ways and freeways, pedestrian and bicycle path	of transportation inc stem, including but n	cluding mass transit and ot limited to, intersection	d non-motorized
Tra a.	ffic Load and Capacity Thresholds At a study, signalized intersection which is located outside the Downtown area and that does not provide direct access to Downtown, the project would cause the motor vehicle level of service (LOS) to degrade to worse than LOS D (i.e., LOS E or F) and cause the total intersection average vehicle delay to increase by four (4) or more seconds;			
b.	At a study, signalized intersection which is located within the Downtown area or that provides direct access to Downtown, the project would cause the motor vehicle LOS to degrade to worse than LOS E (i.e., LOS F) and cause the total intersection average vehicle delay to increase by four (4) or more seconds;			
c.	At a study, signalized intersection outside the Downtown area and that does not provide direct access to Downtown where the motor vehicle level of service is LOS E, the project would cause the total intersection average vehicle delay to increase by four (4) or more seconds;			
d.	At a study, signalized intersection outside the Downtown area and that does not provide direct access to Downtown where the motor vehicle level of service is LOS E, the project would cause an increase in the average delay for any of the critical movements of six (6) seconds or more;			
e.	At a study, signalized intersection for all areas where the level of service is LOS F, the project would cause (a) the overall volume-to-capacity ("v/c") ratio to increase 0.03 or more or (b) the critical movement v/c ratio to increase 0.05 or more;			
f.	At a study, unsignalized intersection the project would add ten (10) or more vehicles to the critical movement and after project completion satisfy the California Manual on Uniform Traffic Control Devices (MUTCD) peak hour volume traffic signal warrant;			

13.	Transportation and Circulation Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
g.	For a roadway segment of the Congestion Management Program (CMP) Network, the project would cause (a) the LOS to degrade from LOS E or better to LOS F or (b) the V/C ratio to increase 0.03 or more for a roadway segment that would operate at LOS F without the project; or			
h.	Cause congestion of regional significance on a roadway segment on the Metropolitan Transportation System (MTS) evaluated per the requirements of the Land Use Analysis Program of the CMP.			

Criteria 13a through 13h

This section of the CEQA Checklist summarizes the findings of the transportation assessment prepared for the proposed project included as Attachment G to this document.²⁸ The analysis is provided in two parts below as follows: the first part describes the BVDSP EIR analysis for the impacts that would be triggered by the proposed project combined with other planned developments, and the second part compares the proposed project's impacts to those analyzed in the BVDSP EIR.

BVDSP EIR Analysis and Conclusion

The BVDSP EIR analyzed transportation and circulation conditions in and around the Plan area under existing conditions and two future scenarios (Years 2020 and 2035), with and without the BVDSP Development Program and transportation improvements. For the purposes of this analysis, these scenarios are referred to as existing conditions and existing conditions plus Development Program (full buildout of the Broadway Valdez Development Program); Year 2020 no project and Year 2020 plus Development Program (partial buildout of the Development Program); and Year 2035 no project and Year 2035 plus Development Program (full buildout of the Development Program).

Because the EIR determined that no significant impacts on transit, pedestrian, bicycle, and other related topics would occur under any of the scenarios, these topics are not further discussed herein. This discussion focuses on the impacts and mitigation measures identified in the BVDSP EIR that would be triggered by the proposed project combined with the other planned developments, as determined in the transportation assessment prepared for the proposed project.

Impact TRANS-2. The development under the BVDSP would degrade the Perry Place/I-580 Eastbound Ramps/ Oakland Avenue intersection (Intersection #15) from level of service (LOS) E to LOS F and increase intersection average delay by 4 seconds or more (Significant Threshold #2) during the weekday PM Peak Hour under existing plus project conditions. Mitigation Measure TRANS-2, identified in the BVDSP EIR to address this impact, includes the following improvements at this intersection, as summarized:

²⁸ Fehr & Peers. 2014. 23rd and Valdez Project – Transportation Assessment, Draft Memorandum. December 8.

- Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the PM Peak Hour.
- Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. This intersection is under the jurisdiction of California Department of Transportation (Caltrans), so any equipment or facility upgrades must be approved by Caltrans prior to installation.

If implemented, Mitigation Measure TRANS-2 would mitigate the significant impact at this intersection. However, it is not certain that this mitigation measure could be implemented because the intersection is under the jurisdiction of Caltrans. City of Oakland, as lead agency, does not have jurisdiction at this intersection, and the mitigation would need to be approved and implemented by Caltrans. Therefore, the BVDSP EIR considered the impact significant and unavoidable.

Impact TRANS-7. The development under the BVDSP would degrade the intersection from LOS E to LOS F and increase intersection average delay by 4 seconds or more (Significant Threshold #2) at the Perry Place/I-580 Eastbound Ramps/ Oakland Avenue intersection (Intersection #15) which would operate at LOS F during the weekday PM Peak Hour under 2020 conditions. Mitigation Measure TRANS-7, identified in the BVDSP EIR to address this impact, states that no feasible mitigation measures are available that would mitigate this impact. Therefore, the BVDSP EIR considered the impact significant and unavoidable.

Impact TRANS-10. The development under the BVDSP would increase the total intersection volume-to-capacity (V/C) ratio by 0.03 or more and increase the V/C ratio for a critical movement by 0.05 or more (Significant Threshold #5) at an intersection operating at LOS F during the weekday AM and PM Peak Hours at the 27th Street/24th Street/Bay Place/Harrison Street intersection (Intersection #37) under 2020 conditions. Mitigation Measure TRANS-10, identified in the BVDSP EIR to address this impact, includes the following improvements at this intersection:

- Reconfigure the 24th Street approach at the intersection to restrict access to 24th Street to right turns only from 27th Street and create a pedestrian plaza at the intersection approach.
- Convert 24th Street between Valdez and Harrison Streets to two-way circulation and allow right turns from 24th Street to southbound Harrison Street south of the intersection, which would require acquisition of private property in the southwest corner of the intersection.
- Modify eastbound 27th Street approach from the current configuration (one right-turn lane, two
 through lanes, and one left-turn lane) to provide one right-turn lane, one through lane, and two
 left-turn lanes.
- Realign pedestrian crosswalks to shorten pedestrian crossing distances.
- Reduce signal cycle length from 160 to 120 seconds, and optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection).
- Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.

Implementation of Mitigation Measure TRANS-10 would not reduce the V/C ratio for critical movements to 0.05 or less at the 27th Street/24th Street/Bay Place/Harrison Street (Intersection #37) intersection. No other feasible mitigation measures are available. Therefore, the BVDSP EIR considered the impact significant and unavoidable.

Impact TRANS-17. The development under the BVDSP would increase the total intersection V/C ratio by 0.03 or more and increase the V/C ratio for a critical movement by 0.05 or more (Significance Threshold #5) at an intersection operating at LOS F during the weekday PM Peak Hour at the Perry Place/I-580 Eastbound Ramps/Oakland Avenue intersection (Intersection #15) under 2035 conditions. Mitigation Measure TRANS-17, identified in the BVDSP EIR to address this impact, states that no feasible mitigation measures are available that would mitigate this impact. Therefore, the BVDSP EIR considered the impact significant and unavoidable.

Impact TRANS-22. The development under the BVDSP would degrade overall intersection operations from LOS E to LOS F and increase intersection average delay by 4 seconds or more (Significance Threshold #2) during the weekday PM Peak Hour and at the 27th Street/ Broadway intersection (Intersection #30) under 2035 conditions. Mitigation Measure TRANS-22, identified in the BVDSP EIR to address this impact, includes the following improvements at this intersection:

- Upgrade traffic signal operations at the intersection to actuated-coordinated operations.
- Reconfigure westbound 27th Street approach to provide a 150-foot left-turn pocket, one through lane, and one shared through/right-turn lane.
- Provide protected left-turn phase(s) for the northbound and southbound approaches.
- Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection).
- Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.

Mitigation Measure TRANS-22 would not mitigate the impact to a less-than-significant level. Therefore, the BVDSP EIR considered the impact significant and unavoidable.

Impact TRANS-24. The development under the HVDSP would increase the total intersection V/C ratio by 0.03 or more and increase the V/C ratio for a critical movement by 0.05 or more (Significance Threshold #5) at an intersection operating at LOS F during the weekday AM and PM Peak Hours and degrade overall intersection operations from LOS E to LOS F and increase intersection average delay by 4 seconds or more (Significance Threshold #2) during the Saturday peak hour at the 27th Street/24th Street/Bay Place/Harrison Street intersection (Intersection #37) under 2035 conditions. Mitigation Measure TRANS-24, identified in the BVDSP EIR to address this impact, states that Mitigation Measure TRANS-5 shall be implemented. Although implementation of Mitigation Measure TRANS-5 would reduce the total intersection V/C ratio during the weekday AM and PM Peak Hours, it would not reduce the V/C ratio for critical movements to 0.02 or less. Therefore, the BVDSP EIR considered the impact significant and unavoidable.

In addition to the mitigation measures described above, the BVDSP EIR identified SCAs that require City review and approval of all improvements in the public right-of-way, reduction of vehicle traffic and parking demand generated by development projects, and construction traffic and parking management, which will also address transportation and circulation impacts.

Project Analysis and Conclusion

Table 5 summarizes the trip generation for the proposed project. The proposed project would generate approximately 1,514 net new trips, including 74 net new vehicle trips during the weekday AM Peak Hour and approximately 138 net new vehicle trips during the weekday PM Peak Hour.²⁹

Table 5. Automobile Trip Generation for the Proposed Project

				Weekday AM Peak Hour		Weekday PM Peak Hour			
Land Use	Units1	ITE Code	Daily	In	Out	Total	In	Out	Total
Residential	196 DU	2202	1,311	20	80	100	81	44	125
Retail	31,500 sf	8203	1,345	19	11	30	56	61	117
Subtotal			2,656	39	91	130	137	105	242
Non-Auto Reduction (-43%) ⁴			-1,142	-17	-39	-56	-59	-45	-104
Net New Project Trips			1,514	22	52	74	78	60	138

Notes:

- 1 DU = dwelling units, sf = square feet.
- 2 ITE Trip Generation (9th Edition) land use category 220 (Apartments):

Daily: T = 6.06(X) + 123.56

AM Peak Hour: T = 0.49(X) + 3.73 (20% in, 80% out) PM Peak Hour: T = 0.55(X) + 17.65 (65% in, 35% out)

3 ITE Trip Generation (9th Edition) land use category 820 (Shopping Center):

Daily: T = 42.7 * X

AM Peak Hour: T = 0.96* X (88% in, 12% out) PM Peak Hour: T = 3.71* X (17% in, 83% out)

- 4 Reduction of 43.0% assumed. Based on City of Oakland Transportation Impact Study Guidelines using BATS 2000 data for development in an urban environment within 0.5 miles of a BART Station.
- Year not specified.Source: Fehr & Peers 2014.

The net new trips generated by the proposed project is an estimate based on rates and equations published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual* (9th Edition) with one adjustment. The analysis reduces the ITE-based trip generation by 43 percent to account for the non-automobile trips. In addition, the analysis conservatively does not account for the existing trips generated by the 250 existing on-site public parking spaces and the analysis conservatively does not reduce retail trip generation estimates related to pass-by trips. Fehr & Peers. 2014. 23rd and Valdez Project – Transportation Assessment, Draft Memorandum. December 8.

Consistent with City of Oakland Transportation Impact Study Guidelines, Table 6 presents the estimates of project trip generation for all travel modes.

Table 6. Trip Generation by Travel Mode for the Proposed Project1

Mode	Mode Share Adjustment Factors ¹	Daily	AM Peak Hour	PM Peak Hour
Automobile	57.0%	1,514	74	138
Transit	30.4%	807	39	74
Bike	3.9%	104	5	9
Walk	23.0%	611	30	56
Total Trips	3,036	148	277	

Note:

Source: Fehr & Peers 2014.

Consistency with Trip Generation in the BVDSP EIR. The BVDSP EIR analyzed the impacts of the Development Program on the roadway network serving the Plan area. As noted in the BVDSP EIR, the Development Program represents the reasonably foreseeable development expected to occur in the next 20 to 25 years in the Plan area. The BVDSP and the BVDSP EIR intend to provide flexibility in the location, amount, and type of development. Thus, the traffic impact analysis in the BVDSP EIR does not assign land uses to individual parcels; rather, land uses are distributed to five subdistricts within the Plan area. Therefore, as long as the trip generation for each subdistrict and the overall Plan area remains below the levels estimated in the BVDSP EIR, the traffic impact analysis presented in the BVDSP EIR remains valid. The project site is in the southern portion of Subdistrict 2 of the Valdez Triangle subarea of the Plan area. As such, comparisons of the trip generation of the proposed project to the trip generation of the Plan area (Subdistricts 1 through 5), the Valdez Triangle subarea (Subdistricts 1 through 3) and Subdistrict 2 are provided below.

Comparison of Project with the Development Program Analyzed in the BVDSP EIR. Table 7 lists the development projects within the Plan area that are currently under construction, approved, and/or proposed. The proposed project is the only currently proposed development project in Subdistrict 2.

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

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Table 7. Developments in the Plan Area¹

			Amount of Development ²	
Development	Subdistrict	Status	Residential (DU)	Commercial (ksf)
3001 Broadway (Sprouts)	Subdistrict 5	Under Construction	0	36.0
2345 Broadway (HIVE)	Subdistrict 1	Under Construction	105	94.3
2425 Valdez Street	Subdistrict 3	Approved	70	0
3093 Broadway	Subdistrict 5	Proposed	435	24.0
2302 Valdez Street (the proposed project)	Subdistrict 2	Proposed	196	31.5
2270 Broadway	Subdistrict 1	Proposed	223	5.0
2315 Valdez Street	Subdistrict 1	Proposed	235	15.0
		Total	1,264	205.8

Note:

DU = dwelling unit.

ksf = 1,000 square feet of use.

Source: Fehr & Peers 2014.

Table 8 presents the combined trip generation of the currently under construction, approved, and proposed development projects for the Plan area (Subdistricts 1 through 5), the Valdez Triangle (Subdistricts 1 through 3), and Subdistrict 2 using similar assumptions and methodology used to estimate the Development Program buildout in the BVDSP EIR. The trip generation by these projects combined is approximately 27 percent of the AM Peak Hour and 31 percent of the PM Peak Hour trips that the BVDSP EIR estimated for the entire BVDSP Development Program and about 39 percent of the AM Peak Hour and 38 percent of the PM Peak Hour trips that the BVDSP EIR estimated for the BVDSP Development Program in the Valdez Triangle subarea. As shown in Table 8, automobile trips generated by the proposed project would be approximately 20 percent of the AM Peak Hour and 15 percent of the PM Peak Hour trips that the BVDSP EIR assumed Subdistrict 2 would generate at buildout.

23rd Street/Valdez Project CEQA Analysis

Table 8. Plan Area, Valdez Triangle Subarea, and Subdistrict 2—Vehicle Trip Generation Comparison

9				-		-
	Weeko	lay AM Peal	k Hour	Weekday PM Peak Hour		Hour
Year	In	Out	Total	In	Out	Total
Plan Area						
Under Construction, Approved, and Proposed Development Projects ¹	167	364	531	629	503	1,132
Development Program Buildout ²	1,152	829	1,981	1,702	2,007	3,709
% Completed	14%	44%	27%	37%	25%	31%
Valdez Triangle Subarea (Subdistricts 1 through 3)						
Under Construction, Approved, and Proposed Development Projects ¹	114	241	355	427	345	772
Development Program Buildout ²	457	442	899	1,013	993	2,006
% Completed	25%	55%	39%	42%	35%	38%
Subdistrict 2						
Under Construction, Approved, and Proposed Development Projects ³	22	52	74	78	60	138
Development Program Buildout ²	161	200	361	475	435	910
% Completed	14%	26%	20%	16%	14%	15%

Notes:

- 1 Based on application of the BVDSP trip generation model with the developments shown in Table 4.
- 2 Based on Table 4.13-10 on page 4.13-43 of BVDSP Draft EIR.
- 3 For details, see Table 1 in the transportation assessment prepared for the proposed project.

Sources: City of Oakland, Broadway Valdez District Specific Plan Draft EIR, 2013, Table 4.13-10: Broadway Valdez Development Program Trip Generation Summary by Subdistrict (pg. 4.13-43); Fehr & Peers 2014.

The transportation assessment prepared for the proposed project concluded that the proposed project, combined with other under construction, approved, and proposed development projects in the Plan area, would trigger Impact TRANS-2 under existing plus project conditions (as well as Impact TRANS-7 under 2020 plus project and Impact TRANS-17 under 2035 plus project conditions) at the Perry Place/I-580 Eastbound Ramps/Oakland Avenue intersection because these projects combined would generate more than 15 percent of the total traffic generated by the Development Program. In addition, the transportation assessment prepared for the proposed project concluded that the proposed project, combined with other under construction, approved, and proposed development projects in the Plan area, would trigger Impact TRANS-10 under 2020 plus project conditions (and also Impact TRANS-24 under 2035 plus project conditions) at the 27th Street/24th Street/Bay Place/Harrison Street intersection because these projects combined would generate more than 10 percent of the total traffic generated by the Development Program.

The transportation assessment prepared for the proposed project also concluded that the proposed project, combined with other under construction, approved, and proposed development projects in the Plan area, would trigger Impact TRANS-22 under 2035 plus project conditions at the 27th Street/Broadway intersection because these projects combined would generate more than 30 percent of the total traffic generated by the Development Program. The transportation assessment prepared for the proposed project concluded that implementation of Mitigation Measure TRANS-2, Mitigation

Measure TRANS-10, and Mitigation Measure TRANS-22 at the Perry Place/I-580 Eastbound Ramps/Oakland Avenue intersection, the 27th Street/24th Street/Bay Place/Harrison Street intersection, and the 27th Street/Broadway intersection, respectively, would be triggered by the proposed project combined with the other planned developments. Furthermore, according to the BVDSP EIR, the project sponsor shall fund the cost of preparing and funding these mitigation measures. Alternatively, if the City adopts the BVDSP Transportation Impact Fee (TIF) program, the applicant may pay the TIF to mitigate the project impacts.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would neither increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to transportation and circulation that were not identified in the BVDSP EIR. The transportation assessment prepared for the proposed project concluded that the location of the proposed project, its land uses, and its access points are consistent with the assumptions in the traffic impact analysis for the BVDSP EIR. Therefore, the trip distribution and trip assignment assumptions used in the BVDSP EIR continue to remain valid for the proposed project. Considering the project trip generation and that the BVDSP EIR analyzed the impacts of the Development Program at signalized intersections along Broadway, 27th Street, Harrison Street, and Grand Avenue that provide direct access to the project site, the proposed project would not add 50 or more trips to any signalized intersection that was not analyzed in the BVDSP EIR. Therefore, the proposed project would not result in impacts on traffic operations at the intersections beyond the ones identified in the BVDSP EIR. Also, the proposed project would not increase the magnitude of the impacts identified in the BVDSP EIR.

As a condition of approval, the proposed project would implement recommended improvement measures identified in the transportation assessment prepared for the proposed project (Attachment G) related to vehicle access and circulation, bicycle access, and transportation demand management (TDM). In addition, the proposed project is not in conflict with BVDSP Policy C-4.3 regarding the potential for temporary or permanent closure of Waverly Street between 23rd Street and 24th Street to through traffic because a temporary and/or partial closure of Waverly Street may be feasible after completion of the proposed project. Consistent with Figures 6.7 and 6.8 in the BVDSP, the proposed project would widen the sidewalks along the 23rd Street and Valdez Street frontages. Furthermore, the proposed project would not modify access between the project site and the 19th Street BART Station. The proposed project would also not result in any changes to the bus routes operating in the vicinity of the project site or modify access between the project site and bus stops in the project area.

In addition, SCAs related to city review and approval of all improvements proposed in the public right-of-way, reduction of vehicle traffic and parking demand generated by development projects, and construction traffic and parking management (SCA-TRANS-1, SCA-TRANS-2, SCA-AES-7, and SCA-AES-8), as identified in Attachment A, Standard Conditions of Approval and Mitigation Monitoring and Reporting Program.

23rd Street/Valdez Project CEQA Analysis

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

23rd Street/Valdez Project CEQA Analysis

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

As described in the BVDSP EIR, EBMUD has accounted for the water demand projections associated with development under the BVDSP. The BVDSP EIR determined that adoption and development under the BVDSP would not require new water supply entitlements, resources, facilities, or expansion of existing facilities beyond those already planned, and that impacts related to water supplies would be less than significant.

As described in the BVDSP EIR, EBMUD's Wastewater Planning Engineering Group indicated that there would be adequate wastewater treatment capacity to accommodate increased sewer generation for the Plan area. Much of the Plan area is composed of impervious surfaces, and new development would likely decrease storm drain runoff because proposed projects would be required to incorporate additional pervious areas through landscaping, in compliance with City requirements. The BVDSP EIR determined that development under the BVDSP would have less-than-significant impacts related to stormwater and wastewater facilities. However, development projects would increase the amount of wastewater generated in the Plan area and could alter the composition of the overall impervious surfaces in the Plan area, which may increase sewer capacity demand. Implementation of SCAs requiring stormwater control during and after construction would address potential impacts on stormwater treatment and sanitary sewer infrastructure. However, these projects would not require or result in the construction of new wastewater treatment facilities or expansion of existing treatment facilities because EBMUD has adequate capacity to treat this projected demand in addition to its existing commitments.

Solid Waste Services (Criterion 14c)

As described in the BVDSP EIR, impacts associated with solid waste would be less than significant. Nonhazardous solid waste in the Plan area is ultimately hauled to the Altamont Landfill and Resource Facility. The Altamont Landfill would have sufficient capacity to accept waste generated by development under the BVDSP. In addition, implementation of an SCA pertaining to waste reduction and recycle, would reduce waste through compliance with the City's Recycling Space Allocation Ordinance (Oakland Municipal Code, Chapter 17.118).

Energy (Criterion 14d)

As described in the BVDSP EIR, impacts associated with energy services would be less than significant. Adoption and development under the BVDSP EIR would be required to comply with the standards of Title 24 of the California Code of Regulations. SCAs pertaining to compliance with the green building ordinance would require construction projects to incorporate energy-conserving design measures.

Project Analysis and Conclusion

The water and sanitary sewer demand and stormwater facilities, as well as solid waste and energy associated with the proposed project, have been addressed in the BVDSP EIR analysis because development of the proposed project is accounted for in the BVDSP development projections.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would neither substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to utilities and service systems that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any mitigation measures related to utilities and service systems, and no mitigation measures would be required for the proposed project. The proposed project would be required to implement SCAs related to sewer capacity, stormwater drainage facilities, solid waste services, and energy (SCA-UTIL-1 through SCA-UTIL-3, SCA-HYD-6, and SCA-HYD-7), as identified in Attachment A, Standard Conditions of Approval and Mitigation Monitoring and Reporting Program.

ATTACHMENT A: STANDARD CONDITIONS OF APPROVAL AND MITIGATION MONITORING AND REPORTING PROGRAM

This Standard Conditions of Approval and Mitigation Monitoring and Reporting Program (SCAMMRP) is based on the CEQA Analysis prepared for the 23rd Street and Valdez Project.

This SCAMMRP is in compliance with Section 15097 of the CEQA Guidelines, which requires that the Lead Agency "adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." The SCAMMRP lists mitigation measures ("MM") recommended in the EIR and identifies mitigation monitoring requirements, as well as the City's Standard Conditions of Approval ("SCA") identified in the EIR as measures that would minimize potential adverse effects that could result from implementation of the project, to ensure the conditions are implemented and monitored.

All MMs and SCAs identified in the CEQA Analysis, which is consistent with the measures and conditions presented in the Broadway Valdez District Specific Plan Environmental Impact Report (EIR), are included herein. To the extent that there is any inconsistency between the SCA and MM, the more restrictive conditions shall govern; to the extent any MM and/or SCA identified in the CEQA Analysis were inadvertently omitted, they are automatically incorporated herein by reference.

- The first column identifies the SCA and MM applicable to that topic in the CEQA Analysis. The SCA numbers have been updated for the 23rd Street and Valdez Project; however, the SCAs as presented in the BVDSP EIR are included in parenthesis for cross-reference purposes.
- The second column identifies the monitoring schedule or timing applicable the Project.
- The third column names the party responsible for monitoring the required action for the Project.

The project sponsor is responsible for compliance with any recommendations approved technical reports, all applicable mitigation measures adopted and with all conditions of approval set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or condition of approval, and subject to the review and approval of the City of Oakland. Overall monitoring and compliance with the mitigation measures will be the responsibility of the Planning and Zoning Division. Prior to the issuance of a demolition, grading, and/or construction permit, the project sponsor shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

	Other dead Constitutions of Assessed Marketing Marketing	Mitigation Implement	ation/ Monitoring
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
Aestl	hetics, Shadow and Wind		
Cons Subn new r additi the p	AES-1 (Standard Condition of Approval 12): Required Landscape Plan for New struction and Certain Additions to Residential Facilities: Prior to issuance of a building permit. In ittal and approval of a landscape plan for the entire site is required for the establishment of a residential unit (excluding secondary units of five hundred (500) square feet or less), and for itons to Residential Facilities of over five hundred (500) square feet. The landscape plan and lant materials installed pursuant to the approved plan shall conform to all provisions of other 17.124 of the Oakland Planning Code, including the following:	Prior to issuance of a building permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning
a)	Landscape plan shall include a detailed planting schedule showing the proposed location, sizes, quantities, and specific common botanical names of plant species.		Inspections City of Oakland,
b)	Landscape plans for projects involving grading, rear walls on downslope lots requiring conformity with the screening requirements in Section 17.124.040, or vegetation management prescriptions in the S-11 zone, shall show proposed landscape treatments for all graded areas, rear wall treatments, and vegetation management prescriptions.		Public Works, Environmental Services
c)	Landscape plan shall incorporate pest-resistant and drought-tolerant landscaping practices. Within the portions of Oakland northeast of the line formed by State Highway 13 and continued southerly by Interstate 580, south of its intersection with State Highway 13, all plant materials on submitted landscape plans shall be fire-resistant. The City Planning and Zoning Division shall maintain lists of plant materials and landscaping practices considered pest-resistant, fire-resistant, and drought-tolerant.		
d)	All landscape plans shall show proposed methods of irrigation. The methods shall ensure adequate irrigation of all plant materials for at least one growing season.		
Front	-AES-2 (Standard Condition of Approval 13): Landscape Requirements for Street tages: It o issuance of a final inspection of the building permit: All areas between a primary Residential Facility and abutting street lines shall be fully landscaped, plus any unpaved areas of abutting rights-of-way of improved streets or alleys, provided, however, on streets without sidewalks, an unplanted strip of land five (5) feet in width shall be provided within the right-of-way along the edge of the pavement or face of curb, whichever is applicable. Existing plant materials may be incorporated into the proposed landscaping if approved by the Director of City Planning. In addition to the general landscaping requirements set forth in Chapter 17.124, a minimum of one (1) fifteen-gallon tree, or substantially equivalent landscaping consistent with city policy and as approved by the Director of City Planning, shall be provided for every twenty-five (25) feet of street frontage. On streets with sidewalks where the	Prior to issuance of a final inspection of the building permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspections City of Oakland, Public Works, Environmental Services
	distance from the face of the curb to the outer edge of the sidewalk is at least six and one-half (6 ½) feet, the trees to be provided shall include street trees to the satisfaction of the Director of Parks and Recreation.		
Ongo when appli	-AES-3 (Standard Condition of Approval 15): Landscape Maintenance (residential): ping. All required planting shall be permanently maintained in good growing condition and, never necessary, replaced with new plant materials to ensure continued compliance with cable landscaping requirements. All required fences, walls and irrigation systems shall be tanently maintained in good condition and, whenever necessary, repaired or replaced.	Ongoing.	City of Oakland - Building Services Division, Zoning Inspections City of Oakland, Public Works, Environmental Services
Front where one-to- twent unles	-AES-4 (Standard Condition of Approval 17): Landscape Requirements for Street tages: Prior to issuance of a final inspection of the building permit, on streets with sidewalks the the distance from the face of the curb to the outer edge of the sidewalk is at least six and thalf (6 ½) feet and does not interfere with access requirements, a minimum of one (1) ty-four (24) inch box tree shall be provided for every twenty-five (25) feet of street frontage, as a smaller size is recommended by the City arborist. The trees to be provided shall de species acceptable to the Tree Services Division.	Prior to issuance of a final inspection of the building permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspections City of Oakland, Public Works, Environmental Services

	Standard Conditions of Approve 1/88/4/	Mitigation Implement	ation/ Monitoring
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
and in grow conti	-AES-5 (Standard Condition of Approval 18): Landscape Maintenance (new commercial manufacturing): Ongoing. All required planting shall be permanently maintained in good ing condition and, whenever necessary, replaced with new plant materials to ensure nued compliance with applicable landscaping requirements. All required irrigation systems be permanently maintained in good condition and, whenever necessary, repaired or	Ongoing.	City of Oakland Planning and Building Department
repla			City of Oakland - Building Services Division, Zoning Inspections
a bui revie relev	-AES-6 (Standard Condition of Approval 19): Underground Utilities: Prior to issuance of lding permit, the project applicant for projects under the Specific Plan shall submit plans for w and approval by the Building Services Division and the Public Works Agency, and other ant agencies as appropriate, that show all new electric and telephone facilities; fire alarm	Prior to issuance of a building permit.	City of Oakland Planning and Building Department
The ifrom telep	uits; street light wiring; and other wiring, conduits, and similar facilities placed underground. new facilities shall be placed underground along the project applicant's street frontage and the project applicant's structures to the point of service. The plans shall show all electric, hone, water service, fire water service, cable, and fire alarm facilities installed in		City of Oakland - Building Services Division, Zoning Inspections
acco	rdance with standard specifications of the serving utilities.		City of Oakland, Public Works, Environmental Services
	-AES-7 (Standard Condition of Approval 20): Improvements in the Public Right-of-Way eral). Approved prior to the issuance of a P-job or building permit The project applicant shall submit Public Improvement Plans to Building Services Division	Prior to the issuance of a P-job or building	City of Oakland Planning and Building
υ,	for adjacent public rights-of-way (ROW) showing all proposed improvements and compliance with the conditions and/or mitigations and City requirements including but not limited to curbs, gutters, sewer laterals, storm drains, street trees, paving details, locations of transformers and other above ground utility structures, the design specifications and locations of facilities required by the East Bay Municipal Utility District (EBMUD), street lighting, on-street parking and accessibility improvements compliant with applicable standards and any other improvements or requirements for the project as provided for in this Approval. Encroachment permits shall be obtained as necessary for	permit.	Department City of Oakland - Building Services Division, Zoning Inspections City of Oakland, Public Works, Environmental
b)	any applicable improvements- located within the public ROW. Review and confirmation of the street trees by the City's Tree Services Division is required as part of this condition and/or mitigations.		Services
c)	The Planning and Zoning Division and the Public Works Agency will review and approve designs and specifications for the improvements. Improvements shall be completed prior to the issuance of the final building permit.		
d)	The Fire Services Division will review and approve fire crew and apparatus access, water supply availability and distribution to current codes and standards.		
(Spe	AES-8 (Standard Condition of Approval 21): Improvements in the Public Right-of-Way cific). Approved prior to the issuance of a grading or building permit. Final building and c improvement plans submitted to the Building Services Division shall include the following bonents:	Prior to the issuance of a grading or building permit.	City of Oakland Planning and Building Department
a)	Install additional standard City of Oakland streetlights.		City of Oakland -
b)	Remove and replace any existing driveway that will not be used for access to the property with new concrete sidewalk, curb and gutter.		Building Services Division, Zoning
c)	Reconstruct drainage facility to current City standard.		Inspections
d)	Provide separation between sanitary sewer and water lines to comply with current City of Oakland and Alameda Health Department standards.		City of Oakland, Public Works, Environmental
e)	Construct wheelchair ramps that comply with Americans with Disabilities Act requirements and current City Standards.		Services
f)	Remove and replace deficient concrete sidewalk, curb and gutter within property frontage.		
g)	Provide adequate fire department access and water supply, including, but not limited to currently adopted fire codes and standards.		

	Other dead On all the second Mark that he had not been a	Mitigation Implement	ation/ Monitoring
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
fixture preve and Z	AES-9 (Standard Condition of Approval 40): Lighting Plan. The proposed lighting es shall be adequately shielded to a point below the light bulb and reflector and that and unnecessary glare onto adjacent properties. Plans shall be submitted to the Planning Coning Division and the Electrical Services Division of the Public Works Department for w and approval. All lighting shall be architecturally integrated into the site.	Prior to the issuance of an electrical or building permit.	City of Oakland Planning and Building Department
			City of Oakland – Building Services Division, Zoning Inspection
			City of Oakland Public Works Department, Electrical Services Division
Air Q	Puality		
(Dust	AIR-1 (Standard Condition of Approval A): Construction-Related Air Pollution Controls and Equipment Emissions): Ongoing throughout demolition, grading, and/or construction. g construction, the project applicant shall require the construction contractor to implement the following applicable measures recommended by the BAAQMD:	Ongoing throughout demolition, grading, and/or construction.	City of Oakland Planning and Building Department
BASI	C (Applies to ALL construction sites)	Prior to starting operations.	City of Oakland -
a)	Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.	operations.	Building Services Division, Zoning Inspection.
b)	Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).		
c)	All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.		
d)	Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.		
e)	Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).		
f)	Limit vehicle speeds on unpaved roads to 15 miles per hour.		
g)	Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points.		
h)	Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes and fleet operators must develop a written idling policy (as required by Title 13, Section 2449 of the California Code of Regulations.)		
i)	All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.		
j)	Post a publicly visible sign that includes the contractor's name and telephone number to contact regarding dust complaints. When contacted, the contractor shall respond and take corrective action within 48 hours. The telephone numbers of contacts at the City and the BAAQMD shall also be visible. This information may be posted on other required on-site signage.		
	ENHANCED: All "Basic" controls listed above plus the following controls if the project involves:		
	i) 114 or more single-family dwelling units;		
	ii) 240 or more multi-family units;		
	iii) Nonresidential uses that exceed the applicable screening size listed in the Bay Area Air Quality Management District's CEQA Guidelines;		

	Chandand Canditions of Annuaus (Militination Massaure)	Mitigation Implement	ation/ Monitoring
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
	iv) Demolition permit;		
	v) Simultaneous occurrence of more than two construction phases (e.g., grading and building construction occurring simultaneously);		
	vi) Extensive site preparation (i.e., the construction site is four acres or more in size); or		
	vii) Extensive soil transport (i.e., 10,000 or more cubic yards of soil import/export).		
k)	Portable equipment shall be powered by electricity if available. If electricity is not available, propane or natural gas shall be used if feasible. Diesel engines shall only be used if electricity is not available and it is not feasible to use propane or natural gas.		
I)	All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.		
m)	All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.		
n)	Install sandbags or other erosion control measures to prevent silt runoff to public roadways.		
o)	Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).		
p)	Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.		
q)	Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind blown dust. Wind breaks must have a maximum 50 percent air porosity.		
r)	Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.		
s)	The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.		
t)	All trucks and equipment, including tires, shall be washed off prior to leaving the site.		
u)	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.		
v)	Minimize the idling time of diesel-powered construction equipment to two minutes.		
w)	All equipment to be used on the construction site and subject to the requirements of Title 13, Section 2449 of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") must meet Emissions and Performance Requirements one year in advance of any fleet deadlines. The project applicant shall provide written documentation that the fleet requirements have been met.		
x)	Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).		
y)	All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOX and PM.		
z)	Off-road heavy diesel engines shall meet the CARB's most recent certification standard.		
	TRANS-2 (Standard Condition of Approval 25): Parking and Transportation Demand agement: Refer to SCA-TRANS-2 under Transportation.	See below.	See below.

	Standard Conditions of Approval/Mitigation Measures	Mitigation Implement	ation/ Monitoring
	Standard Conditions of Approvammingation measures	Schedule	Responsibility
Biolo	ogical Resources		
Prior other Marcibe subirds. 15 the pservi prese buffer fledge CDFC disturs sufficibe income.	-BIO-1 (Standard Condition of Approval 44): Tree Removal During Breeding Season: to issuance of a tree removal permit. To the extent feasible, removal of any tree and/or vegetation suitable for nesting of raptors shall not occur during the breeding season of h 15 and August 15. If tree removal must occur during the breeding season, all sites shall arveyed by a qualified biologist to verify the presence or absence of nesting raptors or other. Pre-removal surveys shall be conducted within 15 days prior to start of work from March rough May 31, and within 30 days prior to the start of work from June 1 through August 15. Difference Division of the Public Works Department. If the survey indicates the potential ences of nesting raptors or other birds, the biologist shall determine an appropriately sized or around the nest in which no work will be allowed until the young have successfully ed. The size of the nest buffer will be determined by the biologist in consultation with the G, and will be based to a large extent on the nesting species and its sensitivity to orbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should be to prevent disturbance to birds nesting in the urban environment, but these buffers may creased or decreased, as appropriate, depending on the bird species and the level of rbance anticipated near the nest.	Prior to issuance of a tree removal permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection City of Oakland Public Works Department-Tree Services Division
demo	BIO-2 (Standard Condition of Approval 45): Tree Removal Permit: Prior to issuance of a plition, grading, or building permit. Prior to removal of any protected trees, per the Protected Ordinance, located on the project site or in the public right-of-way adjacent to the project, roject applicant must secure a tree removal permit from the Tree Division of the Public is Department, and abide by the conditions of that permit.	Prior to issuance of a demolition, grading, or building permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection City of Oakland Public Works Department-Tree Services Division
issua erosi	-BIO-3 (Standard Condition of Approval 46): Tree Replacement Plantings: Prior to ince of a final inspection of the building permit. Replacement plantings shall be required for on control, groundwater replenishment, visual screening and wildlife habitat, and in order to ent excessive loss of shade, in accordance with the following criteria:	Prior to issuance of a final inspection of the building permit.	City of Oakland Planning and Building
1) 2)	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. Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood),		Department City of Oakland - Building Services Division, Zoning Inspection
·	Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye) or Umbellularia californica (California Bay Laurel) or other tree species acceptable to the Tree Services Division.		City of Oakland Public Works
3)	Replacement trees shall be at least of 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.		Department-Tree Services Division
4)	Minimum planting areas must be available on site as follows:		
-	- For Sequoia sempervirens, three hundred fifteen square feet per tree;		
	- For all other species listed in #2 above, seven hundred (700) square feet per tree.		
5)	In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee as determined by the master fee schedule of the City may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians.		
6)	Plantings shall be installed prior to the issuance of a final inspection of the building permit, subject to seasonal constraints, and shall be maintained by the project applicant until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement planting and the method of irrigation. Any replacement planting which fails to become established within one year of planting shall be replanted at the project applicant's expense.		

	Standard Conditions of Approval/Militiration Macauses	Mitigation Implement	ation/ Monitoring
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
to iss	-BIO-4 (Standard Condition of Approval 47): Tree Protection during Construction: Prior suance of a demolition, grading, or building permit. Adequate protection shall be provided g the construction period for any trees which are to remain standing, including the ving, plus any recommendations of an arborist:	Prior to issuance of a demolition, grading, or building permit.	City of Oakland Planning and Building Department
1)	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 City Tree Reviewer. 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.		City of Oakland - Building Services Division, Zoning Inspection City of Oakland Public Works Department-Tree
2)	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 City Tree Reviewer 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.		Services Division
3)	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 Tree Reviewer 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 tree reviewer. 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.		
4)	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.		
5)	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 of such damage. 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.		
6)	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.		
	-HAZ-12 (Standard Condition of Approval 35): Hazards Best Management Practices: r to SCA-HAZ-12, Hazardous Materials, below.	See below.	See below.
	-HYD-5 (Standard Condition of Approval 55): Erosion and Sedimentation Control Plan: r to SCA-HYD-5, Hydrology and Water Quality, below.	See below.	See below.
	-HYD-6 (Standard Condition of Approval 75): Stormwater Pollution Prevention Plan: r to SCA-HYD-6, Hydrology and Water Quality, below.	See below.	See below.
	-HYD-7 (Standard Condition of Approval 80): Post-construction Stormwater agement Plan: Refer to SCA-HYD-7, Hydrology and Water Quality, below.	See below.	See below.
	-HYD-8 (Standard Condition of Approval 82): Erosion, Sedimentation, and Debris rol Measures: Refer to SCA-HYD-8, Hydrology and Water Quality, below.	See below.	See below.

	Standard Conditions of Approval/Mitigation Measures	Mitigation Implement	tation/ Monitoring			
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility			
Cultu	Cultural Resources					
	CUL-1 (Standard Condition of Approval 52): Archaeological Resource: Ongoing ghout demolition, grading, and/or construction	Ongoing throughout demolition, grading, and/or construction.	City of Oakland Planning and Building Department			
a.	Pursuant to CEQA Guidelines section 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Oakland. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.		City of Oakland - Building Services Division, Zoning Inspection			
b.	In considering any suggested measure proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the project applicant shall determine whether avoidance is necessary and feasible in light 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) shall be instituted. Work may proceed on other parts of the project site while measure for historical resources or unique archaeological resources is carried out.					
c.	Should an archaeological artifact or feature be discovered on-site during project construction, all activities within a 50-foot radius of the find would be halted until the findings can be fully investigated by a qualified archaeologist to evaluate the find and assess the significance of the find according to the CEQA definition of a historical or unique archaeological resource. If the deposit is determined to be significant, the project applicant and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate measure, subject to approval by the City of Oakland, which shall assure implementation of appropriate measures recommended by the archaeologist. Should archaeologically-significant materials be recovered, the qualified archaeologist shall recommend appropriate analysis and treatment, and shall prepare a report on the findings for submittal to the Northwest Information Center.					
d.	Archaeological Resources – Sensitive Areas. Prior to issuance of a demolition, grading, or building permit, the project applicant shall implement either Provision A (Intensive Pre-Construction Study) or Provision D (Construction ALERT Sheet). However, if in either case a high potential presence of historic-period archaeological resources on the project site is indicated, or a potential resource is discovered, the project applicant shall also implement all of the following provisions:					
	Provision B (Construction-Period Monitoring),					
	Provision C (Avoidance and/or Find Recovery), and					
	 Provision D (to establish a Construction ALERT Sheet if the Intensive Pre- Construction Study was originally implemented per Provision A, or to update and provide more specificity to the initial Construction ALERT Sheet if a Construction ALERT Sheet was originally implemented per Provision D). 					
Provi	sion A through Provision D are detailed as follows:					
•	Provision A: Intensive Pre-Construction Study – The project applicant, upon approval from the City Planning and Zoning Division, may choose to complete a site-specific, intensive archaeological resources study prior to soil-disturbing activities occurring on the project site. The purpose of the site-specific, intensive archaeological resources study is to identify early the potential presence of history-period archaeological resources on the project site. If that approach is selected, the study shall be conducted by a qualified archaeologist approved by the City Planning and Zoning Division. If prepared, at a minimum, the study shall include:					
-	An intensive cultural resources study of the project site, including subsurface presence/absence studies, of the project site. Field studies conducted by the approved archaeologist(s) may include, but are not limited to, auguring and other common methods used to identify the presence of archaeological resources;					

	Standard Conditions of Appropriation Manager	Mitigation Implemen	ntation/ Monitoring
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
-	A report disseminating the results of this research;		
-	Recommendations for any additional measures that could be necessary to mitigate any adverse impacts to recorded and/or inadvertently discovered cultural resources.		
	If the results of the study indicate a high potential presence of historic-period archaeological resources on the project site, or a potential resource is discovered, the project applicant shall hire a qualified archaeologist to monitor any ground disturbing activities on the project site during construction (see Provision B, Construction-Period Monitoring, below), implement avoidance and/or find recovery measures (see Provision C, Avoidance and/or Find Recovery, below), and prepare an ALERT Sheet that details what could potentially be found at the project site (see Provision D, Construction ALERT Sheet, below).		
•	Provision B: Construction-Period Monitoring — Archaeological monitoring would include briefing construction personnel about the type of artifacts that may be present (as referenced in the ALERT Sheet, require per Provision D, Construction ALERT Sheet, below) and the procedures to follow if any are encountered, field recording and sampling in accordance with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation, notifying the appropriate officials if human remains or cultural resources are discovered, or preparing a report to document negative findings after construction is completed. If a significant archaeological resource is discovered during the monitoring activities, adherence to Provision C, Avoidance and/or Find Recovery, discussed below), would be required to reduce the impact to less than significant. The project applicant shall hire a qualified archaeologist to monitor all ground-disturbing activities on the project site throughout construction.		
•	Provision C: Avoidance and/or Find Recovery – If a significant archaeological resource is present that could be adversely impacted by the proposed project, the project applicant of the specific project site shall either:		
-	Stop work and redesign the proposed project to avoid any adverse impacts on significant archaeological resource(s); or,		
-	If avoidance is determined infeasible by the City, design and implement an Archaeological Research Design and Treatment Plan (ARDTP). The project applicant shall hire a qualified archaeologist who shall prepare a draft ARDTP that shall be submitted to the City Planning and Zoning Division for review and approval. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical. The project applicant shall implement the ARDTP. 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.		
•	Provision D: Construction ALERT Sheet – The project applicant, upon approval from the City Planning and Zoning Division, may choose to prepare a construction ALERT sheet prior to soil-disturbing activities occurring on the project site, instead of conducting site-specific, intensive archaeological resources pursuant to Provision A, above. The project applicant shall submit for review and approval by the City prior to subsurface construction activity an "ALERT" sheet prepared by a qualified archaeologist with visuals that depict each type of artifact that could be encountered on the project site. Training by the qualified archaeologist shall be provided to the project's prime contractor; any project subcontractor firms (including demolition, excavation, grading, foundation, and pile driving); and/or utilities firm involved in soil-disturbing activities within the project site.		
	The ALERT sheet shall state, in addition to the basic archaeological resource protection measures contained in other standard conditions of approval, that in the event of discovery of the following cultural materials, all work must be stopped in the area and the City's Environmental Review Officer contacted to evaluate the find: concentrations of shellfish remains; evidence of fire (ashes, charcoal, burnt earth, fire-cracked rocks);		

	Mitigation Implementation/ Monit	
Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
concentrations of bones; recognizable Native American artifacts (arrowheads, shell beads, stone mortars [bowls], humanly shaped rock); building foundation remains; trash pits, privies (outhouse holes); floor remains; wells; concentrations of bottles, broken dishes, shoes, buttons, cut animal bones, hardware, household items, barrels, etc.; thick layers of burned building debris (charcoal, nails, fused glass, burned plaster, burned dishes); wood structural remains (building, ship, wharf); clay roof/floor tiles; stone walls or footings; or gravestones.		
Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, and supervisory personnel.		
If the project applicant chooses to implement Provision D, Construction ALERT Sheet, and a potential resource is discovered on the project site during ground disturbing activities during construction, the project applicant shall hire a qualified archaeologist to monitor any ground disturbing activities on the project site during construction (see Provision B, Construction-Period Monitoring, above), implement avoidance and/or find recovery measures (see Provision C, Avoidance and/or Find Recovery, above), and prepare an updated ALERT Sheet that addresses the potential resource(s) and other possible resources based on the discovered find found on the project site.		
SCA-CUL-2 (Standard Condition of Approval 53): Human Remains: Ongoing throughout demolition, grading, and/or construction. In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines 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 Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. 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.	Ongoing throughout demolition, grading, and/or construction.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
SCA-CUL-3 (Standard Condition of Approval 54): Paleontological Resources: Ongoing throughout demolition, grading, and/or construction. In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards [SVP 1995,1996]). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval.	Ongoing throughout demolition, grading, and/or construction.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
SCA-CUL-4 (Standard Condition of Approval 57): Vibrations Adjacent to Historic Structures: The project applicant shall retain a structural engineer or other appropriate professional to determine threshold levels of vibration and cracking that could damage other nearby historic structures, and design means and methods of construction that shall be utilized to not exceed the thresholds.	Prior to issuance of a demolition, grading or building permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection

	Standard Conditions of Approval/Mitigation Measures		Mitigation Implement	ation/ Monitoring
		Standard Conditions of Approvariantigation measures	Schedule	Responsibility
Geo	logy	Soils and Geohazards		
con revi in p	<i>mittai</i> struct ew ar art, o	O-1 (Standard Condition of Approval 58): Soils Report: Required as part of the of a Tentative Tract or Tentative Parcel Map. A preliminary soils report for each ion site within the project area shall be required as part of this project and submitted for a approval by the Building Services Division. The soils reports shall be based, at least an information obtained from on-site testing. Specifically the minimum contents of the bould include:	Required as part of the submittal of a Tentative Tract or Tentative Parcel Map.	City of Oakland, Building Services Division
a)	Log	s of borings and/or profiles of test pits and trenches:		
	1)	The minimum number of borings acceptable, when not used in combination with test pits or trenches, shall be two (2), when in the opinion of the Soils Engineer such borings shall be sufficient to establish a soils profile suitable for the design of all the footings, foundations, and retaining structures.		
	2)	The depth of each boring shall be sufficient to provide adequate design criteria for all proposed structures.		
	3)	All boring logs shall be included in the soils report.		
b)	Tes	t pits and trenches		
	1)	Test pits and trenches shall be of sufficient length and depth to establish a suitable soils profile for the design of all proposed structures.		
	2)	Soils profiles of all test pits and trenches shall be included in the soils report.		
c)	tren	at shall be included which shows the relationship of all the borings, test pits, and ches to the exterior boundary of the site. The plat shall also show the location of all bosed site improvements. All proposed improvements shall be labeled.		
d)	soil slop desi	ies of all data generated by the field and/or laboratory testing to determine allowable bearing pressures, sheer strength, active and passive pressures, maximum allowable es where applicable and any other information which may be required for the proper gn of foundations, retaining walls, and other structures to be erected subsequent to or current with work done under the grading permit.		
e)	A w	ritten Soils Report shall be submitted which shall include but is not limited to the following:		
	1)	Site description		
	2)	Local and site geology		
	3)	Review of previous field and laboratory investigations for the site		
	4)	Review of information on or in the vicinity of the site on file at the Information Counter, City of Oakland, Office of Planning and Building.		
	5)	Site stability shall be addressed with particular attention to existing conditions and proposed corrective attention to existing conditions and proposed corrective actions at locations where land stability problems exist.		
	6)	Conclusions and recommendations for foundations and retaining structures, resistance to lateral loading, slopes, and specifications, for fills, and pavement design as required.		
	7)	Conclusions and recommendations for temporary and permanent erosion control and drainage. If not provided in a separate report they shall be appended to the required soils report.		
	8)	All other items which a Soils Engineer deems necessary.		
	9)	The signature and registration number of the Civil Engineer preparing the report.		
f)	The date insta	Director of Planning and Building may reject a report that she/he believes is not sufficient. Director of Planning and Building may refuse to accept a soils report if the certification of the responsible soils engineer on said document is more than three years old. In this ance, the Director may be require that the old soils report be recertified, that an addendum is soils report be submitted, or that a new soils report be provided.		

		Mitigation Implement	ation/ Monitoring
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
	EO-2 (Standard Condition of Approval 60): Geotechnical Report: Required as part of mittal of a tentative Tract Map or tentative Parcel Map.	Required as part of the submittal of a tentative Tract Map or tentative	City of Oakland, Building Services Division
co	site-specific, design level, Landslide or Liquefaction geotechnical investigation for each nstruction site within the project area shall be required as part of this project and bmitted for review and approval by the Building Services Division. Specifically:	Parcel Map.	
1)	Each investigation shall include an analysis of expected ground motions at the site from identified faults. The analyses shall be accordance with applicable City ordinances and polices, and consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from identified faults.		
2)	The investigations shall determine final design parameters for the walls, foundations, foundation slabs, surrounding related improvements, and infrastructure (utilities, roadways, parking lots, and sidewalks).		
3)	The investigations shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer, geotechnical engineer, shall be included in the final design, as approved by the City of Oakland.		
4)	The geotechnical report shall include a map prepared by a land surveyor or civil engineer that shows all field work and location of the "No Build" zone. The map shall include a statement that the locations and limitations of the geologic features are accurate representations of said features as they exist on the ground, were placed on this map by the surveyor, the civil engineer or under their supervision, and are accurate to the best of their knowledge.		
5)	Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the projects design phase, shall be incorporated in the project.		
6)	Final seismic considerations for the site shall be submitted to and approved by the City of Oakland Building Services Division prior to commencement of the project.		
7)	A peer review is required for the Geotechnical Report. Personnel reviewing the geologic report shall approve the report, reject it, or withhold approval pending the submission by the applicant or subdivider of further geologic and engineering studies to more adequately define active fault traces.		
	entative Tract or Parcel Map approvals shall require, but not be limited to, approval of the eotechnical Report.		
	YD-5 (Standard Condition of Approval 55): Erosion and Sedimentation Control Plan: o SCA-HYD-5 under Hydrology and Water Quality.	See below	See below.
Hazard	s and Hazardous Materials		
in build specific enclose but not Code; [AZ-1 (Standard Condition of Approval 41): Asbestos Removal in Structures: Prior to the of a demolition permit. If asbestos-containing materials (ACM) are found to be present ing materials to be removed, demolition and disposal, the project applicant shall submit eations signed by a certified asbestos consultant for the removal, encapsulation, or are of the identified ACM in accordance with all applicable laws and regulations, including necessarily limited to: California Code of Regulations, Title 8; Business and Professions Division 3; California Health & Safety Code 25915-25919.7; and Bay Area Air Quality ement District, Regulation 11, Rule 2, as may be amended.	Prior to issuance of a demolition permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspections
			Oakland Fire Prevention Bureau, Hazardous Materials Unit
to the is for site	AZ-2 (Standard Condition of Approval 61): Site Review by Fire Services Division: Prior ssuance of demolition, grading or building permit. The project applicant shall submit plans review and approval to the Fire Prevention Bureau Hazardous Materials Unit. Property may be required to obtain or perform a Phase II hazard assessment.	Prior to issuance of any demolition, grading or building permit.	Oakland Fire Prevention Bureau, Hazardous Materials Unit

	Standard Conditions of Approval/Misimatica Macaning	Mitigation Implement	ation/ Monitoring
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
Prior the F repor make	-HAZ-3 (Standard Condition of Approval 62): Phase I and/or Phase II Reports: to issuance of demolition, grading, or building permits. The project applicant shall submit to fire Prevention Bureau, Hazardous Materials Unit, a Phase I Environmental Site Assessment and a Phase II report if warranted by the Phase I report for the project site. The reports shall be recommendations for remedial action, if appropriate, and should be signed by a Registered commental Assessor, Professional Geologist, or Professional Engineer.	Prior to issuance of demolition, grading, or building permits	Oakland Fire Prevention Bureau, Hazardous Materials Unit
SCA-HAZ-4 (Standard Condition of Approval 63): Lead-Based Paint/Coatings, Asbestos, or PCB Occurrence Assessment: Prior to issuance of any demolition, grading or building permit.		Prior to issuance of any demolition, grading or building permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspections
			Oakland Fire Prevention Bureau, Hazardous Materials Unit
Rem	-HAZ-5 (Standard Condition of Approval 64): Environmental Site Assessment Reports ediation: Prior to issuance of any demolition, grading or building permit. If the commental site assessment reports recommend remedial action, the project applicant shall:	Prior to issuance of any demolition, grading or building permit.	City of Oakland Planning and Building Department
a)	Consult with the appropriate local, State, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination, groundwater contamination, or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps.		City of Oakland - Building Services Division, Zoning Inspections
b)	Obtain and submit written evidence of approval for any remedial action if required by a local, State, or federal environmental regulatory agency. Submit a copy of all applicable documentation required by local, State, and federal environmental regulatory agencies, including but not limited to: permit applications, Phase I and II environmental site assessments, human health and ecological risk assessments, remedial action plans, risk management plans, soil management plans, and groundwater		Oakland Fire Prevention Bureau, Hazardous Materials Unit
appliesigne and/oregul	management plans. SCA-HAZ-6 (Standard Condition of Approval 65): Lead-base Paint Remediation: Prior to issuance of any demolition, grading or building permit. If lead-based paint is present, the project applicant shall submit specifications to the Fire Prevention Bureau, Hazardous Materials Unit signed by a certified Lead Supervisor, Project Monitor, or Project Designer for the stabilization and/or removal of the identified lead paint in accordance with all applicable laws and regulations, including but not necessarily limited to: Cal/OSHA's Construction Lead Standard, 8 CCR1532.1 and DHS regulation 17 CCR Sections 35001 through 36100, as may be amended.		City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection Oakland Fire Prevention Bureau, Hazardous Materials Unit
Wast as ha confin and r	-HAZ-7 (Standard Condition of Approval 66): Other Materials Classified as Hazardous te: Prior to issuance of any demolition, grading or building permit. If other materials classified azardous waste by State or federal law are present, the project applicant shall submit written rmation to Fire Prevention Bureau, Hazardous Materials Unit that all State and federal laws regulations shall be followed when profiling, handling, treating, transporting and/or disposing of materials.	Prior to issuance of any demolition, grading or building permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection Oakland Fire Prevention Bureau, Hazardous Materials Unit

		Mitigation Implement	ation/ Monitoring
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
SCA-HAZ-8 (Standard Condition of Approval 67): Health and Safety Plan per Assessment: Prior to issuance of any demolition, grading or building permit. If the required lead-based paint/coatings, asbestos, or PCB assessment finds presence of such materials, the project applicant shall create and implement a health and safety plan to protect workers from risks associated with hazardous materials during demolition, renovation of affected structures, and transport and disposal.		Prior to issuance of any demolition, grading or building permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
Grou	a-HAZ-9 (Standard Condition of Approval 68): Best Management Practices for Soil and undwater Hazards: The project applicant shall implement all of the following Best agement Practices (BMPs) regarding potential soil and groundwater hazards:	Prior to issuance of any demolition, grading, or building permit, and ongoing.	City of Oakland Planning and Building Department
a)	Soil generated by construction activities shall be stockpiled onsite 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 agencies laws, in particular, the Regional Water Quality Control Board (RWQCB) and/or the Alameda County Department of Environmental Health (ACDEH) and policies of the City of Oakland.		City of Oakland - Building Services Division, Zoning Inspection Oakland Fire Prevention
b)	Groundwater pumped from the subsurface shall be contained onsite 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 of the City of Oakland, the RWQCB and/or the ACDEH. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building (pursuant to the Standard Condition of Approval regarding Radon or Vapor Intrusion from Soil and Groundwater Sources);		Bureau, Office of Emergency Services
c)	Prior to issuance of any demolition, grading, or building permit, the applicant shall submit for review and approval by the City of Oakland, written verification that the appropriate federal, state or county oversight authorities, including but not limited to the RWQCB and/or the ACDEH, have granted all required clearances and confirmed that the all applicable standards, regulations and conditions for all previous contamination at the site. The applicant also shall provide evidence from the City's Fire Department, Office of Emergency Services, indicating compliance with the Standard Condition of Approval requiring a Site Review by the Fire Services Division pursuant to City Ordinance No. 12323, and compliance with the Standard Condition of Approval requiring a Phase I and/or Phase II Reports.		
Whet Phas Haza Phas appro	A-HAZ-10 (Standard Condition of Approval 69): Radon or Vapor Intrusion from Soil or andwater Sources: Ongoing. The project applicant shall submit documentation to determine their radon or vapor intrusion from the groundwater and soil is located on-site as part of the sel documents. The Phase I analysis shall be submitted to the Fire Prevention Bureau, andous Materials Unit, for review and approval, along with a Phase II report if warranted by the sel report for the project site. The reports shall make recommendations for remedial action, if opriate, and should be signed by a Registered Environmental Assessor, Professional ogist, or Professional Engineer. Applicant shall implement the approved recommendations.	Submittal with Phase I and/or Phase II documents, prior to issuance of a demolition, grading or building permit. Ongoing if remediation actions are recommended.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection Oakland Fire Prevention Bureau, Hazardous Materials Unit
to iss Busin appro purpo hand	A-HAZ-11 (Standard Condition of Approval 74): Hazardous Materials Business Plan: Prior suance of a business license. The project applicant shall submit a Hazardous Materials ness Plan for review and approval by Fire Prevention Bureau, Hazardous Materials Unit. Once oved this plan shall be kept on file with the City and will be updated as applicable. The ose of the Hazardous Business Plan is to ensure that employees are adequately trained to the materials and provides information to the Fire Services Division should emergency onse be required. The Hazardous Materials Business Plan shall include the following:	Prior to issuance of a business license	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
a)b)c)d)	The types of hazardous materials or chemicals stored and/or used on site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids. The location of such hazardous materials. An emergency response plan including employee training information. A plan that describes the manner in which these materials are handled, transported and disposed.		Oakland Fire Prevention Bureau, Hazardous Materials Unit

	Other dead Constitutions of Assessment (MAN) and the Management	Mitigation Implement	ation/ Monitoring
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
Prior cons imple	-HAZ-12 (Standard Condition of Approval 35): Hazards Best Management Practices: to the commencement of demolition, grading, or construction. The project applicant and truction contractor shall ensure that construction of Best Management Practices (BMPs) is emented as part of construction to minimize the potential negative effects to groundwater soils. These shall include the following:	Prior to the commencement of demolition, grading, or construction.	City of Oakland Planning and Building Department City of Oakland -
a)	Follow manufacturers' recommendations on use, storage, and disposal of chemical products used in construction;		Building Services Division, Zoning Inspection
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)	Ensure that construction would not have a significant impact on the environment or pose a substantial health risk to construction workers and the occupants of the proposed development. Soil sampling and chemical analyses of samples shall be performed to determine the extent of potential contamination beneath all UST's, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition, or construction activities would potentially affect a particular development or building.		
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 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 notification of 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.		
Hydı	rology and Water Quality		
cons cons cons Plant mana	-HYD-1 (Standard Condition of Approval 78): Site Design Measures for Post- struction Stormwater Management: Prior to issuance of building permit (or other truction-related permit). The project drawings submitted for a building permit (or other truction-related permit) shall contain a final site plan to be reviewed and approved by ning and Zoning. The final site plan shall incorporate appropriate site design measures to age stormwater runoff and minimize impacts to water quality after the construction of the ict. These measures may include, but are not limited to, the following:	Prior to issuance of building permit (or other construction-related permit). Implementation: Ongoing.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
a)	Minimize impervious surfaces, especially directly connected impervious surfaces;		
b)	Utilize permeable paving in place of impervious paving where appropriate;		
c) d)	Cluster buildings; Preserve quality open space; and		
e)	Establish vegetated buffer areas.		
Ongo	bing. The approved plan shall be implemented and the site design measures shown on the shall be permanently maintained.		
Storr The a the C pollu		Prior to issuance of building permit (or other construction-related permit).	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning
Mana	oing. The applicant, or his or her successor, shall implement all operational Best agement Practices (BMPs) imposed by the Chief of Building Services to limit the ration, discharge, and runoff of stormwater pollution.		Inspection

	Mitigation Implement	ation/ Monitoring
Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
SCA-HYD-3 (Standard Condition of Approval 81): Maintenance Agreement for Stormwater Treatment Measures: Prior to final zoning inspection. For projects incorporating stormwater treatment measures, the applicant shall enter into the "Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement," in accordance with Provision C.3.e of the NPDES permit, which provides, in part, for the following: The 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 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 agreement shall be recorded at the County Recorder's Office at the applicant's expense.	Prior to final zoning inspection.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection City of Oakland - Public Works Department, Sewer and Stormwater Division
SCA-HYD-4 (Standard Condition of Approval 91): Stormwater and Sewer: Confirmation of the capacity of the City's surrounding stormwater and sanitary sewer system and state of repair shall be completed by a qualified civil engineer with funding from the project applicant. The project applicant shall be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the proposed project. In addition, the applicant shall be required to pay additional fees to improve sanitary sewer infrastructure if required by the Sewer and Stormwater Division. Improvements to the existing sanitary sewer collection system shall specifically include, but are not limited to, mechanisms to control or minimize increases in infiltration/inflow to offset sanitary sewer increases associated with the proposed project. To the maximum extent practicable, the applicant will be required to implement Best Management Practices to reduce the peak stormwater runoff from the project site. Additionally, the project applicant shall be responsible for payment of the required installation or hook-up fees to the affected service providers.	Prior to issuance of a demolition, grading, or building permit within vicinity of the creek.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
SCA-HYD-5 (Standard Condition of Approval 55): Erosion and Sedimentation Control Plan: Prior to any grading activities. The project applicant shall obtain a grading permit if required by the Oakland Grading Regulations pursuant to Section 15.04.780 of the Oakland Municipal Code. The grading permit application shall include an erosion and sedimentation control plan for review and approval by the Building Services Division. 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 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 Director of Development or designee. 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. Ongoing throughout grading and construction activities. The project applicant shall implement the approved erosion and sedimentation plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Building Services Division.	Prior to any grading activities. Implementation: Ongoing throughout grading and construction activities.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
SCA-HYD-6 (Standard Condition of Approval 75): Stormwater Pollution Prevention Plan: Prior to and ongoing throughout demolition, grading, and/or construction activities. The project applicant must obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the State Water Resources Control Board (SWRCB). The project applicant must file a notice of intent (NOI) with the SWRCB. The project applicant will be required to prepare a stormwater pollution prevention plan (SWPPP) and submit the plan for review and approval by the Building Services Division. At a minimum, the SWPPP shall include a description of construction materials, practices, and equipment storage and maintenance; a list of pollutants likely to contact stormwater; site-specific erosion and sedimentation control practices; a list of provisions to eliminate or reduce discharge of materials to stormwater; Best Management Practices (BMPs), and an inspection and monitoring program. Prior to the issuance of any construction-related permits, the project applicant shall submit to	Prior to and ongoing throughout demolition, grading, and/or construction activities.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection

	Standard Conditions of Approve/Militeration Managemen	Mitigation Implementation/ Monito	
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
SWR contir	uilding Services Division a copy of the SWPPP and evidence of submittal of the NOI to the CB. Implementation of the SWPPP shall start with the commencement of construction and nue though the completion of the project. After construction is completed, the project cant shall submit a notice of termination to the SWRCB.		
Mana The a Disch Progr const Form (or ot and a in sto	connected impervious surfaces; and Source control measures to limit the potential for stormwater pollution;	Construction-Permit-Phase Stormwater Supplemental Form Submittal: Prior to issuance of building permit (or other construction-related permit). Implement SWP: Prior to final permit inspection.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
6)			
m	he following additional information shall be submitted with the post-construction stormwater nanagement plan:		
All prostorm consilands irrigative approrequii	Detailed hydraulic sizing calculations for each stormwater treatment measure proposed; and Pollutant removal information demonstrating that any proposed manufactured/ mechanical (i.e., non-landscape-based) stormwater treatment measure, when not used in combination with a landscape-based treatment measure, is capable or removing the range of pollutants typically removed by landscape-based treatment measures and/or the range of pollutants expected to be generated by the project. Oposed stormwater treatment measures shall incorporate appropriate planting materials for inwater treatment (for landscape-based treatment measures) and shall be designed with derations for vector/mosquito control. Proposed planting materials for all proposed scape-based stormwater treatment measures shall be included on the landscape and tion plan for the project. The applicant is not required to include on-site stormwater ment measures in the post-construction stormwater management plan if he or she secures and from Planning and Zoning of a proposal that demonstrates compliance with the rements of the City's Alternative Compliance Program. Ito final permit inspection. The applicant shall implement the approved stormwater agement plan.		
SCA- Contr project by the Pract Clear abate	-HYD-8 (Standard Condition of Approval 82): Erosion, Sedimentation, and Debris rol Measures: Prior to issuance of demolition, grading, or construction-related permit: The ct applicant shall submit an erosion and sedimentation control plan for review and approval e Building Services Division. All work shall incorporate all applicable "Best Management ices (BMPs) for the construction industry, and as outlined in the Alameda Countywide in Water Program pamphlets, including BMP's for dust, erosion and sedimentation ement per Chapter Section 15.04 of the Oakland Municipal Code. The measures shall de, but are not limited to, the following: On sloped properties, the downhill end of the construction area must be protected with silt fencing (such as sandbags, filter fabric, silt curtains, etc.) and hay bales oriented parallel to the contours of the slope (at a constant elevation) to prevent erosion into the creek. In accordance with an approved erosion control plan, the project applicant shall implement	Prior to issuance of demolition, grading, or construction-related permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
u)	mechanical and vegetative measures to reduce erosion and sedimentation, including appropriate seasonal maintenance. One hundred (100) percent degradable erosion control fabric shall be installed on all graded slopes to protect and stabilize the slopes during		

		Mitigation Implement	ation/ Monitoring
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	construction and before permanent vegetation gets established. All graded areas shall be temporarily protected from erosion by seeding with fast growing annual species. All bare slopes must be covered with staked tarps when rain is occurring or is expected.		
c)	Minimize the removal of natural vegetation or ground cover from the site in order to minimize the potential for erosion and sedimentation problems. Maximize the replanting of the area with native vegetation as soon as possible.		
d)	All work in or near creek channels must be performed with hand tools and by a minimum number of people. Immediately upon completion of this work, soil must be repacked and native vegetation planted.		
e)	Install filter materials (such as sandbags, filter fabric, etc.) acceptable to the Engineering Division at the storm drain inlets nearest to the project site prior to the start of the wet weather season (October 15); site dewatering activities; street washing activities; saw cutting asphalt or concrete; and in order to retain any debris flowing into the City storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding.		
f)	Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains.		
g)	Direct and locate tool and equipment cleaning so that wash water does not discharge into the creek.		
h)	Create a contained and covered area on the site for storage of bags of cement, paints, flammables, oils, fertilizers, pesticides, or any other materials used on the project site that have the potential for being discharged to the storm drain system by the wind or in the event of a material spill. No hazardous waste material shall be stored on site.		
i)	Gather all construction debris on a regular basis and place them in a dumpster or other container which is emptied or removed on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater pollution.		
j)	Remove all dirt, gravel, refuse, and green waste from the sidewalk, street pavement, and storm drain system adjoining the project site. During wet weather, avoid driving vehicles off paved areas and other outdoor work.		
k)	Broom sweep the street pavement adjoining the project site on a daily basis. Caked-on mud or dirt shall be scraped from these areas before sweeping. At the end of each workday, the entire site must be cleaned and secured against potential erosion, dumping, or discharge to the creek, street, gutter, stormdrains.		
l)	All erosion and sedimentation control measures implemented during construction activities, as well as construction site and materials management shall be in strict accordance with the control standards listed in the latest edition of the Erosion and Sediment Control Field Manual published by the RWQCB.		
m)	Temporary fencing is required for sites without existing fencing between the creek and the construction site and shall be placed along the side adjacent to construction (or both sides of the creek if applicable) at the maximum practical distance from the creek centerline. This area shall not be disturbed during construction without prior approval of Planning and Zoning.		
applio qualit meas	sion and sedimentation control measures shall be monitored regularly by the project cant. The City may require erosion and sedimentation control measures to be inspected by a fied environmental consultant (paid for by the project applicant) during or after rain events. If sures are insufficient to control sedimentation and erosion then the project applicant shall lop and implement additional and more effective measures immediately.		
Nois	se		
Ongo	-NOI-1 (Standard Condition of Approval 28): Days/Hours of Construction Operation: oing throughout demolition, grading, and/or construction. The project applicant shall require truction contractors to limit standard construction activities as follows:	Ongoing throughout demolition, grading, and/or construction.	City of Oakland Planning and Building Department
a)	Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pile driving and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday.		City of Oakland - Building Services Division, Zoning
b)	Any construction activity proposed to occur outside of the standard hours of 7:00 a.m. to 7:00 p.m. Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of		Inspection

	Standard Conditions of America (Militimatical Management	Mitigation Implement	tion/ Monitoring
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	resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division.		
c)	Construction activity shall not occur on Saturdays, with the following possible exceptions:		
	i. Prior to the building being enclosed, requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division.		
	ii. After the building is enclosed, requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed.		
d)	No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.		
e)	No construction activity shall take place on Sundays or federal holidays.		
f) g)	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. Applicant shall use temporary power poles instead of generators where feasible.		
proje redu	colition, grading, and/or construction. To reduce noise impacts due to construction, the ect applicant shall require construction contractors to implement a site-specific noise ction program, subject to the Planning and Zoning Division and the Building Services sion review and approval, which includes the following measures: 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	throughout demolition, grading, and/or construction.	Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
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 wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, is 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)	Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures as determined by the City to provide equivalent noise reduction.		
d)	The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determined an extension is necessary and all available noise reduction controls are implemented.		
throu perm to the	-NOI-3 (Standard Condition of Approval 30): Noise Complaint Procedures: Ongoing aghout demolition, grading, and/or construction. Prior to the issuance of each building hit, along with the submission of construction documents, the project applicant shall submit a Building Services Division a list of measures to respond to and track complaints pertaining instruction noise. These measures shall include:	Ongoing throughout demolition, grading, and/or construction.	City of Oakland Planning and Building Department City of Oakland - Building Services
a)	A procedure and phone numbers for notifying the Building Services Division staff and Oakland Police Department; (during regular construction hours and off-hours);		Division, Zoning Inspection

	Chandand Canditions of Annual (Mitimation Manager)	Mitigation Implement	ation/ Monitoring
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility
b)	A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);		
c)	The designation of an on-site construction complaint and enforcement manager for the project;		
d)	Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity; and		
e)	A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.		
build Oakl redu be in acou Final desig Writt	Interior Noise: Prior to issuance of a ling permit. If necessary to comply with the interior noise requirements of the City of and's General Plan Noise Element and achieve an acceptable interior noise level, noise ction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls) shall corporated into project building design, based upon recommendations of a qualified istical engineer and submitted to the Building Services Division for review and approval. I recommendations for sound-rated assemblies would depend on the specific building gns and layout of buildings on the site and shall be determined during the design phases. In enconfirmation by the acoustical consultant, HVAC or HERS specialist, shall be submitted be submitted by review and approval, prior to Certificate of Occupancy (or equivalent) that: Quality control was exercised during construction to ensure all air-gaps and penetrations of the building shell are controlled and sealed; and Demonstrates compliance with interior noise standards based upon performance testing of a sample unit. Inclusion of a Statement of Disclosure Notice in the CC&R's on the lease or title to all new tenants or owners of the units acknowledging the noise generating activity and the single event noise occurrences. Potential features/measures to reduce interior noise could include, but are not limited to, the following: i. Installation of an alternative form of ventilation in all units identified in the acoustical analysis as not being able to meet the interior noise requirements due to adjacency to a noise generating activity, filtration of ambient make-up air in each unit and analysis of ventilation noise if ventilation is included in the recommendations by the acoustical analysis.	Prior to issuance of a building permit.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
Noise the p the C noise	ii. Prohibition of Z-duct construction. -NOI-5 (Standard Condition of Approval 32): Operational Noise (General): Ongoing. e levels from the activity, property, or any mechanical equipment on site shall comply with performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of Dakland Municipal Code. If noise levels exceed these standards, the activity causing the e shall be abated until appropriate noise reduction measures have been installed and oliance verified by the Planning and Zoning Division and Building Services.	Ongoing during Project operations.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning
General potes greathers such and achies paid	A-NOI-6 (Standard Condition of Approval 39): Pile Driving and Other Extreme Noise erators: Ongoing throughout demolition, grading, and/or construction. To further reduce nitial pier drilling, pile driving and/or other extreme noise generating construction impacts ter than 90dBA, a set of site-specific noise attenuation measures shall be completed under supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for measures shall be submitted for review and approval by the Planning and Zoning Division the Building Services Division to ensure that maximum feasible noise attenuation will be eved. This plan shall be based on the final design of the project. A third-party peer review, for by the project applicant, may be required to assist the City in evaluating the feasibility effectiveness of the noise reduction plan submitted by the project applicant. A special	Ongoing throughout demolition, grading, and/or construction.	Inspection City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection

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inspection deposit is required to ensure compliance with the noise reduction plan. The amount of the deposit shall be determined by the Building Official, and the deposit shall be submitted by the project applicant concurrent with submittal of the noise reduction plan. The noise reduction plan shall include, but not be limited to, an evaluation of the following measures. These attenuation measures shall include as many of the following control strategies as applicable to the site and construction activity:		
 Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; 		
 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; 		
c) Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;		
d) 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		
e) Monitor the effectiveness of noise attenuation measures by taking noise measurements.		
SCA-CUL-4 (Standard Condition of Approval 57): Vibrations Adjacent to Historic Structures: Refer to SCA-CUL-4 under Cultural Resources.	See above.	See above.
Transportation and Circulation		
Mitigation Measure TRANS-2: Implement the following measures at the Perry Place / I-580	Investigation of the	City of Oakland
 Eastbound Ramps/Oakland Avenue intersection: Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the PM peak hour Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. This intersection is under the jurisdiction of Caltrans so any equipment or facility upgrades must be approved by Caltrans prior to installation. To implement this measure, the project sponsor shall submit the following to City of Oakland's Transportation Services Division and Caltrans for review and approval: Plans, Specifications, and Estimates (PS&E) to modify intersection. All elements shall be designed to City and Caltrans standards in effect at the time of construction and all new or upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both City standards and Americans with Disabilities Act (ADA) standards (according to Federal and State Access Board guidelines) at the time of construction. Current City Standards call for the elements listed below: 2070L Type Controller with cabinet assembly GPS communications (clock) Accessible pedestrian crosswalks according to Federal and State Access Board guidelines with signals (audible and tactile) Countdown pedestrian head module switch out 	need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, at the time when about 15 percent of the Development Program is operational and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. The City of Oakland will notify the Project Sponsor when this threshold is reached. If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications,	Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection City of Oakland Transportation Services Division Caltrans

	Mitigation Implementation/ Monitoring		
Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility	
- PTZ Camera (where applicable)			
Transit Signal Priority (TSP) equipment consistent with other signals along corridor			
Signal timing plans for the signals in the coordination group.			
The project sponsor shall fund the cost of preparing and implementing these plans. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the project sponsor shall have the option to pay the applicable fee in lieu of implementing this mitigation measure and payment of the fee shall be considered the equivalent of implementing the mitigation measure, which would still result in significant unavoidable impacts.			
A straight line interpolation of intersection traffic volume between Existing and Existing Plus Project conditions indicates that mitigation at this intersection may be required when about 15 percent of the Development Program is developed. Investigation of the need for this mitigation shall be studied at the time when this threshold is reached and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.			
Mitigation Measure TRANS-10: Implement the following measures at the 27th Street/24th Street/Bay Place/Harrison Street intersection:	Investigation of the need for this mitigation	City of Oakland Planning and	
Reconfigure the 24th Street approach at the intersection to restrict access to 24th Street to right turns only from 27th Street and create a pedestrian plaza at the intersection approach.	need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2016 (one year prior to the horizon date) and every three years thereafter until 2035 or until the mitigation	Building Department	
 Convert 24th Street between Valdez and Harrison Streets to two-way circulation and allow right turns from 24th Street to southbound Harrison Street south of the intersection, which would require acquisition of private property in the southwest corner of the intersection. 		City of Oakland - Building Services Division, Zoning	
 Modify eastbound 27th Street approach from the current configuration (one right-turn lane, two through lanes, and one left-turn lane) to provide one right-turn lane, one through lane, and two left-turn lanes. 		Inspection City of Oakland Transportation	
Realign pedestrian crosswalks to shorten pedestrian crossing distances.	measure is	Services Division	
Reduce signal cycle length from 160 to 120 seconds, and optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection).	implemented, whichever occurs first. If investigations in 2016, or subsequent years, as stipulated		
Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.			
To implement this measure, the project sponsor shall submit the following to City of Oakland's Transportation Services Division for review and approval:	above, show this mitigation is still required, submit Plans,		
PS&E to modify intersection as detailed in Mitigation Measure TRANS-2.	Specifications, and		
Signal timing plans for the signals in the coordination group.	Estimates (PS&E) for review and approval by		
The project sponsor shall fund the cost of preparing and implementing these plans. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the project sponsor shall have the option to pay the applicable fee in lieu of implementing this mitigation measure and payment of the fee shall be considered the equivalent of implementing the mitigation measure, which would still result in significant unavoidable impacts.	the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.		
A straight line interpolation of intersection traffic volume between Existing and 2020 Plus Project conditions indicates that mitigation at this intersection may be required by 2017. Investigation of the need for this mitigation shall be studied at that time and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.			
Mitigation Measure TRANS-22: Implement the following measures at the 27th Street / Broadway intersection:	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2023 (one year prior to the horizon date), and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	City of Oakland Planning and	
Upgrade traffic signal operations at the intersection to actuated-coordinated operations		Building	
Reconfigure westbound 27th Street approach to provide a 150-foot left-turn pocket, one through lane, and one shared through/right-turn lane.		Department City of Oakland -	
Provide protected left-turn phase(s) for the northbound and southbound approaches.		Building Services	
Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection).		Division, Zoning Inspection	
Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.		City of Oakland Transportation Services Division	

	Chandrad Conditions of America (Mittington Macause	Mitigation Implementation/ Monitoring		
Standard Conditions of Approval/Mitigation Measures		Schedule	Responsibility	
To implement this measure, the project sponsor shall submit the following to City of Oakland's Transportation Services Division for review and approval: • PS&E to modify intersection as detailed in Mitigation Measure TRANS-2. Signal timing plans for the signals in the coordination group. The project sponsor shall fund the cost of preparing and implementing these plans. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the project sponsor shall have the option to pay the applicable fee in lieu of		If investigations in 2023, or subsequent years as stipulated above, show this mitigation is still required, submit Plans, Specifications, and Estimates (PS&E) for review and approval by		
equiv	menting this mitigation measure and payment of the fee shall be considered the alent of implementing the mitigation measure, which would still result in significant bidable impacts.	the City for implementation of this mitigation.		
Proje Inves	aight line interpolation of intersection traffic volume between Existing and 2035 Plus ct conditions indicates that mitigation at this intersection may be required by 2024. Itigation of the need for this mitigation shall be studied at that time and every three years after until 2035 or until the mitigation measure is implemented, whichever occurs first.	This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by the City.		
	TRANS-1: (Standard Condition of Approval 33): Construction Traffic and Parking. Prior is suance of a demolition, grading or building permit.	Prior to the issuance of a demolition, grading	City of Oakland Planning and	
The project sponsor and construction contractor shall meet with appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project sponsor shall develop a construction management plan for review and approval by the Planning and Zoning Division, the Building Services Division, and the Transportation Services Division. The plan shall include at least the following items and requirements:		or building permit.	Zoning Division City of Oakland Building Services Division City of Oakland Transportation	
a)	A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes.		Services Division	
b)	Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur.			
c)	Location of construction staging areas for materials, equipment, and vehicles at an approved location.			
d)	A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager. The manager shall determine the cause of the complaints and shall take prompt action to correct the problem. Planning and Zoning shall be informed who the Manager is prior to the issuance of the first permit issued by Building Services.			
e)	Provision for accommodation of pedestrian flow.			
f)	Provision for parking management and spaces for all construction workers to ensure that construction workers do not park in on-street spaces.			
g)	Any damage to the street caused by heavy equipment, or as a result of this construction, shall be repaired, at the project sponsor's 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 issuance of a final inspection of the building permit. All damage that is a threat to public health or safety shall be repaired immediately. The street shall be restored to its condition prior to the new construction as established by the City Building Inspector and/or photo documentation, at the project sponsor's expense, before the issuance of a Certificate of Occupancy.			
h)	Any heavy equipment brought to the construction site shall be transported by truck, where feasible.			
i)	No materials or equipment shall be stored on the traveled roadway at any time.			
j)	Prior to construction, a portable toilet facility and a debris box shall be installed on the site, and properly maintained through project completion.			
k)	All equipment shall be equipped with mufflers.			
l)	Prior to the end of each work day during construction, the contractor or contractors shall pick up and properly dispose of all litter resulting from or related to the project, whether located on the property, within the public rights-of-way, or properties of adjacent or nearby neighbors.			

			ation Implementation/ Monitoring		
	Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility		
SCA-TRANS-2 (Standard Condition of Approval 25): Parking and Transportation Demand Management: This SCA would apply to development projects under the Specific Plan generating 50 or more net new AM or PM peak hour vehicle trips.		Prior to issuance of a final inspection of the building permit.	City of Oakland Planning and Building Department		
Prior to issuance of a final inspection of the building permit. The project applicant shall submit a Transportation and Parking Demand Management (TDM) for review and approval by the City. The intent of the TDM plan shall be to reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable consistent with the potential traffic and parking impacts of the project.		Implementation: Ongoing e.g. submittal of additional approved TDM reports as needed per approved TDM plan.	City of Oakland - Building Services Division, Zoning Inspection		
The g	poal of the TDM shall be to achieve the following project vehicle trip reductions (VTR):		City of Oakland Public Works		
•	Projects generating 50 – 99 net new AM or PM peak hour vehicle trips: 10 percent VTR		Department, Traffic Services		
•	Projects generating 100 or more net new AM or PM peak hour vehicle trips: 20 percent VTR		Division		
and r	FDM plan shall include strategies to increase pedestrian, bicycle, transit, and carpool use, educe parking demand. All four modes of travel shall be considered, as appropriate. VTR egies to consider include, but are not limited to, the following:				
a.	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 Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement.				
b.	Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority Bikeway Projects, on-site signage and bike lane striping.				
C.	Installation of safety elements per the Pedestrian Master Plan (such as cross walk 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.				
d.	Installation of amenities such as lighting, street trees, trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan.				
e.	Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements.				
f.	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).				
g.	Provision of a transit subsidy to employees or residents, determined by the project sponsor and subject to review by the City, if the employees or residents use transit or commute by other alternative modes.				
h.	Provision of an ongoing contribution to AC Transit service to the area between the development and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle or streetcar service; and 3) Establishment of new shuttle or streetcar service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario3).				
i.	Guaranteed ride home program for employees, either through 511.org or through separate program.				
j.	Pre-tax commuter benefits (commuter checks) for employees.				
k.	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.				
I.	Onsite carpooling and/or vanpooling program that includes preferential (discounted or free) parking for carpools and vanpools.				
m.	Distribution of information concerning alternative transportation options.				
n.	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.				
0.	Parking management strategies; including attendant/valet parking and shared parking spaces.				

Standard Conditions of Approval/Mitigation Magazza	Mitigation Implementation/ Monitoring		
Standard Conditions of Approval/Mitigation Measures	Schedule	Responsibility	
 p. Requiring tenants to provide opportunities and the ability to work off-site. q. 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). 			
r. 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 proposed based on published research or guidelines. 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.			
The project applicant shall implement the approved TDM Plan on an ongoing basis. 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. 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-AES-7 (Standard Condition of Approval 20): Improvements in the Public Right-of-Way (General): Refer to SCA-AES-7 under Aesthetics, Shadow and Wind.	See above.	See above.	
SCA-AES-8 (Standard Condition of Approval 21): Improvements in the Public Right-of-Way (Specific): Refer to SCA-AES-8 under Aesthetics, Shadow and Wind.	See above.	See above.	
Utilities and Service Systems			
SCA-UTIL-1 (Standard Condition of Approval 36): Waste Reduction and Recycling: The project applicant will submit a Construction and Demolition WRRP and an Operational Diversion Plan (ODP) for review and approval by the Public Works Department. Chapter 15.34 of the Oakland Municipal Code outlines requirements for reducing waste and optimizing construction and demolition (C&D) recycling. Affected projects include: — All New Construction:	Prior to issuance of a construction-related permit and ongoing as specified.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning	
 All Alterations, Renovations, Repairs, or Modifications with construction value of \$50,000 or greater, excluding R-3; 		Inspections City of Oakland, Public Works,	
 All Demolition, including Soft Demo, and excluding R-3; 		Environmental Services	
Applicants must complete a Waste Reduction and Recycling Plan (WRRP) 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 current at the time of this writing call for salvage and/or recycling 100% of asphalt and concrete, and at least 65% of all remaining debris. These rates are subject to administrative adjustment and Applicants must follow the standards published at the time of building permit application. The City will not issue an affected permit without an approved WRRP on file.			
Upon approval of the WRRP and issuance of the permit(s), the Applicant shall execute the plan. Prior to the Final Inspection, Temporary Certificate of Occupancy or Certificate of Occupancy, the Applicant must complete and obtain approval of a Construction and Demolition Summary Report (CDSR). The CDSR documents the salvage, recycling and disposal activities that took place during the project. The CDSR must include documentation, such as scale tickets, that support the data provided in the CDSR. Additional information is available at: http://www2.oaklandnet.com/Government/o/PWA/o/FE/s/GAR/OAK024368.			

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
Standard Conditions of Approvar/witigation Measures	Schedule	Responsibility
The ODP will identify how the project complies with the Recycling Space Allocation Ordinance, (Chapter 17.118 of the Oakland Municipal Code), including capacity calculations, and specify the methods by which the development will meet the current City recycling standards for materials generated by operation of the proposed project. The proposed program shall be in implemented and maintained for the duration of the proposed activity or facility, and conform with the requirements of the Alameda County Mandatory Recycling Ordinance. Any incentive programs shall remain fully operational as long as residents and businesses exist at the project site.		
SCA-UTIL-2 (Standard Condition of Approval 91): Stormwater and Sewer: Confirmation of the capacity of the City's surrounding stormwater and sanitary sewer system and state of repair shall be completed by a qualified civil engineer with funding from the project applicant. The project applicant shall be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the proposed project. In addition, the applicant shall be required to pay additional fees to improve sanitary sewer infrastructure if required by the Sewer and Stormwater Division. Improvements to the existing sanitary sewer collection system shall specifically include, but are not limited to, mechanisms to control or minimize increases in infiltration/inflow to offset sanitary sewer increases associated with the proposed project. To the maximum extent practicable, the applicant will be required to implement Best Management Practices to reduce the peak stormwater runoff from the project site. Additionally, the project applicant shall be responsible for payment of the required installation or hook-up fees to the affected service providers.	Prior to issuance of a demolition, grading, or building permit within vicinity of the creek.	City of Oakland Planning and Building Department City of Oakland - Building Services Division, Zoning Inspection
SCA-UTIL-3 (Standard Condition of Approval H): Green Building for Residential Structures and Non-residential Structures: SCA H applies to certain projects that would construct single or multi-family dwellings or modifications of existing uses. SCA H requires that the applicant comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the Green Building Ordinance. SCA H is initially presented in Section 4.14, Utilities and Service Systems. The Green Building Ordinance establishes checklist requirements for developers based on LEED or Build it Green. LEED certification requires a 10 percent reduction in the Title 24 energy standards which are reflected in Table 4.6-3.	Prior to issuance of a construction-related permit and ongoing as specified.	City of Oakland, Building Services Division
SCA-HYD-6 (Standard Condition of Approval 75): Stormwater Pollution Prevention Plan: Refer to SCA-HYD-6 under Hydrology and Water Quality.	See above.	See above.
SCA-HYD-7 (Standard Condition of Approval 80): Post-construction Stormwater Management Plan: Refer to SCA-HYD-7 under Biological Resources.	See above.	See above.

ATTACHMENT B: PROJECT CONSISTENCY WITH COMMUNITY PLAN OR ZONING, PER CEQA GUIDELINES SECTION 15183

ATTACHMENT B: PROJECT CONSISTENCY WITH COMMUNITY PLAN OR ZONING, PER CEQA GUIDELINES SECTION 15183

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

Proposed Project. The proposed project would be located in the Broadway Valdez District Specific Plan (BVDSP) area. The proposed project would include the construction of a residential and retail building consisting of approximately 328,211 square feet (sf) within a six-story wood-frame building plus a basement. Up to 196 multi-family units (approximately 269,639 sf) would be provided with a mix of studios, one-bedroom units, two-bedroom units, and community function spaces, including management/ leasing offices and lobbies. Residential parking for approximately 147 spaces would be included in the basement level. The proposed project would provide approximately 31,500 sf of ground-floor and mezzanine retail along Valdez Street and at the corner of 23rd Street/Valdez Street. Approximately 62 parking spaces would be provided for the retail uses in a garage on the ground floor.

Project Consistency. The BVDSP EIR was prepared for the BVDSP; it was certified by the Planning Commission on May 21, 2014, and confirmed by the City Council on June 17, 2014. As determined by the City of Oakland Bureau of Planning, the proposed project is permitted in the zoning district in which it is located and is consistent with the general bulk, density, and land uses envisioned in the Plan Area, as outlined below.

- The land use designation for the site is Central Business District, which supports the destination retail district envisioned for the area and would, over time, result in larger structures to be constructed than currently exist. The intent of the Central Business District is to encourage a high density, mixed-use urban center of regional importance as a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation. Although the proposed project would also include housing, retail would be provided on the ground floor. A Conditional Use Permit (CUP) would be required to grant the allowance of less retail than the minimum requirement and to allow for the proposed number of residential units. Although a CUP is needed to achieve consistency with the retail requirements of the BVDSP, the development density of the proposed project is substantially similar to what was considered in the BVDSP. The reduction in retail uses would not lead to new physical impacts not previously considered in the BVDSP EIR. In accordance with Section 15183.3 of the CEQA Guidelines, the proposed project is consistent with the BVDSP.
- The site is zoned Broadway Valdez District Retail Priority Sites Commercial Zone 1 (D-BV-1), Retail Priority Zone 5A, which is the most restrictive zoning regarding general uses and ground floor uses in the BVDSP area. The regulatory framework of D-BV-1 is intended to ensure that larger sites and opportunity areas are reserved primarily for new, larger retail development to accommodate consumer goods retail, at least on the ground floor. Properties zoned as D-BV-1 Retail Priority Sites would only allow residential uses if a project were to include a certain size/type of retail component. The proposed mixed-use project would be consistent with this land use designation.

- The proposed project would be up to 75 feet in height, which is not consistent with the height limits assumed at the project site. The height model analyzed in the BVDSP EIR assumed 65 feet at the project site, whereas 75 feet are proposed. Although a CUP is needed to allow for an increase in height, the development density of the proposed project is substantially similar to what was considered in the BVDSP. The slight increase in building height would not lead to new physical impacts not previously considered in the BVDSP EIR. In accordance with Section 15183.3 of the CEQA Guidelines, the proposed project is consistent with the BVDSP.
- The project site is designated as a Retail Priority Site, which does not allow for residential density without a residential facilities bonus by way of a CUP. However, the proposed CUP would allow for a density of up to 275 sf of lot area per dwelling unit.³⁰ Therefore, the proposed 196 dwelling units would be below the maximum residential density of 200 dwelling units allowed on the project site with a CUP for greater height.³¹ Regardless, the BVDSP EIR assumed a residential density similar to the proposed project development density.³² The slight increase in residential uses under the proposed project compared to the BVDSP EIR assumptions would not lead to new physical impacts not previously considered in the BVDSP EIR. In accordance with Section 15183.3 of the CEQA Guidelines, the proposed project is consistent with the BVDSP.
- The Project site must include at least 45,905 sf of retail before the Project can be entitled to a "residential facilities bonus." The project proposes approximately 31,500 sf of retail due to site constraints; therefore, the proposed project requires a CUP to grant the allowance of less retail than the minimum retail requirement. With the exception, the proposed project would be consistent with the zoning. The BVDSP assumed a retail density of approximately 127,733 sf, which is more than proposed under the project. Therefore, in accordance with Section 15183.3 of the CEQA Guidelines, the proposed project is consistent with the BVDSP.

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

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³⁰ The project site is 55,092 sf.

³¹ See Appendix B of the BVDSP, Existing and Proposed Zoning and Height Area Maps, Figure B.4.

³² See Appendix D of the BVDSP, Illustrative Development Program Map, Table D.1. This table assumed 118 housing units.

ATTACHMENT C: INFILL PERFORMANCE STANDARDS, PER CEQA GUIDELINES SECTION 15183.3

ATTACHMENT C: INFILL PERFORMANCE STANDARDS, PER CEQA GUIDELINES SECTION 15183.3

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

	Table C-1 Project Infill Eligibility				
	CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project			
1.	Be located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least seventy-five percent of the site's perimeter. For the purpose of this subdivision "adjoin" means the infill project is immediately adjacent to qualified urban uses or is only separated from such uses by an improved right-of-way. (CEQA Guidelines Section 15183.3[b][1])	Yes The project site has been previously developed with automobile repair and sales uses; and adjoins existing urban uses, as described in the Project Description, above.			
2.	Satisfy the performance Standards provided in Appendix M (CEQA Guidelines Section 15183.3[b][2]) as presented in 2a and 2b below:				
	2a. <i>Performance Standards Related to Project Design</i> . All projects must implement <u>all</u> of the following:				
	Renewable Energy. Non-Residential Projects. All nonresidential projects shall include onsite renewable power generation, such as solar photovoltaic, solar thermal, and wind power generation, or clean back-up power supplies, where feasible. Residential Projects. Residential projects are also encouraged to include such on site renewable power generation.	Not Applicable According to Section IV (G) of CEQA Appendix M, for mixed-use projects "the performance standards in this section that apply to the predominant use shall govern the entire project." Because the predominant use is residential, the proposed project is not required to include onsite renewable power generation. It is not known at this time if the proposed project will provide onsite renewable power. However, the proposed project would be GreenPoint Rated in compliance with Oakland's Green Building Program (including site preparation for future photovoltaic installation) and would comply with CALGreen requirements.			
	Soil and Water Remediation. If the project site is included on any list compiled pursuant to Section 65962.5 of the Government Code, the project shall document how it has remediated the site, if remediation is completed. Alternatively, the project shall implement the recommendations provided in a preliminary endangerment assessment or comparable document that identifies remediation appropriate for the site.	Yes The project site is listed in regulatory databases compiled pursuant to Section 65962.5 of the Government Code. However, SCAs as outlined in the BVDSP EIR would be applicable to the project site. In particular, SCA-HAZ-3 requires a Phase I and Phase II (if needed) Environmental Site Assessment (ESA), which would make recommendations for remedial action. SCA-HAZ-5 requires consultation with appropriate agencies and approval of remediation actions. A Phase I ESA has been conducted for the project site and recommended that a			

Table C-1 Project Infill Eligibility				
CEQA Eligibility Criteria Eligible?/Notes for Proposed Project				
	Phase II subsurface investigation be completed in order to evaluate the current subsurface site conditions. ³³ In accordance with SCA-HAZ-3, the project sponsor conducted a Phase II ESA, which requires the implementation of a soil management plan (SMP) and a health and safety plan (HASP). ³⁴ The project sponsor would implement the recommendations in the Phase II ESA, per SCA-HAZ-5. Therefore, the project sponsor would implement the recommendations provided in a preliminary endangerment assessment or comparable document that identifies remediation appropriate for the site.			
Residential Units Near High-Volume Roadways and Stationary Sources. If a project includes residential units located within 500 feet, or other distance determined to be appropriate by the local agency or air district based on local conditions, of a high volume roadway or other significant sources of air pollution, the project shall comply with any policies and standards identified in the local general plan, specific plan, zoning code, or community risk reduction plan for the protection of public health from such sources of air pollution. If the local government has not adopted such plans or policies, the project shall include	Yes Per the findings of the Broadway Valdez District Specific Plan (BVDSP) Environmental Impact Report (EIR), an air quality screening was prepared for the proposed project. ³⁵ The proposed project would be located near high-volume roadways and stationary sources. As summarized in the air quality screening prepared for the proposed project, no air pollution measures are required to be implemented for the proposed project.			
measures, such as enhanced air filtration and project design, that the lead agency finds, based on substantial evidence, will promote the protection of public health from sources of air pollution. Those measures may include, among others, the recommendations of the California Air Resources Board, air districts, and the California Air Pollution Control Officers Association.				
2b. Additional Performance Standards by Project Type. In addition to implementing all the features described in 2a above, the project must meet eligibility requirements provided below by project type. ^a				

³³ Langan Treadwell Rollo. 2014. "Phase I Environmental Site Assessment: 2342 Valdez Street, Oakland, California." November 13.

Langan Treadwell Rollo. 2014. "Environmental Site Characterization: 2302-2332 Valdez Street and 2321-2335 Waverly Street, Oakland, California." October 22.

³⁵ ICF International, 2014. 23rd and Valdez Project – Air Quality Screening Analysis per the Broadway Valdez District Specific Plan Environmental Impact Report Technical Memorandum. December.

Table C-1 Project Infill Eligibility					
CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project				
Residential. A residential project must meet one of the following: A. Projects achieving below average regional per capita vehicle miles traveled (VMT). A residential project is eligible if it is located in a "low vehicle travel area" within the region; B. Projects located within ½ mile of an Existing Major Transit Stop or High Quality Transit Corridor. A residential project is eligible if it is located within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor; or C. Low - Income Housing. A residential or mixeduse project consisting of 300 or fewer residential units all of which are affordable to low income households is eligible if the developer of the development project provides sufficient legal commitments to the lead agency to ensure the continued availability and use of the housing units for lower income households, as defined in Section 50079.5 of the Health and Safety Code, for a period of at least 30 years, at monthly housing costs, as determined pursuant to Section 50053 of the Health and Safety Code.	The proposed project is eligible under Section (B). The proposed project site is well-served by multiple transit providers, including Alameda-Contra Costa County Transit District (AC Transit) routes 1, 1R, 51A, 800, and 851, as well as other private shuttle bus services (Kaiser Medical Shuttle and Alta Bates Shuttle). The project site is also within 1 mile of the 19th Street BART station, which is southwest of the site. Broadway, which is two blocks west of the project site, qualifies as a "High Quality Transit Corridor," as defined by Section II of CEQA, with fixed route bus service at intervals no longer than 15 minutes during peak commute hours. The AC Transit Line 51A runs along Broadway in the project vicinity, and has service intervals no longer than 15 minutes during peak commute hours. Other bus routes in the project vicinity further satisfy this criterion.				
Commercial/Retail. A commercial/retail project must meet one of the following: A. Regional Location. A commercial project with no single-building floor-plate greater than 50,000 square feet is eligible if it locates in a "low vehicle travel area"; or B. Proximity to Households. A project with no single-building floor-plate greater than 50,000 square feet located within ½ mile of 1,800 households is eligible.	Not Applicable According to Section IV (G) of CEQA Appendix M, for mixed-use projects "the performance standards in this Section that apply to the predominant use shall govern the entire project." Because the predominant use is residential, the requirements for commercial/retail projects do not apply.				
Office Building. An office building project must meeting one of the following: A. Regional Location. Office buildings, both commercial and public, are eligible if they locate in a low vehicle travel area; or B. Proximity to a Major Transit Stop. Office buildings, both commercial and public, within ½ mile of an existing major transit stop, or ¼ mile of an existing stop along a high quality transit corridor, are eligible.	Not Applicable				

	Table C-1 Project Infill Eligibility				
	CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project			
	Schools. Elementary schools within 1 mile of 50 percent of the projected student population are eligible. Middle schools and high schools within 2 miles of 50 percent of the projected student population are eligible. Alternatively, any school within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor is eligible. Additionally, to be eligible, all schools shall provide parking and storage for bicycles and scooters, and shall comply with the requirements of Sections 17213, 17213.1, and 17213.2 of the California Education Code.	Not Applicable			
	Transit. Transit stations, as defined in Section 15183.3(e)(1), are eligible.	Not Applicable			
	Small Walkable Community Projects. Small walkable community projects, as defined in Section 15183.3, subdivision (e)(6), that implement the project features in 2a above are eligible.	Not Applicable			
3.	Be consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy, except as provided in CEQA Guidelines Sections 15183.3(b)(3)(A) or (b)(3)(B) below: (b)(3)(A). Only where an infill project is proposed within the boundaries of a metropolitan planning organization for which a sustainable communities strategy or an alternative planning strategy will be, but is not yet in effect, a residential infill project must have a density of at least 20 units per acre, and a retail or commercial infill project must have a floor area ratio of at least 0.75; or (b)(3)(B). Where an infill project is proposed outside of the boundaries of a metropolitan	Yes (see explanation below table)			
	planning organization, the infill project must meet the definition of a "small walkable community project" in CEQA Guidelines §15183.3(f)(5). (CEQA Guidelines Section 15183.3[b][3])				

Note:

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

Explanation for Eligibility Criteria 3—The adopted Plan Bay Area (2013)³⁶ serves as the sustainable communities strategy for the Bay Area, per Senate Bill 375. As defined by the Plan, Priority Development Areas (PDAs) are areas where new development will support the needs of residents and workers in a pedestrian-friendly environment served by transit. As stated in the BVDSP, the Broadway Valdez District is considered a PDA. With the CUP, the proposed project is consistent with the general land use designation, density, building intensity, and applicable policies specified in the BVDSP and described further below.

The land use designation for the site is Central Business District. The intent of the Central Business District is to encourage a high-density, mixed-use urban center of regional importance as a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation. The proposed project would include a mixed-use building with retail and residential; therefore, the proposed project would be consistent with this designation.

The project site is zoned Broadway Valdez District Retail Priority Sites Commercial Zone 1 (D-BV-1), Retail Priority Zone 5A, which is the most restrictive zoning regarding general uses and ground floor uses in the Plan area. The regulatory framework of D-BV-1 is intended to ensure that larger sites and opportunity areas are reserved primarily for new, larger retail development to accommodate consumer goods retail, at least on the ground floor. Properties zoned as D-BV-1 Retail Priority Sites would only allow residential uses if a project were to include a certain size and type of retail component. Special height regulations apply to this zoning district.

The proposed project would include up to 196 residential units and approximately 31,500 sf of retail; therefore, it is within the development maximums analyzed in the BVDSP, which considered 1,030 residential units and 794,000 sf of retail in the area. As mentioned above, the Project site is within the Valdez Triangle and is within a Retail Priority Site, meaning that there are restrictions on residential activities in favor of development of retail uses. The project site must include at least 45,905 sf of retail before the proposed project can be entitled to a "residential facilities bonus." The project proposes approximately 31,500 sf of retail due to site constraints; therefore, the project requires a CUP to grant the allowance of less retail than the minimum retail requirement and to allow for the proposed number of residential units.

As shown in Table C-2, the proposed project would be consistent with the allowed development in D-BV-1 zoning district with application of the residential facilities bonus. The permitted FAR is 8.0 for the non-residential areas. The proposed building would be constructed at 5.95 FAR. In general, maximum heights are permitted to 45 feet. However, with a retail height bonus, the Project could be constructed to a height of 85 feet.

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³⁶ Metropolitan Transportation Commission and Association of Bay Area Governments, 2013. Plan Bay Area, Strategy for a Sustainable Region. Adopted July 18, 2013.

	Allowed Development (D-BV-1)	Proposed Development
Floor Area Ratio (FAR)	8.0	5.99
Retail/Dwelling Unit	275 sf/unit [125/unit] ^a	160.7 sf/unit
Max. Building Heights	45 feet [85 feet] ^a	75 feet
Open Space ^b	14,700 sf	22,688 sf

Sources: City of Oakland 2014; Wood Partners 2014.

Notes:

The project site is approximately 55,092 sf. As discussed above, the project site is currently within a 45-foot height limit area and a Retail Priority Site, which does not allow residential uses without a residential facilities bonus. Therefore, in order to allow housing and a greater height, a CUP would be required. With the proposed CUP, 1 dwelling unit per 275 feet would be permitted, which equates to approximately 200 dwelling units at the project site. Therefore, the proposed 196 units would be within the allowed density for the project site.

For mixed use projects, the maximum nonresidential FAR is based on the total lot area, and any square footage allotted or occupied by residential use is included in the lot area calculation. The proposed amount of nonresidential uses is approximately 31,500 sf. The project site is approximately 55,092 sf; therefore, with the proposed CUP, the maximum nonresidential FAR allowed would be 247,914 sf. Therefore, with the CUP, the proposed project would comply with the amount of nonresidential FAR allowed under the Planning Code.

 $^{^{\}mbox{\tiny a.}}$ [] denotes the maximum allowable with a Retail Height Bonus.

b. 75 sf of open space is required per unit.

ATTACHMENT D: CRITERIA FOR USE OF ADDENDUM, PER CEQA GUIDELINES SECTIONS 15164 AND 15162

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

Project Modifications. The Broadway Valdez District Specific Plan (BVDSP) EIR analyzed the Broadway Valdez Development Program (Development Program), which represents the maximum feasible development that the City of Oakland (City) has projected can reasonably be expected to occur in the Plan area over a 25-year planning period.³⁷ Appendix D of the BVDSP identified the Development Program at the 23rd Street/Valdez project site (designated Project Site #6 in the BVDSP), which included 118 residential units and 127,733 sf of retail. The proposed project differs from the Development Program for the project site and would construct up to 196 residential units and approximately 31,500 square feet of retail space.

The EIR indicates that the CEQA analysis was based on the development quantities set forth in the Development Program, and that the intent of the BVDSP is to provide as much flexibility as is feasible in terms of the precise mix of newly developed land uses and their location in the Plan area, while conforming to the CEQA analysis and thresholds. The EIR identified traffic capacity as the key environmental factor constraining development and stated that the City would track and measure vehicle trip generation by projects proposed under the BVDSP rather than the amount of specific land uses. As described in Section 13 of this CEQA Checklist, the proposed project would generate approximately 74 new vehicle trips during the weekday AM Peak Hour and approximately 138 new vehicle trips during the weekday PM Peak Hour. The proposed project would generate fewer vehicle trips during the weekday AM and PM Peak Hours than assumed in the BVDSP EIR because it would provide less retail than assumed. Therefore, the proposed project's trip generation would be below the trips anticipated for the project site, and for Subdistrict 2, as analyzed in the BVDSP EIR for the Development Program.³⁸

Therefore, the proposed project would represent a minor change in the Development Program, and such changes are anticipated in the EIR.

Conditions for Addendum. None of the following conditions for preparation of a subsequent EIR per Section 15162(a) apply to the proposed project:

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

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³⁷ In total, the Broadway Valdez Development Program includes approximately 3.7 million square feet (sf) of development, including approximately 695,000 sf of office space, 1,114,000 sf of restaurant/retail space, 1,800 residential units, a new 180-room hotel, approximately 6,500 parking spaces provided by the development program, and approximately 4,500 new jobs.

³⁸ Fehr & Peers. 2014. 23rd and Valdez Project - Transportation Assessment, Draft Memorandum. December 8.

- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR; or
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Project Consistency with Section 15162 of the CEQA Guidelines. Since certification of the Final EIR, no changes have occurred in the circumstances under which the revised project would be implemented, that would change the severity of the proposed project's physical impacts as explained in the CEQA Checklist, and no new information has emerged that would materially change the analyses or conclusions set forth in the Final EIR.

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

The analysis presented in this CEQA Checklist, combined with the prior EIR analysis, demonstrates that the proposed project would not result in significant impacts that were not previously identified in the EIR. The proposed project would neither result in a substantial increase in the significance of impacts, nor would the proposed project contribute considerably to cumulative effects that were not already accounted for in the certified EIR. Overall, the proposed project's impacts are similar to those identified and discussed in the EIR, as described in the CEQA Checklist, and the findings reached in the EIR are applicable.

ATTACHMENT E: 23RD & VALDEZ PROJECT - AIR QUALITY HEALTH RISK SCREENING ANALYSIS PER THE BROADWAY VALDEZ DISTRICT SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT



Technical Memorandum

Date:	March 10, 2015
То:	Peterson Vollmann, Planner III City of Oakland, Bureau of Planning 250 Frank H. Ogawa, Suite 2114 Oakland, CA 94612
From:	Darrin Trageser and Shannon Hatcher
Subject:	23 rd & Valdez Project – Air Quality Health Risk Screening Analysis per the Broadway Valdez District Specific Plan Environmental Impact Report

Based on the findings of the Broadway Valdez District Specific Plan (BVDSP) Environmental Impact Report (EIR), the proposed 23rd & Valdez project (proposed project) is required to undergo a screening analysis to determine:

- a) the potential impacts of the project's emissions of Toxic Air Contaminants (TACs) on adjacent sensitive receptors; and
- b) the impacts of nearby sources on the sensitive receptors introduced to the site by the project. This memorandum summarizes the screening analysis completed for the proposed project.

Evaluation Screening Criteria

Health Risk Assessment of Project Impacts on Sensitive Receptors (per BVDSP EIR Mitigation Measure AIR-4: Risk Reduction Plan)

Mitigation Measure AIR-4: Risk Reduction Plan states:

Applicants for projects that would include backup generators shall prepare and submit to the City, a Risk Reduction Plan for City review and approval. The applicant shall implement the approved plan. This Plan shall reduce cumulative localized cancer risks to the maximum feasible extent. The Risk Reduction Plan may contain, but is not limited to the following strategies:

- Demonstration using screening analysis or a health risk assessment that project sources, when combined with local cancer risks from cumulative sources within 1,000 feet would be less than 100 in one million.
- Installation of non-diesel fueled generators.

23rd & Valdez Project – Air Quality Health Risk Screening Analysis per BVDSP EIR March 2015 Page 2 of 10

• Installation of diesel generators with an EPA-certified Tier 4 engine or Engines that are retrofitted with an ARB Level 3 Verified Diesel Emissions Control Strategy.

This screening analysis of the cumulative health risk provides an assessment, per the first bullet above. The project site is within 1,000 feet of existing sensitive land uses, which includes residential land uses, as indicated on Figure E-1. The proposed project's contribution to cumulative impacts to these receptors is described below. The proposed project is assumed to include installation of an emergency diesel generator. Because the Bay Area Air Quality Monitoring District (BAAQMD) does not issue operation permits for equipment that contributes to a risk of greater than 10 in one million, this screening analysis conservatively assumes that the proposed generator would contribute a maximum cancer risk of 10 in one million.

The BAAQMD's health risk assessment (HRA) guidance, Recommended Methods for Screening and Modeling Local Risks and Hazards, recommends that for new sources, the location of the maximally impacted receptor (MIR) be identified and evaluated(Bay Area Air Quality Management District 2012). The location of maximum risk from the 23rd & Valdez Project was determined based upon the proximity of residences to the project location. The nearest sensitive receptors are residences on 24th Street and residences on Waverly Street, directly adjacent to the north and east, respectively, of the project site. These residences are assumed to be the MIR for the project source based on their proximity to the project site.

Methodology

The BAAQMD's HRA guidance document further recommends that when assessing cumulative impacts to the MIR, the risk from existing sources within 1,000 feet of 23rd & Valdez should be assessed. Consistent with BAAQMD requirements, existing sources located within 1,000 feet evaluated in this analysis included stationary sources and roadway sources. The BAAQMD's Stationary Source Screening Analysis Tool for Alameda County was used to evaluate health risks from stationary sources within 1,000 feet of the project area, while the BAAQMD's Roadway Screening Analysis Tables for Alameda were used to evaluate health risks from roadways within 1,000 feet of the project area (See Appendix A). The CEHTP Roadway Traffic Analysis Tool was utilized to identify which nearby roadways have AADT (annual average daily traffic) of greater than 10,000 vehicles per day (see Appendix B). Per the BAAQMD's HRA guidance, the BAAQMD's Diesel Internal Combustion (IC) Engine Distance Multiplier Tool was used to adjust the conservative values for health risks from stationary sources within 1,000 feet of the project area to include the effect of dispersion (see Appendix C). The BAAQMD was contacted to obtain data that was not available from their Stationary Source Screening Analysis Tool, via the BAAQMD Stationary Source Inquiry Form (see Appendix D) (Kirk pers. comm.).

Existing sources of TACs within a 1,000-foot radius of the 23rd & Valdez project are summarized in Table E-1 (stationary sources) and Table E-2 (roadways).

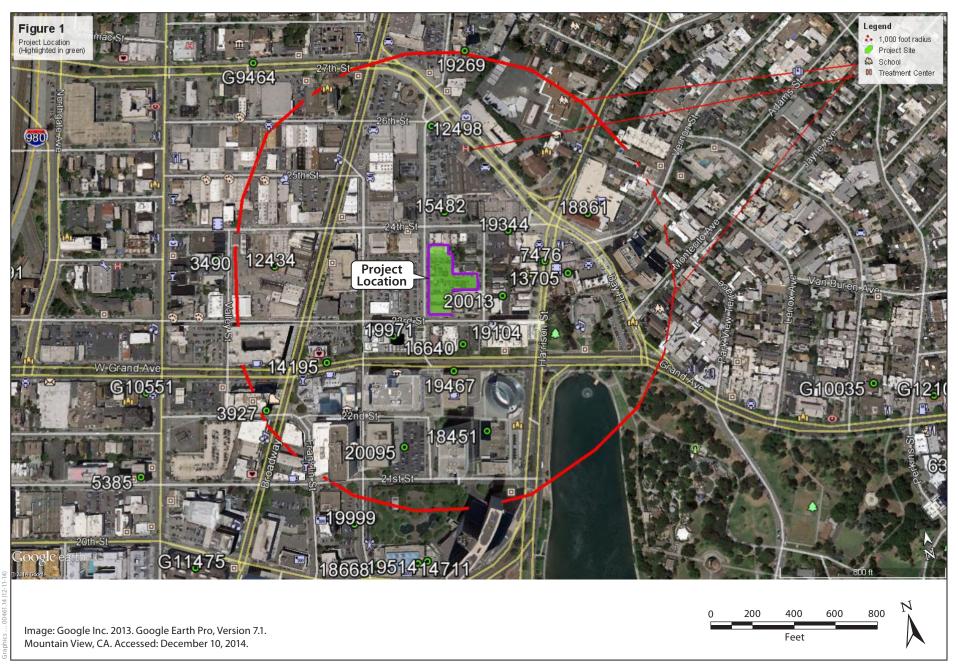




Figure E-1
Sensitive Receptors within 1,000 Feet of the Project Site
23rd Street and Valdez Project

 $23^{\rm rd}$ & Valdez Project – Air Quality Health Risk Screening Analysis per BVDSP EIR March 2015 Page 3 of 10

Table E-1. Sources of Toxic Air Chemicals within 1,000 Feet of the Project Site (Stationary Sources)

Source	BAAQMD Plant Number	Address	Distance to Project Site (feet)	Distance to Maximally Impacted Receptor (feet)	Type of Source
Catholic Cathedral Corp.	18451	2121 Harrison Street	616	808	Generator
CIM Group/Ordway	20095	One Kaiser Plaza	686	936	Generator
Hanzel Auto Body Works	3927	456 23 rd Street	973	1,196	N/A
State of California DOT	14195	111 Grand Avenue	582	797	Generator
Q & S Automotive	12434	2345 Broadway	813	813	N/A
Whole Foods Market California	18861	230 Bay Place	670	596	Generator
VIP Auto Collision Repair	19344	293 27 th Street	288	179	N/A
Label Art	7476	290 27 th Street	361	349	N/A
Saint Pauls Tower	13705	100 Bay Place	465	467	Generator
Autotrends	15482	300 24th Street	227	100	N/A
Mpower Communications	20013	23 rd & Waverly Street	117	180	Generator
Brandywine Realty Trust	19467	155 Grand Avenue, Suite 1025	319	505	Generator
CalSTEARS 180 Grand, LLC	16640	180 Grand Avenue	149	364	Generator
Essex Portfolio LLC DBA	19971	100 Grand Avenue	200	424	Generator
Oakland Acura	12498	277 27 th Street	634	562	N/A
InSite Connect LLC	19104	180 Grand Avenue	308	365	Generator

Table E-2. Sources of Toxic Air Chemicals within 1,000 Feet of the Project Site (Roadways)

Source	AADT	Distance to Project Site (feet)	Distance to Maximally Impacted Receptor (feet)
Broadway St.	30,200	508	460
Grand Ave.	24,800	226	440
Webster St.	19,800	310	320
Harrison St.	22,800	285	301
27 th St.	17,700	435	297
Franklin St.	15,500	835	1,106

23rd & Valdez Project – Air Quality Health Risk Screening Analysis per BVDSP EIR March 2015 Page 4 of 10

Table E-3 presents the raw cancer risk values to the MIR from existing stationary sources located within 1,000 feet of the MIR, as obtained from the BAAQMD's Stationary Source Screening Analysis Tool, as well as the emergency diesel generator associated with the project. The raw cancer risk values presented in Table E-3 have not been adjusted using the BAAQMD's Diesel Internal Combustion (IC) Engine Distance Multiplier Tool to account for lower risk values at the MIR due to the dispersion of emissions from the diesel stationary sources to the MIR.

Table E-3. Raw Cancer Risks from Existing and Project Stationary Sources within 1,000 feet of the MIR

Source	BAAQMD Plant Number	Distance (feet)	Raw Cancer Risk (per million)	Type of Source
Generator at project site	N/A	20	10 ^a	Generator
Catholic Cathedral Corporation	18451	808	0.68	Generator
CIM Group/Ordway	20095a	936	0.1	Generator
State of California DOT	14195	797	54.85	Generator
Q & S Automotive	12434	813	0	N/A
Whole Foods Market California	18861	596	0	Generator
VIP Auto Collision Repair	19344	179	0	N/A
Label Art	7476	349	0	N/A
Saint Pauls Tower	13705	467	18.27	Generator
Autotrends	15482	100	0	N/A
Mpower Communications	20013 ^b	180	2.74	Generator
Brandywine Realty Trust	19467	505	18.84	Generator
CalSTEARS 180 Grand, LLC	16640	364	26.42	Generator
Essex Portfolio LLC DBA	19971	424	16.28	Generator
Oakland Acura	12498	562	0	N/A
InSite Connect LLC	19104	365	19.57	Generator

 $^{^{\}rm a}$ The risk value is conservatively assumed to be the high limit of BAAQMD permitted source threshold of 10 per million. The actual value will likely be lower.

Consistent with BAAQMD's HRA guidance, the raw cancer risk values associated with stationary sources summarized in Table E-3 were adjusted using the BAAQMD's IC Engine Distance Multiplier

^b Health risk data was for these facilities were not available from the BAAQMD's Stationary Source Screening Analysis Tool and were provided directly by the BAAQMD (Kirk pers. comm.)

¹ Because the Bay Area Air Quality Monitoring District (BAAQMD) does not issue operation permits for equipment that contributes to a risk of greater than 10 in one million, this screening analysis conservatively assumes that the proposed generator would contribute a maximum cancer risk of 10 in one million.

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Tool to account for the dispersion of emissions from the diesel stationary sources to the MIR. These adjusted values for the stationary sources are presented in Table E-4.

As Table E-4 indicates, the screening analysis, which is based on conservative assumptions, shows that the risk from the project source, when combined with local cancer risks from cumulative sources within 1,000 feet, would be below the BAAQMD's cumulative cancer risk threshold of 100 in one million. Therefore, the project would not be required to implement Standard Condition of Approval B: Exposure to Air Pollution.

Table E-4. Adjusted Cancer Risks from Existing and Project Stationary Sources and Roadways within 1,000 feet of the MIR

Source	BAAQMD Plant Number	Distance (feet)	Adjusted Cancer ^a Risk	Type of Source				
Stationary Sources								
Generator at Project Site	N/A	20	10 ^a	Generator				
Catholic Cathedral Corporation	18451	808	0.0408	Generator				
CIM Group/Ordway	20095ь	936	0.1	Generator				
State of California DOT	14195	797	3.291	Generator				
Q & S Automotive	12434	813	0	N/A				
Whole Foods Market California	18861	596	0	Generator				
VIP Auto Collision Repair	19344	179	0	N/A				
Label Art	7476	349	0	N/A				
Saint Pauls Tower	13705	467	2.5578	Generator				
Autotrends	15482	100	0	N/A				
Mpower Communications	20013b	180	1.37	Generator				
Brandywine Realty Trust	19467	505	2.2608	Generator				
CalSTEARS 180 Grand, LLC	16640	364	4.7556	Generator				
Essex Portfolio LLC DBA	19971	424	2.6048	Generator				
Oakland Acura	12498	562	0	N/A				
InSite Connect LLC	19104	365	3.5226	Generator				

Local Roadways							
	AADT	Distance (feet)	Adjusted Cancer ^a	Type of Source			
Broadway St.	30,200	460	5.39	Roadway			
Grand Ave.	24,800	440	3.46	Roadway			
Webster St.	19,800	320	2.77	Roadway			
Harrison St.	22,800	301	3.86	Roadway			
27 th St.	17,700	297	2.65	Roadway			
Cumulative impact to proj	ect and existing sources	s	48.6334				
BAAQMD Cumulative Threshold			100				
Exceed threshold?			No				

^a Values adjusted based on the BAAQMD's Diesel Internal Combustion (IC) Engine Distance Multiplier Tool

Evaluation Screening Criteria

Health Risk Assessment of Offsite Sources on the Project-Sensitive Receptors (SCA B: Exposure to Air Pollution [Toxic Air Contaminants])

SCA B: Exposure to Air Pollution [Toxic Air Contaminants] applies to projects that meet all of the following criteria:

- 1. The project involves either of the following sensitive land uses:
 - a. New residential facilities or new dwelling units; or
 - b. New or expanded schools, daycare centers, parks, nursing homes, or medical facilities; and
- 2. The project is located within 1,000 feet of one or more of the following sources of air pollution:
 - a. Freeway
 - b. Roadway with significant traffic (at least 10,000 vehicles per day);
 - c. Rail line (except BART) with over 30 trains per day;
 - d. Distribution center that accommodated more than 100 trucks per day, more than 40 trucks with operating Transportation Refrigeration Units (TRU) per day, or where the TRU unit operations exceed 300 hours per week;
 - e. Major rail or truck yard (such as the Union Pacific rail yard adjacent to the Port of Oakland);
 - f. Ferry terminal;

^b Health risk data was for these facilities were not available from the BAAQMD's Stationary Source Screening Analysis Tool and were provided directly by the BAAQMD (Kirk pers. comm.)

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- g. Port of Oakland; or
- h. Stationary pollutant source requiring a permit from BAAQMD (such as a diesel generator);
- 3. The project exceeds the health risk screening criteria after a screening analysis is conducted in accordance with the BAAQMD California Environmental Quality Act (CEQA) Guidelines.

Because the proposed project would meet item 1a (new dwelling units), item 2b (local roadways with traffic in excess of 10,000 vehicles per day), and item 2h (diesel generator), ICF performed a screening analysis to determine if the project exceeds the health risk screening criteria (local cancer risks from cumulative sources within 1,000 feet would be less than 100 in one million) per item 3 above.

Table E-5 presents the raw cancer risk values to the project receptors from existing and project stationary sources located within 1,000 feet of the project receptors, as obtained from the BAAQMD's Stationary Source Screening Analysis Tool, as well as the emergency diesel generator associated with the project². The raw cancer risk values presented in Table E-5 are conservative and have not been adjusted using the BAAQMD's Diesel Internal Combustion (IC) Engine Distance Multiplier Tool to account for lower risk values at the project receptors due to the dispersion of emissions from the diesel stationary sources to the project receptors.

Table E-5. Raw Cancer Risks from Existing and Project Stationary Sources within 1,000 feet of the Project Residential Receptors

Source	BAAQMD Plant Number	Distance (feet)	Raw Cancer Risk (per million)	Type of Source
Generator at project site	N/A	20	10 ^a	Generator
Catholic Cathedral Corporation	18451	616	0.68	Generator
CIM Group/Ordway	20095b	686	0.1	Generator
Hanzel Auto Body Works	3927	973	0	N/A
State of California DOT	14195	582	54.85	Generator
Q & S Automotive	12434	813	0	N/A
Whole Foods Market California	18861	670	0	Generator
VIP Auto Collision Repair	19344	288	0	N/A

² Because the Bay Area Air Quality Monitoring District (BAAQMD) does not issue operation permits for equipment that contributes to a risk of greater than 10 in one million, this screening analysis conservatively assumes that the proposed generator would contribute a maximum cancer risk of 10 in one million.

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Source	BAAQMD Plant Number	Distance (feet)	Raw Cancer Risk (per million)	Type of Source
Label Art	7476	361	0	N/A
Saint Pauls Tower	13705	465	18.27	Generator
Autotrends	15482	227	0	N/A
Mpower Communications	20013b	117	2.74	Generator
Brandywine Realty Trust	19467	319	18.84	Generator
CalSTEARS 180 Grand, LLC	16640	149	26.42	Generator
Essex Portfolio LLC DBA	19971	200	16.28	Generator
Oakland Acura	12498	634	0	N/A
InSite Connect LLC	19104	308	19.57	Generator

^a The risk value is conservatively assumed to be the high limit of BAAQMD permitted source threshold of 10 per million. The actual value will likely be lower.

Consistent with BAAQMD's HRA guidance, the raw cancer risk values associated with stationary sources summarized in Table E-5 were adjusted using the BAAQMD's IC Engine Distance Multiplier Tool to account for the dispersion of emissions from the diesel stationary sources to the project receptors. These adjusted values for the stationary sources are presented in Table E-6.

The results in Table E-6 indicate that the cumulative cancer risk to the project receptors, based on conservative assumptions, would be below the BAAQMD's cumulative cancer risk threshold of 100 in one million. Therefore, the project would not be required to implement Standard Condition of Approval B: Exposure to Air Pollution.

^b Health risk data was for these facilities were not available from the BAAQMD's Stationary Source Screening Analysis Tool and were provided directly by the BAAQMD (Kirk pers. comm.)

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Table E-6. Adjusted Cancer Risks from Existing Stationary Sources within 1,000 feet of the Project Residential Receptors

Source	BAAQMD Plant Number	Distance (feet)	Adjusted Cancer ^a	Type of Source
Stationary Sources		1		1
Generator at project site	N/A	20		Generator
Catholic Cathedral Corporation	18451	616		Generator
CIM Group/Ordway	20095ь	686	0.1	Generator
Hanzel Auto Body Works	3927	973	0	N/A
State of California DOT	14195	582	5.485	Generator
Q & S Automotive	12434	813	0	N/A
Whole Foods Market California	18861	670	0	Generator
VIP Auto Collision Repair	19344	288	0	N/A
Label Art	7476	361	0	N/A
Saint Pauls Tower	13705	465	2.5578	Generator
Autotrends	15482	227	0	N/A
Mpower Communications	20013 ^b	117	1.7536	Generator
Brandywine Realty Trust	19467	319	4.71	Generator
CalSTEARS 180 Grand, LLC	16640	149	15.3236	Generator
Essex Portfolio LLC DBA	19971	200	6.6748	Generator
Oakland Acura	12498	634	0	N/A
InSite Connect LLC	19104	308	6.0667	Generator

Local Roadways								
	AADT	Distance (feet)	Adjusted Cancer ^a	Type of Source				
Broadway St.	30,200	508	2.08	Roadway				
Grand Ave.	24,800	226	3.46	Roadway				
Webster St.	19,800	310	2.77	Roadway				
Harrison St.	22,800	285	3.86	Roadway				
27 th St.	17,700	435	2.65	Roadway				
Franklin St.	15,500	835	0.88	Roadway				
Cumulative impact to project and ex	isting sources	1	68.4327					
BAAQMD Cumulative Threshold	100							
Exceed threshold?	No							

^a Values adjusted based on the Diesel Internal Combustion (IC) Engine Distance Multiplier Tool

References Cited

Bay Area Air Quality Management District. 2012. Recommended Methods for Screening and Modeling Local Risks and Hazards: Version 3.0. May. San Francisco, CA.

Personal Communications

Kirk, Alison. Senior Environmental Planner. Bay Area Air Quality Management District. Email.

Appendices

- A. Health Risks from Roadways within 1,000 feet of Project Site
- B. Nearby Roadways with AADT of Greater Than 10,000 ADT
- C. Heath Risks from Stationary Sources within 1,000 feet of Project

Site D. Additional Data from BAAQMD

^b Health risk data was for these facilities were not available from the BAAQMD's Stationary Source Screening Analysis Tool and were provided directly by the BAAQMD (Kirk pers. comm.)

Alameda County PM2.5 Concentrations and Cancer Risks Generated from Surface Streets

PM_{2.5} CONCENTRATIONS (UG/M³)

	NORTH-SOUTH DIRECTIONAL ROADWAY								
Annual Average Daily	Dist	Distance East or West of Surface Street - PM2.5 Concentration (ug/m³)							
Traffic	10 feet	50 feet	100 feet	200 feet	500 feet	700 feet	1,000 feet		
1,000 5,000		No analysis required							
10,000	0.159	0.135	0.095	0.045	0.015	0.014	0.014		
20,000	0.199	0.191	0.175	0.111	0.043	0.029	0.016		
30,000	0.278	0.270	0.238	0.167	0.062	0.045	0.027		
40,000	0.342	0.334	0.302	0.215	0.087	0.058	0.041		
50,000	0.485	0.477	0.421	0.278	0.103	0.072	0.049		
60,000	0.640	0.624	0.529	0.346	0.123	0.087	0.060		
70,000	0.795	0.771	0.636	0.413	0.143	0.103	0.070		
80,000	0.908	0.881	0.727	0.472	0.164	0.118	0.080		
90,000	1.022	0.991	0.818	0.531	0.184	0.133	0.090		
100,000	1.136	1.101	0.908	0.590	0.204	0.148	0.100		

How to use the screening tables:

- Distance is from the edge of the nearest travel lane of a street to the facility or development
- When two or more streets are within the influence area, sum the contribution from each street

		EAST-WE	ST DIRECT	ΓΙΟΝΑL ROA	DWAY		
Annual	Dist	ance North or	South of Su	rface Street -	PM2.5 Conce	entration (uç	g/m ³)
Average Daily Traffic	10 feet	50 feet	100 feet	200 feet	500 feet	700 feet	1,000 feet
1,000 5,000			No a	analysis requi	ired		
10,000	0.111	0.095	0.072	0.050	0.024	0.020	0.014
20,000	0.223	0.191	0.143	0.095	0.039	0.030	0.025
30,000	0.254	0.246	0.223	0.135	0.053	0.035	0.027
40,000	0.334	0.318	0.254	0.191	0.070	0.053	0.033
50,000	0.636	0.572	0.461	0.223	0.095	0.066	0.048
60,000	0.680	0.604	0.469	0.262	0.115	0.081	0.056
70,000	0.723	0.636	0.477	0.302	0.135	0.095	0.065
80,000	0.827	0.727	0.545	0.345	0.154	0.109	0.074
90,000	0.930	0.818	0.613	0.388	0.174	0.123	0.084
100,000	1.033	0.908	0.681	0.431	0.193	0.136	0.093

LIFETIME CANCER RISK

NORTH-SOUTH DIRECTIONAL ROADWAY									
Annual Average Daily	D	Distance East or West of Surface Street - Cancer Risk (per million)							
Traffic	10 feet	50 feet	100 feet	200 feet	500 feet	700 feet	1,000 feet		
1,000 5,000			No	analysis requi	ired				
10,000	4.60	3.83	2.87	1.26	0.61	0.49	0.38		
20,000	5.01	4.63	4.06	2.77	1.15	0.88	0.61		
30,000	6.56	6.33	5.79	3.86	1.50	1.12	0.77		
40,000	8.11	8.06	7.33	5.39	2.08	1.54	1.08		
50,000	11.58	11.42	8.93	6.93	2.62	1.92	1.38		
60,000	15.25	14.97	11.99	8.30	3.14	2.29	1.63		
70,000	18.91	18.52	15.06	9.66	3.66	2.65	1.88		
80,000	21.62	21.17	17.21	11.04	4.18	3.03	2.15		
90,000	24.32	23.81	19.36	12.42	4.70	3.41	2.42		
100,000	27.02	26.46	21.51	13.80	5.22	3.79	2.69		

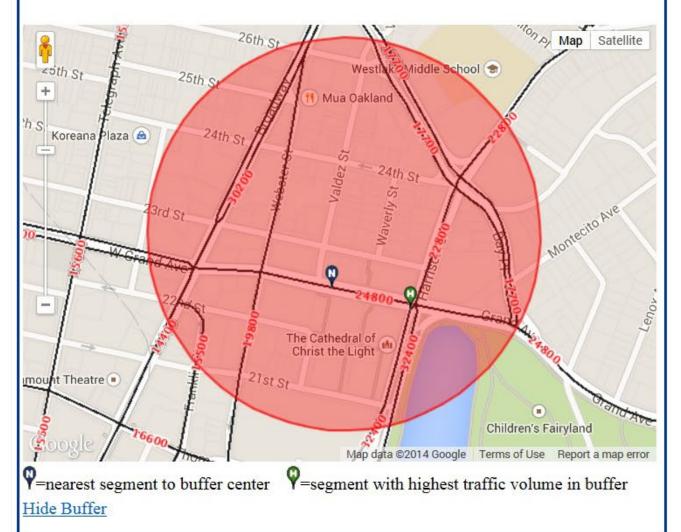
EAST-WEST DIRECTIONAL ROADWAY									
Annual Average Daily	Di	stance North	or South of S	Surface Stree	t - Cancer Ris	sk (per milli	on)		
Traffic	10 feet	50 feet	100 feet	200 feet	500 feet	700 feet	1,000 feet		
1,000 5,000		No analysis required							
10,000	2.70	2.39	1.92	1.46	0.84	0.65	0.53		
20,000	5.47	4.63	3.47	2.65	1.33	1.07	0.80		
30,000	6.17	5.79	5.40	3.46	1.53	1.11	0.88		
40,000	8.10	8.01	6.17	4.63	2.03	1.53	1.11		
50,000	15.06	12.78	10.45	5.40	2.68	2.03	1.42		
60,000	15.75	13.92	11.38	6.55	3.20	2.39	1.68		
70,000	16.44	15.06	12.31	7.70	3.72	2.76	1.95		
80,000	18.79	17.21	14.07	8.80	4.25	3.15	2.23		
90,000	21.14	19.36	15.83	9.90	4.79	3.55	2.51		
100,000	23.49	21.51	17.59	11.00	5.32	3.94	2.79		

- Screening tables based on meteorological data collected from Pleasanton in 2005.
- The maximum acute and chronic hazard index for the distances and AADT shown in the table will be less than 0.03.
- · Cancer risk were estimated based on exposure from 2014 through 2084. PM2.5 concentrations were based on emissions in 2014.

CEHTP Traffic Linkage Service Demonstration

Background	Enter Buffer Parameters	Spatial Linkage Results	
		Metric	Value
(sl) Sum of	all length-adjusted traffic	volumes within buffer (vehicle-km/hr)	4,012
(sg) Sum of	all Gauss-adjusted traffic	volumes within buffer (vehicles/day*)	11,636
(hl) Length- km/hr)	adjusted traffic volume of	f highest segment within buffer (vehicle-	1,043
		Show more metri	cs

*average annual daily traffic



Source: http://www.ehib.org/traffic_tool.jsp. Accessed 12-10-2014.



Appendix C

How to Use the Distance Adjustment Multiplier Tool for Diesel Internal Combustion (IC) Engines

This distance multiplier tool refines the screening values for cancer risk and PM2.5 concentrations found in the District's Stationary Source Screening Analysis Tool for permitted facilities which contain only diesel IC engines, to represent adjusted risk and hazard impacts that can be expected with farther distances from the source of emissions.

- 1. Obtain the facility diesel IC engine(s) cancer risk and/or PM2.5 concentration from the District's Stationary Source Screening Analysis tool only for facilities where the source is listed as "generator." If the distance to the nearest receptor is less than 25 meters, the distance adjustment multiplier table cannot be used and an air dispersion modeling analysis using site-specific information is needed to refine the cancer risk, chronic hazard index or PM2.5 estimates.
- 2. Determine the shortest distance from each diesel IC engine to the nearest receptor. Select the shortest distance to receptor found.
- 3. In the table below, enter the cancer risk and/or PM2.5 concentration found in step 1 for the diesel IC engine in the row which aligns with the shortest distance from each diesel IC engine to the nearest receptor (found in step 2). If the shortest distance to the receptor falls between two distance values, select the multiplier corresponding to the smaller distance. For distances beyond 280 meters, use the multiplier 0.04. The resulting product is the adjusted cancer risk in a million or the adjusted PM2.5 concentration for the diesel IC engine

Note: This distance adjustment multiplier may be used only for the screening level health risk values indicated in the District's Stationary Source Screening Analysis tool for diesel IC engines. This distance multiplier tool may not be used to adjust values from an HRA if an HRA for the facility was conducted.

Note: This distance adjustment multiplier may also be used to adjust the screening values for chronic hazard index found in the District's Stationary Source Screening Analysis Tool for facilities with only diesel IC engines.

Distance (meters)	Distance (feet)	Distance Adjustment Multiplier	Enter Cancer Risk Estimate	Adjusted Cancer Risk Estimate	Enter PM2.5 Concentration	Adjusted PM2.5 Concentration
110	361	0.18	19.57	3.5226	0.035	0.0063
30	98.4	0.73		0		0
35	115	0.64		0		0
40	131	0.58		0		0
50	164	0.5		0		0
60	197	0.41		0		0
70	230	0.31		0		0
80	262	0.28		0		0
90	295	0.25		0		0
100	328	0.22		0		0
110	361	0.18	26.42			0.00846
120	394	0.16	16.28	2.6048	0.004	0.00064
130	426	0.15		0		0
140	459	0.14	18.27			0.00056
150	492	0.12	18.84	2.2608	0.004	0.00048
160	525	0.1		0		0
180	590	0.09		0		0
200	656	0.08		0		0
220	722	0.07		0		0
240	787	0.06	0.68	0.0408		
240	787	0.06	54.85	3.291	0.097	0.00582
280	918	0.04		0		0

Appendix D

Bay Area Air Quality Management District

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD. This form is to be used with the BAAQMD's Google Earth stationary source screening tables. For guidance on conducting a risk & hazard screening, including for roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.

Also see the District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.

Table A: Requestor Contact Information								
Contact Name:	Darrin Trageser							
Affiliation:	ICF International							
Phone:	916-231-7683							
Email:	Darrin.Trageser@icfl.com							
Date of Request	12/5/2014							
Project Name:	23rd & Valdez							
Address:	2346 Valdez St.							
City:	Oakland							
County:	Alameda							
Type (residential,	Mixed Use							
commercial, mixed use, industrial, etc.):								
Project size (# of units, or building square feet):	328,211 sf							

screening level cancer risk, hazard index, and PM2.5 of these two

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

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

- 2. Download and install the free program Google Earth, http://www.google.com/earth/download/ge/, and then download the county specific Google Download and instant in the eig long in Outgoe et arth, inter, it was object, and relative provised grey, and their lowerised the County specific County of Earth stationary source application files from the blistrict webstle, they; I whow bapand gooy/Disson/Planning-and Research/CEQA.

 GUDELINES/Tools-and-Methodology-aspx. The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diseal back-up generators, as satistancy, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.
- 3. Find the project site in Google Earth by inputting the site's address in the Google Earth search box.
- 4. Identify stationary sources near the project. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to the District.
- 5. List the stationary source information in Table B Section 1 below.
- Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.
- Email this completed form to District staff. District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three week

Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.

Submit forms, maps, and questions to Alison Kirk at 415-749-5169, or akirk@baaqmd.gov .

Santa_Clara_May_2011_schema:FID	1140
Santa_Clara_May_2011_schema:PlantNo	G8736
Banta_Clara_May_2011_schema:Plant	Rotten Robbie #39 *
Santa_Clara_May_2011_schema:Address	25 Washington Street
Santa_Clara_May_2011_schema:City	Santa Clara
Santa Clara May 2011 schema:UTM East	594065
Santa_Clara_May_2011_schema.UTM_North	4132930
Banta Clara May 2011 schema:Risk	8.908
Santa_Clara_May_2011_schema Hazard	0.051
Santa_Clara_May_2011_schema:PM25	na

Note the asterisk next to the plant name. This means that the values that appear below are from the HRSA. These values cannot be further adjusted using our screening tools, such as the diesel multiplier sheet. These values are based on modeling. If the Information Table says "Contact District Staff" include in Table B

								Table B: Stat	ionary Sources										
Table 8 Section 1: Requestor fills out these columns based on Google Earth data Table 9 Section 2: BAAQMD returns form with additional information in these columns as needed																			
Distance from Receptor (feet)	Plant # or Gas Dispensary #	Facility Name	Street Address	Screening Level Cancer Risk (1)	Screening Level Hazard Index (1)	Screening Level PM2.5 (1)	Permit #s (2)	Source #s (2)	Fuel Code (3)	Type of Source(s) (4)	HRSA Ap # (5)	HRSA Date (6)	HRSA Engineer (7)	HRSA Cancer Risk in a million	Age Sensitivity Factor (8)	HRSA Adjusted Cancer Risk	HRSA Chronic Health (9)	HRSA PM2.5 Risk	Status/Comments
686	20095	Group/Ordway	One Kaiser Plaza	n/a	n/a	n/a	23737	1,3,4,5,6		see attached	23737	10/26/2011	CSF	0.100	1	0.1	3.4 E-5	0.00031348	engine; see attache for notes
117	20013	Mpower Communications	23rd & Waverly Street	n/a	n/a	n/a	21377	1		diesel gen								0	see attached for notes
																		0	
																		0	
																		0	
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- 1. These Cancer Risk, Hazard Index, and PM2.5 columns represent the values in the Google Earth Plant Information Table.
- 2. Each plant may have multiple permits and sources.
- 3. Fuel codes: 98 = diesel, 189 = Natural Gas.
- 4. Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.
- 5. If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.
- 6. The date that the HRSA was completed. 7. Engineer who completed the HRSA. For District purposes only.
- 8. All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.
- 9. The HRSA "Chronic Health" number represents the Hazard Index.
- 10. Further information about common sources:
 - a. Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet. b. The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard index of 0.003 or
 - less. To be conservative, requestor should assume the cancer risk is 1 in a million and the hazard index is 0.003 for these sources.

 - C. BACAMON Eq. 11 Rule 16 required that all cor-esidential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010.
 Therefore, there is no cancer risk, hazard or PMZ.5 concentrations from co-residential dry cleaning businesses in the BACAMO.

 A hon co-residential dry cleaners must phase out use of perc by Jun. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but instead should reflect the number of years perc use will continue after the project's residents or other sensitive receptors (such as students, patients, etc) take occupancy.

 - e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Mulitplier worksheet.
 - f. Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources. g. This spray booth is considered to be insignificant.

Date last updated:

Plant# 20095 CIM Group/Ordway One Kaiser Plaza Oakland, CA 94612

[C]urrent, [A]rchive, or [F]uture? c [P]lant, [S]ource, [A]bate. device, or [E]mis. Point? p

CURRENT Sources:

1 Emergency Standby Diesel Generator Set Standby Diesel engine, 830 hp, Caterpillar S/N 39J280, 1191 cu in C22BG098 /.P1.

3 Diesel Fire Pump Engine

covered by

Standby Diesel engine, 174 hp, EPA# 9CEXL0409AAB, Cummins, 409 cu in C24AG098 /,P3,

4 Boiler #1

Boiler for Space Heat only, 14600K BTU/hr max, Natural gas, 5 days/wk C1340189 no train

5 Boiler #2

Boiler for Space Heat only, 14300K BTU/hr max, Natural gas, 5 days/wk C1340189 no train

6 Boiler#3

Boiler for Space Heat only, 14300K BTU/hr max, Natural gas, 5 days/wk C1340189 no train

No CURRENT Abatement Devices

Plant #: 20095

Company name: CIM Group/Ordway

Location: One Kaiser Plaza, Oakland, CA 94612

Application #: 21591

Project title: Standby Generator and Fire Pump

Engineer: Faye Bruno [1305]

Received: 02/10/10

Final disposition: Waived A/C, 03/18/10

Application #: 23737

Project title: Diesel Fire Pump (Replacement)

Engineer: Faye Bruno [1305]

Received: 09/13/11

Final disposition: A/C granted, 11/16/11

covered by HrSA

Application #: 25061 Project title: Boiler

> Engineer: Xuna Cai [816] Received: 11/30/12

Final disposition: Waived A/C, 04/25/13

BAY AREA AIR QUALITY MANAGEMENT DISTRICT DETAIL POLLUTANTS - ABATED

MOST RECENT P/O APPROVED (2014)

CIM Group/Ordway (P# 20095)

S# SOURCE NAME

MATERIAL SOURCE CODE

THROUGHPUT DATE POLLUTANT CODE LBS/DAY

1 Emergency Standby Diesel Generator Set C22BG098

Benzene 41 1.62E-04 Formaldehyde 124 1.34E-05 Organics (other, including 990 7.84E-03 Arsenic (all) 1030 1.41E-07

Printed: DEC 8, 201

Beryllium (all) pollutant 1040 8.29E-08 Cadmium 1070 3.54E-07

Chromium (hexavalent) 1095 7.32E-09 Lead (all) pollutant 1140 3.00E-07

Manganese 1160 4.71E-07 Nickel pollutant 1180 5.72E-06 Mercury (all) pollutant 1190 1.00E-07

Diesel Engine Exhaust Part 1350 8.17E-03 PAH's (non-speciated) 1840 7.46E-07 Nitrous Oxide (N2O) 2030 4.35E-05 Nitrogen Oxides (part not 2990 1.14E-01 Sulfur Dioxide (SO2) 2000 5.305 05

Sulfur Dioxide (SO2) 3990 5.30E-05 Carbon Monoxide (CO) pollu 4990 2.49E-02 Carbon Dioxide, non-biogen 6960 5.44E+00

Methane (CH4) 6970 2.18E-04

3 Diesel Fire Pump Engine

C24AG098

Benzene 41 3.90E-04
Formaldehyde 124 3.18E-05
Organics (other, including 990 2.70E-03
Arsenic (all) 1030 3.35E-07

Benzellium (all) pollutant 1040 1 07E 07

Beryllium (all) pollutant 1040 1.97E-07 Cadmium 1070 8.38E-07

Chromium (hexavalent) 1095 1.73E-08 Lead (all) pollutant 1140 7.11E-07

Manganese 1160 1.12E-06
Nickel pollutant 1180 1.36E-05
Mercury (all) pollutant 1190 2.37E-07

Diesel Engine Exhaust Part 1350 2.87E-03 PAH's (non-speciated) 1840 1.77E-06

Nitrous Oxide (N2O) 2030 1.03E-04

' HRSA

Nitrogen Oxides (part not 2990 5.93E-02 Sulfur Dioxide (SO2) 3990 1.26E-04 Carbon Monoxide (CO) pollu 4990 2.70E-02 Carbon Dioxide, non-biogen 6960 1.29E+01 Methane (CH4) 6970 5.16E-04

4 Boiler #1

C1340189

Benzene 41 2.42E-05 Formaldehyde 124 8.66E-04 Toluene 293 3.93E-05 Organics (other, including 990 6.61E-02 Particulates (part not spe 1990 3.46E-02 Nitrous Oxide (N2O) 2030 2.67E-03 Nitrogen Oxides (part not 2990 1.62E+00 Sulfur Dioxide (SO2) 3990 6.56E-03 Carbon Monoxide (CO) pollu 4990 4.04E-01 Carbon Dioxide, non-biogen 6960 1.41E+03 Methane (CH4) 6970 2.19E-02

5 Boiler #2

C1340189

Benzene 41 1.30E-07 Formaldehyde 124 4.64E-06 Toluene 293 2.10E-07 Organics (other, including 990 3.54E-04 Particulates (part not spe 1990 1.86E-04 Nitrous Oxide (N2O) 2030 1.43E-05 Nitrogen Oxides (part not 2990 8.66E-03 Sulfur Dioxide (SO2) 3990 3.51E-05 Carbon Monoxide (CO) pollu 4990 2.16E-03 Carbon Dioxide, non-biogen 6960 7.57E+00 Methane (CH4) 6970 1.17E-04

6 Boiler #3

C1340189

Benzene 41 2.00E-05 Formaldehyde 124 7.16E-04 Toluene 293 3.24E-05 Organics (other, including 990 5.46E-02 Particulates (part not spe 1990 2.86E-02 Nitrous Oxide (N2O) 2030 2.20E-03 Nitrogen Oxides (part not 2990 1.34E+00 Sulfur Dioxide (SO2) 3990 5.42E-03 Carbon Monoxide (CO) pollu 4990 3.34E-01 Carbon Dioxide, non-biogen 6960 1.17E+03 Methane (CH4) 6970 1.81E-02

PLANT TOTAL:

lbs/day Pollutant

- 4.77E-07 Arsenic (all) (1030)
- 5.97E-04 Benzene (41)
- 2.79E-07 Beryllium (all) pollutant (1040)
- 1.19E-06 Cadmium (1070)
- 2.61E+03 Carbon Dioxide, non-biogenic CO2 (6960)
- 7.92E-01 Carbon Monoxide (CO) pollutant (4990)
- 2.47E-08 Chromium (hexavalent) (1095)
- 1.10E-02 Diesel Engine Exhaust Particulate Matter (1350)
- 1.63E-03 Formaldehyde (124)
- 1.01E-06 Lead (all) pollutant (1140)
- 1.59E-06 Manganese (1160)
- 3.37E-07 Mercury (all) pollutant (1190)
- 4.09E-02 Methane (CH4) (6970)
- 1.93E-05 Nickel pollutant (1180)
- 3.13E+00 Nitrogen Oxides (part not spec elsewhere) (2990)
- 5.03E-03 Nitrous Oxide (N2O) (2030)
- 1.32E-01 Organics (other, including CH4) (990)
- 2.52E-06 PAH's (non-speciated) (1840)
- 6.35E-02 Particulates (part not spec elsewhere) (1990)
- 1.22E-02 Sulfur Dioxide (SO2) (3990)
- 7.19E-05 Toluene (293)

L4

NOTE: The HRSA only covers source #3.

consider using the Beta calculator with the current emissions information for the rest of the sources. You can then apply the distance calculator to the diesel engines and add these results together with the screening values for the boilers and the HRSA result for source 3.

For example:

source 1: put current emisisons on left through beta calculator, * distance multiplier = ad

source 2: put current emissions on left thru beta calculator

source 3: HRSA results sources 4,5,6 like source 2

Add adjusted results all together for adjusted screening levels.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT DETAIL POLLUTANTS - ABATED

MOST RECENT P/O APPROVED (2014)

Note:

Printed: DEC 8, 2014

put current emissions
distance multiplier = s

Mpower Communications / Telepacific (P# 20013)

S# SOURCE NAME

MATERIAL SOURCE CODE

THROUGHPUT DATE POLLUTANT CODE LBS/DAY

.....

1 Emergency Standby Diesel Generator Set C22AH098

Methane (CH4)

Benzene 41 9.61E-05
Formaldehyde 124 7.95E-06
Organics (other, including 990 6.25E-03
Arsenic (all) 1030 8.37E-08
Beryllium (all) pollutant 1040 4.91E-08
Cadmium 1070 2.09E-07
Chromium (hexavalent) 1095 4.33E-09
Lead (all) pollutant 1140 1.78E-07
Manganese 1160 2.79E-07

Lead (all) pollutant Manganese 1160 2.79E-07 Nickel pollutant 1180 3.39E-06 Mercury (all) pollutant 1190 5.92E-08 Diesel Engine Exhaust Part 1350 2.54E-03 PAH's (non-speciated) 1840 4.42E-07 Nitrous Oxide (N2O) 2030 2.58E-05 Nitrogen Oxides (part not 2990 4.38E-02 Sulfur Dioxide (SO2) 3990 3.14E-05 Carbon Monoxide (CO) pollu 4990 5.40E-02 Carbon Dioxide, non-biogen 6960 3.22E+00

6970 1.29E-04

ATTACHMENT F: 23RD & VALDEZ PROJECT – GREENHOUSE GASES AND CLIMATE CHANGE SCREENING ANALYSIS PER THE BROADWAY VALDEZ DISTRICT SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT



Technical Memorandum

Date:	March 11, 2015
То:	Peterson Vollmann, Planner III City of Oakland, Bureau of Planning 250 Frank H. Ogawa, Suite 2114 Oakland, CA 94612
From:	Darrin Trageser and Shannon Hatcher
Subject:	23 rd & Valdez Project – Greenhouse Gases and Climate Change Screening Analysis per the Broadway Valdez District Specific Plan Environmental Impact Report

Based on the findings of the Broadway Valdez District Specific Plan EIR (BVDSP EIR), the proposed project is required to quantify the greenhouse gas (GHG) emissions from project construction and operation to determine whether a GHG Reduction Plan is required per the City of Oakland's Standard Conditions of Approval (SCA) F, GHG Reduction Plan.

SCA F applies to projects of a certain minimum size that produce total GHG emissions that exceed one or both of the Bay Area Air Quality Management District's (BAAQMD) CEQA Thresholds of significance, which are 1,100 metric tons of carbon dioxide (CO₂) equivalent (CO₂e) per year, or 4.6 metric tons of CO₂e per service population¹ per year and would result in a significant impact requiring mitigation (Bay Area Air Quality Management District 2011).

SCA F applies to projects developed under the BVDSP under any of the following three scenarios:

- **Scenario A:** Projects that
 - a) Involve a land use development (i.e., a project that does not require a BAAQMD permit to operate);
 - b) Exceed the GHG emissions Screening Criteria contained in Table 3-1 from the BAAQMD CEQA Guidelines (Bay Area Air Quality Management District 2011); AND
 - c) Exceed <u>both</u> applicable numeric City of Oakland CEQA Thresholds,² as indicated by a quantitative GHG analysis.

 $^{^{1}}$ SP is the sum of the number of jobs and the number of residents provided by a project.

 $^{^2}$ The City of Oakland has adopted the BAAQMD's CEQA thresholds of 1,100 metric tons of CO_2e per year and 4.6 metric tons of CO_2e per service population per year.

23rd & Valdez Project – Greenhouse Gases/Climate Change Screening Analysis per the BVDSP EIR March 2015 Page 2 of 7

• **Scenario B**: Projects that

- a) Involve a land use development;
- b) Exceed the GHG emissions Screening Criteria contained in Table 3-1 from the BAAQMD CEQA Guidelines (Bay Area Air Quality Management District 2011);
- c) Exceed <u>one</u> of the applicable numeric City of Oakland CEQA Thresholds³ as indicated by a quantitative GHG analysis.; <u>AND</u>
- d) Are considered to be "Very Large Projects."

• **Scenario C**: Projects that

- a) Involve a stationary source of GHG (i.e., a project that requires a permit from BAAQMD to operate); <u>AND</u>
- b) After a GHG analysis is prepared would produce total GHG emissions in excess of the BAAQMD's stationary source threshold of 10,000 metric tons of CO₂e per year.

SCA F requires a project applicant to prepare a GHG Reduction Plan to increase energy efficiency and reduce GHG emissions to the greatest extent feasible below the BAAQMD CEQA Thresholds. The GHG Reduction Plan would include a comprehensive set of quantified GHG emissions reduction measures, in addition to energy efficiencies included as part of the project (including the City's SCAs, proposed mitigation measures, project design features, and other City requirements).

BAAQMD Screening Criteria are found in Table 3-1 from the 2011 CEQA Air Quality Guidelines, Table 3-1 (Bay Area Air Quality Management District 2011). The Screening Criteria developed by the BAAQMD are screening tables that indicate which projects, based on land use and size, would have impacts that would be considered less than significant. A review of the BAAQMD's Screening Criteria Table indicates that a land use development project that of 87 dwelling units or less of mid-rise apartments, or 19,000 square feet or less area of strip malls or regional shopping center, would have GHG emission levels that would be considered less than significant.

The City of Oakland defines a "Very Large Project" as meeting any of the following conditions:

- a) Residential development of more than 500 dwelling units;
- b) Shopping center or business establishment employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space;
- c) Commercial office building employing more than 1,000 persons or encompassing more than 250,000 square feet of floor space;
- d) Hotel/motel development of more than 500 rooms;
- e) Industrial, manufacturing, processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or encompassing more than 650,000 square feet of floor area; or
- f) Any combination of smaller versions of the above that when combined result in equivalent annual GHG emissions as the above.

³ The City of Oakland has adopted the BAAQMD's CEQA thresholds of 1,100 metric tons CO₂e per year and 4.6 metric tons CO₂e per service population per year.

23rd & Valdez Project – Greenhouse Gases/Climate Change Screening Analysis per the BVDSP EIR March 2015 Page 3 of 7

The City of Oakland has adopted the BAAQMD's CEQA thresholds of 1,100 metric tons CO_2e per year, or 4.6 metric tons CO_2e per service population per year, described above; these thresholds are used in the analysis below.

1.0 Identification of Project Scenario

Table F-1 presents a comparison of the proposed project to the criteria associated with each of the City of Oakland's three SCA F scenarios. In the even the proposed project meets all of the criteria for any of the three SCA F scenario, a GHG Reduction Plan would be required per SCA F to increase energy efficiency and reduce GHG emissions to the greatest extent feasible below the BAAQMD CEQA Thresholds.

Table F-1. Comparison of Proposed Project with Scenarios of SCA F

Scenario	Criterion (a)	Criterion (b)	Criterion (c)	Criterion (d)
Scenario A	Involve a land use development	Exceed the GHG emissions screening criteria contained in Table 3-1 from the BAAQMD's CEQA Guidelines	Exceed <u>both</u> applicable numeric City of Oakland CEQA Thresholds ¹	_
Project	Yes – the project entails development of land uses	Yes – the project land use components exceed the BAAQMD screening size Levels ²	No – see Section 2.0 below	_
Scenario B	Involve a land use development	Exceed the GHG emissions screening criteria contained in Table 3-1 from the BAAQMD's CEQA Guidelines	Exceed <u>one</u> of the applicable numeric City of Oakland CEQA Thresholds ¹	Very Large Project
Project	Yes – the project entails development of land uses	Yes – the project land use components exceed the BAAQMD screening size levels ²	Yes – see Section 2.0 below	No – see Section 3.0 below
Scenario C	Involve a stationary source of GHG	Exceed 10,000 metric tons CO_2e per year	_	_
Project	Yes – proposed project includes an emergency generator, permitted to operate at a maximum 50 hours per year	No – emergency generator emissions are very low; see Section 2 below	_	_

Notes:

 $^{^1}$ The City of Oakland's CEQA thresholds are 1,100 metric tons CO_2e per year and or 4.6 metric tons CO_2e per service population per year.

² The GHG screening-level sizes for mid-rise apartments are 87 dwelling units or less and 19,000 square feet or less for strip malls/regional shopping centers, per Table 3-1 from the BAAQMD's CEQA Guidelines.

23rd & Valdez Project – Greenhouse Gases/Climate Change Screening Analysis per the BVDSP EIR March 2015 Page 4 of 7

As indicated above in Table F-1, the proposed project does not fall under any of the three scenarios of the SCA F. The following sections include a quantitative analysis of the project GHG emissions, and comparison of these emissions with applicable thresholds.

2.0 Project GHG Emissions

The GHG emissions from project construction and operation were estimated using the CalEEMod model. The key input information is listed below; this information was provided by the project sponsor.

- Construction approximate starting time: 2015.
- Construction phasing and equipment lists: See Appendix A.
- Number of residential units: 196 multi-family units (approximately 269,639 square feet).
- Area of commercial use (retail regional shopping center): 31,500 square feet.
- Parking structure area: Retail Parking 62 parking spaces (26,207 square feet); Residential Parking 156 spaces (43,929 square feet).
- Stationary source: one emergency generator (assumed diesel generator operating not more than 50 hours per year; would require a permit from BAAQMD).
- Daily trip generation rates were provided by Fehr & Peers: See Appendix B.
- Other CalEEMod modeling parameters and results are provided in the CalEEMod output files found in Appendix C.

The results of the CalEEMod modeling are summarized in Table F-2. Construction duration per CalEEMod default was approximately 24 months (beginning in late 2015, with building occupancy planned for late 2017); however, for estimating GHG emissions, the total construction emissions, not annual emissions, were amortized over 40 years, consistent with BVDSP, to determine construction emissions contribution to the project's total annual GHG emissions. As shown in Table F-2, the project's GHG emissions would be below 4.6 tons per year per service population, but would exceed the emissions threshold of 1,100 metric tons per year.

This analysis is based on conservative assumptions, and does not account for project features that could further reduce the estimated emissions—such as the project's proximity to transit, or energy-saving features recommended in the City's standard requirements such as Green Building standards.

3.0 Comparison of Project with Very Large Project Criteria

As outlined in Scenario B of SCA F, because the proposed project would exceed one of the applicable numeric City of Oakland CEQA Thresholds—the emissions threshold of 1,100 metric tons per year (Table F-2)—the next step is to assess whether the project is considered a Very Large Project.

Table F-2. Estimates of GHG Emissions from Project and Comparison to Thresholds

Emission Source	CO ₂ e (Metric Tons/Year)
Project Emissions ¹	
Construction	2,471
Construction, amortized over 40 years ²	62
Operations	
Motor vehicle trips	1,318
Energy (natural gas and grid electricity)	549
Emergency Generator	2
Area	11
Water	52
Waste	56
Operations Total	1,988
Annual GHG Emissions (Construction and Operation)	2,050
Annual GHG Emissions per Service Population ³	3.65
Comparison to Thresholds	
BAAQMD and City of Oakland's Threshold (Annual Emissions)	1,100
Project Exceeds Annual Threshold?	Yes
BAAQMD and City of Oakland's Threshold (per Service Population)	4.6
Project Exceeds Threshold?	No

Notes:

^{1.} Emission data estimated using CalEEMod version CalEEMod.2013.2.2.

^{2.} Construction emissions were amortized over 40 years, consistent with BVDSP, to be considered for estimating the project total annual GHG emissions.

 $^{^{3.}}$ Service population of 561 is the CalEEMod model-generated default for the specified land uses (196 mid-rise apartment units).

23rd & Valdez Project – Greenhouse Gases/Climate Change Screening Analysis per the BVDSP EIR March 2015 Page 6 of 7

As previously indicted, the BVDSP EIR defines a "Very Large Project" as any of the following:

- a) A residential development of more than 500 dwelling units;
- b) A shopping center or business establishment employing more than 1,000 persons, or encompassing more than 500,000 square feet of floor space;
- c) A commercial office building employing more than 1,000 persons, or encompassing more than 250,000 square feet of floor space;
- d) A hotel/motel development of more than 500 rooms;
- e) An industrial, manufacturing, processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or encompassing more than 650,000 square feet of floor area; or
- f) Any combination of smaller versions of the above that, when combined, results in annual GHG emissions equivalent to the above.

The proposed project does not meet Criteria A through E. The proposed 196 residential units are below the City's "Very Large Project" 500-dwelling-unit threshold. The retail component of the project would not employ 1,000 persons, and would have less than 500,000 square feet of floor space (31,500 square feet of retail). The proposed project does not include commercial office uses, hotel/motel uses, or industrial/manufacturing uses.

Criterion F is assessed in Table F-3, which shows the combined residential and retail uses and evaluates the percentage of each component of the project to the criteria for large projects. If the sum of these percentages adds up to 100 or greater, then the project would constitute a Very Large Project. As shown in Table F-3, the combined project components do not result in equivalent GHG emissions from a Very Large Project. Therefore, the proposed project would not be considered a Very Large Project, and Scenario B does not apply to the proposed project.

Table F-3. Comparison of Proposed Project with a Very Large Project

Land Use	Unit Metric	Proposed Project	Very Large Project	Project Component's Percentage of Very Large Project
Residential	Dwelling Units	196	500	39%
Commercial	Square Feet	31,500	500,000	6%
Total (Combi	Total (Combined Land Use Components)			46%

Note:

Criteria for a "Very Large Project" are from the BVDSP EIR, and are based on the City of Oakland's Standard Condition of Approval.

4.0 Conclusion

The analysis above indicates that the proposed project would not fall under any of the three scenarios that would require development of a GHG reduction plan under SCA F. Therefore, the proposed project would be consistent with the City of Oakland's Energy and Climate Action Plan, as well as the BVDSP, and a GHG reduction plan is not required.

References Cited

Bay Area Air Quality Management District. 2011. *California Environmental Quality Act Air Quality Guidelines*. May. San Francisco, CA.

Personal Communications

Tabibnia, Sam. Fehr & Peers. December 4, 2014—email to Kirsten Chapman, ICF International.

Attachments

- A. 23rd Valdez Project Data Needs Responses
- B. 23rd/Valdez Project Trip Generation
- C. CalEEMod Outputs



23rd/Valdez CEQA Analysis Data Needs List September 26, 2014

Data Needs - City

- List of major planned projects within 1,000 feet of the project site.
- Provide the generation rate used in the BVDSP for determining the number of employees expected for retail use. This is not cited in the EIR, although it was mentioned that ESA calculated this. (See Table 4.11-6)
- Provide the appendices for the BVDSP Draft EIR.

Data Needs - Applicant

- Please provide information about the *existing* Project site:
 - Square footage of each existing building on the Project site
 - Tribune Garage 12, 581 sf
 - Ho's Auto 3,600 sf
 - Construction dates of the existing buildings
 - Tribune Garage 1920
 - Ho's Auto 1925
 - Number of parking stalls
 - Assume 147 spaces in parking lots (from survey count of striped spaces).
 Assume 14 on street parking based on aerial images. On-street parking would mostly remain except on Waverly, where we may lose two spaces, and 23rd where 2 to 3 spaces may be lost.
 - Building site coverage in percentage (building footprint)
 - 27.5% building site coverage
 - Are these buildings occupied? If so, what are the uses and who are they owned/operated by?
 - Yes. Tribune Garage Parking lot, owned by West Coast Properties, LLC Ho's Auto – auto detail, operated by Victor Ho
- Confirm all of the square footages written into the Project Description due to the slight changes in the residential units and retail areas.
 - See attached spreadsheet of areas (Attachment A)

- What is the proposed floor area ratio (FAR)? What is the proposed building footprint (in square feet and percent)?
 - Project FAR is 5.99 overall. Proposed building footprint is 100% of site area, approximately 55,092 SF.
- Provide previously prepared Geotechnical Reports.
 - See attached preliminary Geotech Report (Attachment B)
- What is the elevation difference between Valdez Street and Waverly Street?
 - 20.39 at Valdez 8.46 at Waverly = 11.93'
- Include more information about the proposed residential units. Would they be rental or condos? Would affordable housing be included? If so, how much?
 - All rentals. No BMR units included
- How would non-residents be restricted from parking in the residential parking garage?
 - Non-residents using car share would have a key fob to use at a door from the street, and vehicles would have proximity readers / garage opener system for the overhead / rolling gate at the residential garage entry.
- Provide a summary of how the building would be accessed during an emergency.
 - Project anticipates providing fire department connections once on each street face. The 23rd street FDC would be located near the loading dock, the Valdez Street FDC would be located near the exit corridor for Stair 1. The Waverly Street FDC would be located near the exit corridor for Stair 3. Stair 1 would have direct access to the podium through a half-flight of stairs; additionally there would be half-flight stair access from Stair 3 to the podium. The project has assumed that there will be no requirement for rescue windows in this Type III-A sprinklered building. We have assumed NFPA 13 sprinklers, not NFPA 13R.
- The number of residential parking spaces is inconsistent in the site plans. Sheet A2.00 shows that there would be 133 spaces in the table, but 131 on the site plan.
 - Update parking count to maximum of 147 spaces (0.75 spaces per 196 units).
- Provide more information about the "retail flex area." The more conservative approach would be to analyze this area as retail rather than employee parking. Is this a way to get retail up to 35.000 sf?
 - Do not hold on to the idea of the retail flex area. This will remain as parking. Assume maximum retail of 31,500 SF.

- Existing/proposed impervious versus pervious surfaces (in square footages and percentages).
 - The existing site appears to be 100% impervious (55,092 sf). We would need a preliminary landscape plan to determine the proposed pervious
- Provide information (if available) about the proposed landscaping in the podium courtyards, rooftop, and sidewalk frontages.
 - In podium courtyards, assume raised infiltration planters for stormwater management, and pavers over podium structure. For roof areas, assume a mix of raised planters, vegetated roof areas, and decking pavers on pedestals and some windscreens. At street level, sidewalk frontages assume some permeable paving with tree planting areas.
- How many trees will be removed/planted and what are the species?
 - There are no existing street trees in front of property according to photos and google map aerial views. There are some trees adjacent to interior property lines that will need to be surveyed for species.
- Please provide a drainage study/plan (if available). Will stormwater treatment areas be included? If appropriate, include potential water quality Best Management Practices (BMPs) that could be implemented to reduce impacts.
 - TBD –Civil, Landscape and Pyatok to coordinate
- Per the BVDSP, Valdez Street and 23rd Street should include widened sidewalks and amenities such as planting, lighting, and seating. Will the Project include any of these features?
 - We are currently assuming the widened sidewalks and amenities listed in the BVSP.
- What is the general anticipated architectural style? If available, provide information about building design and lighting.
 - Building will be in a contemporary architectural style utilizing a variety of materials including but not limited to cement plaster, cementitious panels, metal panels, stone or brick, concrete and storefront glazing and aluminum windows at the exterior street facades, and vinyl windows at the interior courtyard facades.
- Would the Project be LEED certified or include any sustainable features? Solar panels could be included on the roof. Please provide more specific information for analysis.
 - Project will be GreenPoint Rated in compliance with Oakland's Green Building Program and will also comply with CalGreen requirements.

Pyatok has provided a preliminary GPR checklist for review. See attached draft (Attachment C)

- Would any upgrades to the existing water/wastewater mains or storm drains be required? Provide any information about potential infrastructure upgrades.
 - According to the BVDSP no water improvements are necessary but the project will pay a fee to fund future sanitary improvements. We anticipate a new storm drain main in Valdez and potentially Waverly will be required but this needs to be confirmed with the City
- Describe the type of HVAC system and filters (e.g., MERV -13) proposed.
 - TBD May be determined by air quality analysis or noise analysis.
- If a diesel generator is proposed, provide the number of generators, location, and horsepower.
 - No diesel general assumed at this time.
- Please provide following <u>annual</u> information for project operations by land use type, if available.
 - Not yet available

		Natural gas	Water consumption		
Land use	Electricity consumption (kWh)	consumption (therms or MMBtu)	Indoor (gallons)	Outdoor (gallons)	Waste generation (Tons)

Construction Data Needs. ICF understands that not all of this information may currently be available. Please provide us with as much information as is currently known. ICF can generate a conservative estimate of the unknown data and confirm this information with the applicant before incorporating it into the analysis.

- Confirm assumptions for construction phasing. We will assume two buildings will be constructed at a time. Please confirm the phasing for this, how phases overlap, how long each building takes, etc. If requested, ICF can assist with developing these assumptions.
 - One building will be constructed, see phasing table below.
- Please provide the start and end dates of construction for each of phase of the project (e.g., demolition, site grading, fine grading, utilities installation, building construction, asphalt laying, architectural coatings application, etc.). Please note the number of days of construction activities for each. The following table can be used for this.

Page 5 of 7

Phase	Start Date	End Date	Number of Work Days
Site Mobilization	12/7/2015	12/18/2015	10
Abatement & Demo	12/14/2015	1/8/2016	19
Set Soldier Piles	1/11/2016	1/22/2016	10
Mass Exc & Lagging	1/25/2016	2/19/2016	20
F/R/P Foundations	2/22/2016	4/1/2016	30
Shotcrete Perimeter Walls	2/29/2016	4/8/2016	30
F/R/P CIP Shear Walls & Columns	2/29/2016	4/8/2016	30
Sub-Slab Utilities	4/4/2016	4/29/2016	20
F/R/P SOG	4/11/2016	5/6/2016	20
1st Floor Deck Shoring	5/2/2016	5/27/2016	20
F/R/P 1st Floor Deck	5/9/2016	6/3/2016	20
F/R/P 1st Floor Column & Walls	5/30/2016	6/24/2016	20
Podium Deck Shoring	6/6/2016	7/1/2016	20
F/R/P Podium Deck	6/27/2016	7/22/2016	19
2 nd Floor Framing	7/5/2016	8/15/2016	30
3 rd Floor Framing	8/22/2016	9/30/2016	30
4 th Floor Framing	9/6/2016	10/17/2016	30
5 th Floor Framing	9/21/2016	11/1/2016	30
6 th Floor Framing	10/6/2016	11/16/2016	30
Roof Framing	10/21/2016	12/5/2016	30
Roofing	11/17/2016	12/16/2016	20
Exterior Finishes	12/6/2016	6/30/2017	147
B1 Removal Re-shores	8/22/2016	8/26/2016	5
B1 Build out	8/29/2016	11/29/2016	65
L1 Retail Remove Re-shores	8/29/2016	9/2/2016	5
L1 Retail Storefronts	9/5/2016	9/30/2016	20
L1 Retail Build out	9/5/2016	2/10/2017	111
L1 Parking Remove Re-shores	9/5/2016	9/9/2016	5
L1 Parking Build out	9/12/2016	12/13/2016	65
L2 Rough In	8/22/2016	12/29/2016	91
L2 Finishes	12/14/2016	5/19/2017	111
L3 Rough In	9/6/2016	1/13/2017	90
L3 Finishes	1/2/2017	6/2/2017	110
L4 Rough In	9/21/2016	1/27/2017	89
L4 Finishes	1/12/2017	6/16/2017	112
L5 Rough In	10/6/2016	2/14/2017	90
L5 Finishes	1/31/2017	6/30/2017	109
L6 Rough In	10/24/2016	3/3/2017	91
L6 Finishes	2/15/2017	7/18/2017	110
Site Improvements	5/22/2017	9/22/2017	90
Commissioning	7/31/2017	8/25/2017	20
Testing	8/28/2017	9/22/2017	20

Final Inspection	9/25/2017	10/6/2017	10

• Please provide the construction equipment types (electric, diesel, natural gas, LPG, and propane powered), horsepower, number of pieces, and equipment operation hours/day for each phase. The following table can be used for this. An example is provided in red.

Phase	Equipment Type/Fuel	Number	Horsepower	Hours/day
All Phases	Extendable Forklift / Gas	1	200	4
	Generator / Gas	2	100	6
Demolition and	Excavator / Diesel	1	300	8
Excavation	Loader / Diesel	1	300	8
	Dump Truck / Diesel	2	450	8
Concrete & Framing	Tower Crane (Electric)	1	500	8
Interior	Elev Man/Mat'l Lift (Electric)	1	200	8
Exterior Finishes	Extendable Lift / Gas	2	100	8

- Please provide the quantity of exported and imported soil for each phase (cubic yards).
 - Haul-off: 12,200 CY, Import: 200 CY
- Details on the amount of demolition material to be removed in cubic yards. How much would be recycled? How much would be generated and shipped to landfills? Where would the construction debris be shipped?
 - Demolition material to be removed: 3000CY
- Please provide the number of daily and total haul truck trips for each construction phase in which hauling would occur. This includes materials delivery, materials removal (i.e. removal of demolished material), and soil hauling. What is the maximum haul truck distance (miles)?
 - Demolition number of daily haul trucks: 17Loads, Total haul trucks: 334Loads
 - Excavation number of daily haul trucks: 68Loads, Total haul trucks: 1356Loads
- Please provide material disposal, soil borrow/fill, and delivery/vendor site locations. What are the haul routes? What roads will the trucks use to get to/from the project site?
 - Cannot estimate at this time.
- How many acres would be graded during each phase of construction? Of this, what is the maximum number of acres that would be graded in one day?
 - Rough Grading: 1.26 Acres, Fine Grading: .01 Acres

Page 7 of 7

• Please provide the average daily construction workers for each phase. Would there be carpool or shuttle service for construction workers? It will be assumed each worker will make two trips to the construction site per day.

Demolition: 15 (workers) Grading/Excavation: 10 Foundation/Concrete: 60

Framing/Rough-In/Interior Finishes: 100

Exterior:100 Site: 10

- How many miles of roads and acres of area will be paved with asphalt and during which construction phases?
 - Site Improvements: 1500SF
- Will any electricity be used during construction to power mobile offices or equipment? If so, please provide the annual kWh.

Mobile office: 20,000kWh (annually)Equipment: 400,000kWh (annually)

• How much water will be needed for each construction phase (e.g., for dust control)? How much wastewater will be processed for each construction phase?

Dust control: 700,000Gal Power washing: 200,000Gal Concrete: 150,000Gal Lavatory: 50,000Gal

- Location of potential construction staging areas and whether dewatering will be required.
 - Dewatering will not be required.
- Site topography and grading, including, but not limited to, the maximum depth of excavation.
 - Maximum depth of excavation: 13ft
- Will pile driving be required?
 - Not for the foundation it is a mat slab. Not known at this time for shoring.

23RD AND VALDEZ PROJECT, OAKLAND, CA

WOOD PARTNERS

11/3/2014 14:10

AREA SCHEDULE

Туре	Area
RETAIL	22,807 SF
RETAIL LOADING	630 SF
RETAIL MEZZANINE	7,126 SF
RETAIL PARKING	25,970 SF
SERVICE	313 SF
TOTAL RETAIL AREA	56,847 SF

TOTAL RETAIL AREA	56,847 SF
AMENITY	4,184 SF
CIRCULATION - CORRIDORS, LOBBIES	24,885 SF
DOG RUN	1,783 SF
LEASING	1,988 SF
LEASING OFFICE MEZZANINE	643 SF
PRIVATE OPEN SPACE	1,258 SF
PUBLIC OPEN SPACE	13,343 SF
RESIDENTIAL PARKING	47,662 SF
RESIDENTIAL TRASH	671 SF
RESIDENTIAL UNITS	159,999 SF
ROOF DECK	13,113 SF
SERVICE	3,595 SF
TOTAL RESIDENTIAL AREA	273,123 SF
TOTAL PROJECT AREA	329,970 SF



NEW HOME RATING SYSTEM, VERSION 6.0

MULTIFAMILY CHECKLIST

The GreenPoint Rated checklist tracks green features incorporated into the home. GreenPoint Rated is administered by Build It Green, a non-profit whose mission is to promote healthy, neargy and resource efficient buildings in California.

The minimum requirements of GreenPoint Rated are: verification of 50 or more points; Earn the following minimum points per category: Commutity (2) Energy (25), Indoor Air Quality/Health (6), Resources (6), and Water (8); and meet the prerequisites CALGreen Mandatory, E5.2, H6.1, J5.1, O1, O7.

The criteria for the green building practices listed below are described in the GreenPoint Rated Single Family Rating Manual. For more information please visit www.builditgreen.org/greenpointrated Build It Green is not a code enforcement agency.

104 Total Points Targeted:

Certfication Level: Silver

POINTS REQUIRED

■Minimum Points

■ Targeted Points

A home is only GreenPoint Rated if all features are verified by a Certified GreenPoint Rater through Build It Green. This is the public version of the Checklist and cannot be used for certification. New Home Multifamily Version 6.0.2

A	
Yes	otes
A STEE	
A. Job Site Construction Waste Diversion 2	
Yes A2.1 GSN: CAD Waste Diversion (Including Abrenative Dayl Cover) A2.2 GSN: CAD Waste Diversion (Excluding Abrenative Dayl Cover) D	
No	Chanter 4 sec. 4 408 1
Yes	Shapter 4, 3cc. 4.400.1
TBO	
Yes	21 ~ 20%
A.S. Stornwater Control: Prescriptive Path Yes A.S. 2-Finistion and/or Bo-Patrionic Plantures	
New A6.2 Pitration and/or Bio-Retention Features 1	
No. A6.3 Non-Leaching Roofing Materials 0 1 1	
TBD	
B. FOUNDATION Yes B. I. Fly Ash and/or Stag in Concrete 1	
Teb 1. Fly Ash and/or Stag in Concrete 1	
TED B.2. Radon-Resistant Construction Yes B.3. Foundation Drainage System 2 2 2	
Yes	
B5. Structural Pest Controls No	
No	
Yes	
CLANDSCAPE	
Yes	
Yes C2. Three Inches of Mulch in Planting Beds 1	
C3. Resource Efficient Landscapes	
Yes C3.1 No Invasive Species Listed by Cal-IPC 1	
Yes	
Yes	
C2. Minimal Turf in Landscape C4.1 No Turf on Slopes Exceeding 10% and No Overhead Sprinklers Installed in Areas Less Than Eight Feet Wide O	
Ves	
Yes	
Yes	ull credit
Yes C6. High-Efficiency Irrigation System 0 2	
TBD C8. Rainwater Harvesting System C9. Recycled Wastewater Irrigation System C9. Submeter or Dedicated Meter for Landscape Irrigation C9. Submeter or Dedicated Meter for Landscape Irrigation C9. Submeter or Dedicated Meter for Landscape Mest Waster Budget C9. Submeter or Dedicated Meter Budget C9. Submeter System Sy	
TBD	
TBD	water mgmt, possible cred
Solid	
C12. Environmentally Preferable Materials for Site C12.1 Environmentally Preferable Materials for 70% of Non-Plant Landscape Elements and Fencing C12.2 Play Structures and Surfaces Have an Average Recycled Content ≥20% Yes C13. Reduced Light Pollution No C14. Large Stature Tree(s) TBD C15. Third Party Landscape Program Certification TBD C16. Maintenance Contract with Certified Professional TBD C17. Community Garden D1. Optimal Value Engineering TBD D1. Optimal Value Engineering TBD D1. Joists, Raffers, and Studs at 24 Inches on Center Yes D1.2 Non-Load Bearing Door and Window Headers Sized for Load TBD D2. Construction Material Efficiencies Yes D3.2 Wood J-Joists or Web Trusses for Floors TBD D3.3 Engineered Lumber Yes D3.2 Engineered Engineer-Jointed Studs for Vertical Applications TBD D3.4 Engineered or Finger-Jointed Studs for Vertical Applications D3.5 OSB for Subfloor D3.6 OSB for Wall and Roof Sheathing No D4. Insulated Headers 0 1 1 VIII VIII	
TBD	
Elements and Fencing	
Yes	
No	
TBD	
TBD	
D. STRUCTURAL FRAME AND BUILDING ENVELOPE	
D1. Optimal Value Engineering	
TBD	
Ves	
Yes D2. Construction Material Efficiencies 1	
D3. Engineered Lumber D3.1 Engineered Lumber D3.1 Engineered Beams and Headers D3.2 Wood I-Joists or Web Trusses for Floors D3.2 Wood I-Joists or Web Trusses for Floors D3.3 Engineered Lumber for Roof Rafters D3.4 Engineered or Finger-Jointed Studs for Vertical Applications D3.4 Engineered or Finger-Jointed Studs for Vertical Applications D3.5 OSB for Subfloor D3.6 OSB for Wall and Roof Sheathing D3.6 OSB for Wall and Roof Sheathing D4. Insulated Headers D4. Insulated Headers D6.5 D7.5 D7.5	
Yes D3.1 Engineered Beams and Headers 1 1 1 Yes D3.2 Wood I-Joists or Web Trusses for Floors 1 1 1 TBD D3.3 Engineered Lumber for Roof Rafters 1 1 1 TBD D3.4 Engineered or Finger-Jointed Studs for Vertical Applications 1 1 TBD D3.5 OSB for Subfloor 0.5 0.5 TBD D3.6 OSB for Wall and Roof Sheathing 0.5 0.5 No D4. Insulated Headers 0 1 1	
Yes D3.2 Wood I-Joists or Web Trusses for Floors 1	
TBD	
TBD	
TBD	
No D4. Insulated Headers 0 1	
D5. FSC-Certified Wood	
TBD D5.1 Dimensional Lumber, Studs, and Timber 6	
TBD D5.2 Panel Products 3	
D6. Solid Wall Systems	
No D6.2 At Least 90% of Exterior Walls 0 1 1	
No D6.3 At Least 90% of Roofs 0 1 1 1	
No D7. Energy Heels on Roof Trusses 0 1	
No D8. Overhangs and Gutters 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
D9. Reduced Pollution Entering the Home from the Garage No D9.1 Detached Garage 0 2	
NU Del Detaute Garage Yes D9.2 Milication Strategies for Attached Garage 1 1 1	

			ξ		£	es		
Project N	ame	Points Achieved	Community) j	AQ/Health	Resources	<u>_</u>	
		Achie	ĕ	Energy	ΑØΛ	Seso	Water	
	D10. Structural Pest and Rot Controls		Ŭ		_			
Yes	D10.1 All Wood Located At Least 12 Inches Above the Soil D10.2 Wood Framing Treating With Borates or Factory-Impregnated, or Wall	1				1		
No	Materials Other Than Wood	0				1		
Yes	D11. Moisture-Resistant Materials in Wet Areas (such as Kitchen, Bathrooms, Utility Rooms,					١.		
EXTERIOR	and Basements)	2			1	1		
TBD	E1. Environmentally Preferable Decking					1		
TBD TBD	E2. Flashing Installation Third-Party Verified E3. Rain Screen Wall System					2		
Yes	E4. Durable and Non-Combustible Cladding Materials	1				1		
	E5. Durable Roofing Materials E5.1 Durable and Fire Resistant Roofing Materials or Assembly					1		
Yes TBD	E5.1 Durable and Fire Resistant Rooting Materials of Assembly E5.2 Roofing Warranty for Shingle Roofing	1	R	R	R	R	R	no shingle roofing, is not applicable
TBD	E6. Vegetated Roof		2	2				amenities buildings, portion of upper deck roofing near
INSULATION	F1. Insulation with 30% Post-Consumer or 60% Post-Industrial Recycled Content							
TBD	F1.1 Walls and Floors					1		
TBD	F1.2 Ceilings					1		
TBD	F2. Insulation that Meets the CDPH Standard Method—Residential for Low Emissions F2.1 Walls and Floors				1		1	
TBD	F2.2 Ceilings				1			
TBD	F3. Insulation That Does Not Contain Fire Retardants F3.1 Cavity Walls and Floors				1			
TBD	F3.2 Ceilings				1			
TBD	F3.3 Interior and Exterior Insulation				1			
PLUMBING	G1. Efficient Distribution of Domestic Hot Water							
Yes	G1.1 Insulated Hot Water Pipes	1		1				
TBD	G1.2 WaterSense Volume Limit for Hot Water Distribution						1	
TBD	G1.3 Increased Efficiency in Hot Water Distribution G2. Install Water-Efficient Fixtures			1		1	2	
Yes	G2.1 WaterSense Showerheads with Matching Compensation Valve	2					2	
Yes	G2.2 WaterSense Bathroom Faucets G3.2 WaterSense Tailots with a Maximum Performance (Map) Throchold of No.	1					1	
TBD	G2.3 WaterSense Toilets with a Maximum Performance (MaP) Threshold of No Less Than 500 Grams						1	
No	G2.4 Urinals with Flush Rate of ≤ 0.1 Gallons/Flush	0					1	
TBD	G3. Pre-Plumbing for Graywater System G4. Operational Graywater System	0					3	
No TBD	G5. Submeter Water for Tenants	0					2	
HEATING, VENTILA	ATION, AND AIR CONDITIONING							
TBD	H1. Sealed Combustion Units H1.1 Sealed Combustion Furnace				-1			
TBD	H1.2 Sealed Combustion Water Heater				2			
No	H2. High Performing Zoned Hydronic Radiant Heating System	0		1	1			
TBD	H3. Effective Ductwork H3.1 Duct Mastic on Duct Joints and Seams			1				
TBD	H3.2 Pressure Balance the Ductwork System			1				
Yes	H4. ENERGY STAR® Bathroom Fans Per HVI Standards with Air Flow Verified	1			1			
Yes	H5. Advanced Practices for Cooling H5.1 ENERGY STAR Ceiling Fans in Living Areas and Bedrooms	1		1				West and South Facing Units
Yes	H5.2 Operable Windows and Skylights Located to Induce Cross Ventilation in At							
	Least One Room in 80% of Units H6. Whole House Mechanical Ventilation Practices to Improve Indoor Air Quality	1		1				
Yes	H6.1 Meet ASHRAE Standard 62.2-2010 Ventilation Residential Standards	Y	R	R	R	R	R	
No	H6.2 Advanced Ventilation Standards	0			1			
TBD	H6.3 Outdoor Air Ducted to Bedroom and Living Areas H7. Effective Range Design and Installation				2			
TBD	H7.1 Effective Range Hood Ducting and Design				1			
No	H7.2 Automatic Range Hood Control	0			1			
Yes	I1. Pre-Plumbing for Solar Water Heating	1		1				
Yes	I2. Preparation for Future Photovoltaic Installation	1		1				
	I3. Onsite Renewable Generation (Solar PV, Solar Thermal, and Wind) I4. Net Zero Energy Home			25				-
No	I4.1 Near Zero Energy Home	0		2		L	L	
No	I4.2 Net Zero Electric	0		4				
TBD TBD	I5. Solar Hot Water Systems to Preheat Domestic Hot Water I6. Photovoltaic System for Multifamily Projects			12				
BUILDING PERFOR	RMANCE AND TESTING							
TBD	J1. Third-Party Verification of Quality of Insulation Installation J2. Supply and Return Air Flow Testing			4	1			
TBD Yes	J2. Supply and Return Air Flow Testing J3. Mechanical Ventilation Testing and Low Leakage	1		1	1			
TBD	J4. Combustion Appliance Safety Testing				1			
2008	J5. Building Performance Exceeds Title 24 Part 6 J5.1 Home Outperforms Title 24	05		20				
15.0% 0.0%	J5.1 Home Outperforms Little 24 J5.2 Non-Residential Spaces Outperform Title 24	25 0		30 15				
TBD	J6. Title 24 Prepared and Signed by a CABEC Certified Energy Analyst			1				
TBD TBD	J7. Participation in Utility Program with Third-Party Plan Review J8. ENERGY STAR for Homes		-	1		-	-	
No	J9. EPA Indoor airPlus Certification			<u> </u>	1	t		
FINISHES	W.F							
No	K1. Entryways Designed to Reduce Tracked-In Contaminants K1.1 Entryways to Individual Units	0		1	1	1	1	
Yes	K1.2 Entryways to Buildiings	1			1			
TBD	K2. Zero-VOC Interior Wall and Ceiling Paints				2			
Yes	K3. Low-VOC Caulks and Adhesives K4. Environmentally Preferable Materials for Interior Finish	1			1	<u> </u>		
TBD	K4.1 Cabinets					2		
TBD	K4.2 Interior Trim					2		
TBD TBD	K4.3 Shelving K4.4 Doors			 		2	 	
TBD	K4.5 Countertops					1		
TD-	K5. Formaldehyde Emissions in Interior Finish Exceed CARB							
TBD TBD	K5.1 Doors K5.2 Cabinets and Countertops			-	1 2	-	-	
TBD	K5.3 Interior Trim and Shelving				2			
TBD	K6. Products That Comply With the Health Product Declaration Open Standard				2			
TBD	K7. Indoor Air Formaldehyde Level Less Than 27 Parts Per Billion				2			
No					1		1	1
No Yes	K8. Comprehensive Inclusion of Low Emitting Finishes K9. Durable Cabinets	2			2			

Drainat Nor		9	nity		E E	seo		
Project Nar	ne	Points Achieved	Community	Energy	AQ/Health	Resources	Water	
L. FLOORING								
No TBD	L1. Environmentally Preferable Flooring L2. Low-Emitting Flooring Meets CDPH 2010 Standard Method—Residential	0			3	3		
TBD	L3. Durable Flooring				3	1		
No	L4. Thermal Mass Flooring	0		1				
M. APPLIANCES AND LIG		4		_				
Yes TBD	M1. ENERGY STAR® Dishwasher M2. CEE-Rated Clothes Washer	1		1			1 2	
<25 cubic feet	M3. Size-Efficient ENERGY STAR Refrigerator	1		2				
	M4. Permanent Centers for Waste Reduction Strategies							
TBD	M4.1 Built-In Recycling Center M4.2 Built In Composition Center		_			1		
TBD	M4.2 Built-In Composting Center M5. Lighting Efficiency					1		
TBD	M5.1 High-Efficacy Lighting			2				
TBD	M5.2 Lighting System Designed to IESNA Footcandle Standards or Designed							
	by Lighting Consultant			2				
No Yes	M6. Central Laundry M7. Gearless Elevator	0		1			1	
N. COMMUNITY	mir oddioo Elorator			<u> </u>				
	N1. Smart Development							
Yes	N1.1 Infill Site	2	1			1		
No >35	N1.2 Designated Brownfield Site N1.3 Conserve Resources by Increasing Density	0 4	1	2	1	2		
>35 Yes	N1.3 Conserve Resources by Increasing Density N1.4 Cluster Homes for Land Preservation	2	1	-		1		
	N1.5 Home Size Efficiency	6				9		
1080	Enter the area of the home, in square feet							
2 Yes	Enter the number of bedrooms N2. Home(s)/Development Located Within 1/2 Mile of a Major Transit Stop	2	2					
703	N3. Pedestrian and Bicycle Access							
	N3.1 Pedestrian Access to Services Within 1/2 Mile of Community Services	2	2					
10	Enter the number of Tier 1 services							
6 Yes	Enter the number of Tier 2 services N3.2 Connection to Pedestrian Pathways	1	1					+
TBD	N3.3 Traffic Calming Strategies		2					
Yes	N3.4 Sidewalks Buffered from Roadways and 5-8 Feet Wide	1	1					
Yes	N3.5 Bicycle Storage for Residents	1	1					
TBD 1 space per unit	N3.6 Bicycle Storage for Non-Residents N3.7 Reduced Parking Capacity	2	2					5% of anticipated visitors?
r space per unit	N4. Outdoor Gathering Places			1				
Yes	N4.1 Public or Semi-Public Outdoor Gathering Places for Residents	1	1					
No	N4.2 Public Outdoor Gathering Places with Direct Access to Tier 1 Community	_	١.					
	Services N5. Social Interaction	0	1					
Yes	N5.1 Residence Entries with Views to Callers	1	1					
Yes	N5.2 Entrances Visible from Street and/or Other Front Doors	1	1					
TBD	N5.3 Porches Oriented to Street and Public Space		1					
Yes	N5.4 Social Gathering Space N6. Passive Solar Design	1	1					
TBD	N6.1 Heating Load			2				
TBD	N6.2 Cooling Load			2				
TOD	N7. Adaptable Building							
TBD No	N7.1 Universal Design Principles in Units N7.2 Full-Function Independent Rental Unit	0	1		1			
INO	N8. Affordability	- 0	<u> </u>	1				
No	N8.1 Dedicated Units for Households Making 80% of AMI or Less	0	2					
No	N8.2 Units with Multiple Bedrooms for Households Making 80% of AMI or Less	0	1					
No	N8.3 At Least 20% of Units at 120% AMI or Less are For Sale N9. Mixed-Use Developments	0	1					
No	N9.1 Live/Work Units Include a Dedicated Commercial Entrance	0	1					
Yes	N9.2 At Least 2% of Development Floor Space Supports Mixed Use	1	1					
TBD	N9.3 Half of the Non-Residential Floor Space is Dedicated to Community Service		1					
O. OTHER Yes	O1. GreenPoint Rated Checklist in Blueprints	Y	R	R	R	R	R	
Yes	O2. Pre-Construction Kickoff Meeting with Rater and Subcontractors	2	_ · ·	0.5	- 13	1	0.5	
TBD	O3. Orientation and Training to Occupants—Conduct Educational Walkthroughs			0.5	0.5	0.5	0.5	
TBD	O4. Builder's or Developer's Management Staff are Certified Green Building							
No	Professionals O5. Home System Monitors	0		0.5	0.5	0.5	0.5	
	O6. Green Building Education	- 0					<u> </u>	
TBD	O6.1 Marketing Green Building		2					
Yes	O6.2 Green Building Signage	1	_	0.5	_	_	0.5	
Yes TBD	O7. Green Appraisal Addendum O8. Detailed Durability Plan and Third-Party Verification of Plan Implementation	Y	R	R	R	R 1	R	
TBD	O9. Residents Are Offered Free or Discounted Transit Passes		2					
TBD	O10. Vandalism Deterrence Practices and Vandalism Management Plan					1		
P. DESIGN CONSIDERATI			1		1			
	P1. Acoustics: Noise and Vibration Control Enter the number of Tier 1 practices		1		1			
	Enter the number of Tier 2 practices							
	P2. Mixed-Use Design Strategies							
Yes Yes	P2.1 Tenant Improvement Requirements for Build-Outs P2.2 Commercial Loading Area Separated for Residential Area	2	-		1	_	1	
Yes	P2.2 Commercial Loading Area Separated for Residential Area P2.3 Separate Mechanical and Plumbing Systems	1			1	—		
	P3. Commissioning							
TBD	P3.1 Design Phase			1	1			
TBD	P3.2 Construction Phase			1	1			
TBD TBD	P3.3 Post-Construction Phase P4. Building Enclosure Testing			1	1	1		
	Summary							
	Total Available Points in Specific Categories	381	43	138	61	86	53	
	Minimum Points Required in Specific Categories	50	2	25	6	6	6	
	Total Points Achieved							
	Total Points Achieved	104.0	17.0	36.0	13.0	28.0	10.0	

TABLE X 23RD AND VALDEZ PROJECT AUTO TRIP GENERATION

		ITE		AM Peak Hour			PM Peak Hour		
Land Use	Units ¹	Code	Daily	In	Out	Total	In	Out	Total
Residential	196 DU	220 ²	1,311	20	80	100	81	44	125
Commercial	31.5 KSF	820 ³	1,345	19	11	30	56	61	117
Subtotal			2,656	39	91	130	137	105	242
Non-Auto Reduction (-43%) ⁴			-1,142	-17	-39	-56	-59	-45	-104
Net New Projec	t Trips		1,514	22	52	74	78	60	138

- 1. DU = Dwelling Units, KSF = 1,000 square feet.
- 2. ITE Trip Generation (9th Edition) land use category 220 (Apartments):

Daily: T = 6.06(X) + 123.56

AM Peak Hour: T = 0.49(X) + 3.73 (20% in, 80% out)

PM Peak Hour: T = 0.55(X) + 17.65 (65% in, 35% out)

3. ITE Trip Generation (9th Edition) land use category 820 (Shopping Center):

Daily: T = 42.7 * X

AM Peak Hour: T = 0.96* X (88% in, 12% out) PM Peak Hour: T = 3.71* X (17% in, 83% out)

4. Reduction of 43.0% assumed. Based on City of Oakland *Transportation Impact Study Guidelines* using BATS 2000 data for development in an urban environment within 0.5 miles of a BART Station.

Source: Fehr & Peers, 2014.

TABLE X 23RD AND VALDEZ PROJECT TRIP GENERATION BY TRAVEL MODE

Mode	Mode Share Adjustment Factors ¹	Daily	AM Peak Hour ²	PM Peak Hour ³
Automobile	57.0%	1,514	74	138
Transit	30.4%	807	39	74
Bike	3.9%	104	5	9
Walk	23.0%	611	30	56
	Total Trips	3,036	148	277

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

Sources: Fehr & Peers, 2014.

CalEEMod Version: CalEEMod.2013.2.2 Page 1 of 90 Date: 12/10/2014 4:51 PM

23rd & Valdez

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	218.00	Space	0.00	70,136.00	0
Apartments Mid Rise	196.00	Dwelling Unit	1.26	269,639.00	561
Regional Shopping Center	31.50	1000sqft	0.00	31,500.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)63Climate Zone5Operational Year2018

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 641.35
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - PD said otherwise

Construction Phase - Updatedper PD

Off-road Equipment - Updated per PD

Off-road Equipment - per pd

Off-road Equipment - per PD

Off-road Equipment - Updated per PD

Off-road Equipment - Used PD as guidance

Off-road Equipment - updated per PD

Off-road Equipment - Updated per PD

Off-road Equipment - per pd

Off-road Equipment - Updated per PD

Off-road Equipment - per pd

Off-road Equipment - per pd

Off-road Equipment - Updated per PD

Off-road Equipment - per pd

Off-road Equipment - Updated per PD

Off-road Equipment - per pd

Off-road Equipment - Updated per PD

Off-road Equipment - per pd

Off-road Equipment - Updated per PD

Off-road Equipment - per pd

Off-road Equipment - Updated per PD

Off-road Equipment - per pd

Off-road Equipment - per pd

Trips and VMT - Updated per Data Needs List

Demolition -

Grading - Per Data Needs List

Architectural Coating - square footage divided by six for each level

Vehicle Trips - Calcluated from F&P traffic data

Land Use Change -

Sequestration -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	182,006.00	30,300.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	182,006.00	30,300.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	182,006.00	30,300.00

tblArchitecturalCoating	ConstArea_Residential_Exterior	182,006.00	30,300.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	182,006.00	30,300.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	182,006.00	30,300.00
tblArchitecturalCoating	ConstArea_Residential_Interior	546,019.00	91,000.00
tblArchitecturalCoating	ConstArea_Residential_Interior	546,019.00	91,000.00
tblArchitecturalCoating	ConstArea_Residential_Interior	546,019.00	91,000.00
tblArchitecturalCoating	ConstArea_Residential_Interior	546,019.00	91,000.00
tblArchitecturalCoating	ConstArea_Residential_Interior	546,019.00	91,000.00
tblArchitecturalCoating	ConstArea_Residential_Interior	546,019.00	91,000.00
tblConstructionPhase	NumDays	10.00	113.00
tblConstructionPhase	NumDays	10.00	110.00
tblConstructionPhase	NumDays	10.00	112.00
tblConstructionPhase	NumDays	10.00	109.00
tblConstructionPhase	NumDays	10.00	110.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	94.00
tblConstructionPhase	NumDays	200.00	67.00
tblConstructionPhase	NumDays	200.00	93.00
tblConstructionPhase	NumDays	200.00	94.00
tblConstructionPhase	NumDays	200.00	95.00
tblConstructionPhase	NumDays	200.00	149.00
tblConstructionPhase	NumDays	200.00	10.00
tblConstructionPhase	NumDays	200.00	215.00
tblConstructionPhase	NumDays	200.00	94.00
tblConstructionPhase	NumDays	200.00	67.00
tblConstructionPhase	NumDays	200.00	115.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	4.00	20.00

tblConstructionPhase	NumDays	10.00	50.00
tblConstructionPhase	NumDays	2.00	480.00
tblConstructionPhase	PhaseEndDate	12/6/2017	5/19/2017
tblConstructionPhase	PhaseEndDate	10/20/2017	6/2/2017
tblConstructionPhase	PhaseEndDate	11/7/2017	6/16/2017
tblConstructionPhase	PhaseEndDate	11/16/2017	6/30/2017
tblConstructionPhase	PhaseEndDate	12/1/2017	7/18/2017
tblConstructionPhase	PhaseEndDate	3/10/2017	9/30/2016
tblConstructionPhase	PhaseEndDate	2/9/2017	1/13/2017
tblConstructionPhase	PhaseEndDate	4/18/2017	12/13/2016
tblConstructionPhase	PhaseEndDate	4/21/2017	1/27/2017
tblConstructionPhase	PhaseEndDate	6/8/2017	2/14/2017
tblConstructionPhase	PhaseEndDate	6/27/2017	3/3/2017
tblConstructionPhase	PhaseEndDate	9/28/2017	6/30/2017
tblConstructionPhase	PhaseEndDate	10/20/2017	1/22/2016
tblConstructionPhase	PhaseEndDate	4/27/2017	12/29/2016
tblConstructionPhase	PhaseEndDate	4/3/2017	11/29/2016
tblConstructionPhase	PhaseEndDate	5/9/2017	2/10/2017
tblConstructionPhase	PhaseEndDate	9/26/2017	10/6/2017
tblConstructionPhase	PhaseEndDate	11/10/2017	10/6/2017
tblConstructionPhase	PhaseStartDate	7/1/2017	12/14/2016
tblConstructionPhase	PhaseStartDate	5/20/2017	1/2/2017
tblConstructionPhase	PhaseStartDate	6/3/2017	1/12/2017
tblConstructionPhase	PhaseStartDate	6/17/2017	1/31/2017
tblConstructionPhase	PhaseStartDate	7/1/2017	2/15/2017
tblConstructionPhase	PhaseStartDate	2/11/2017	9/5/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	9/6/2016
tblConstructionPhase	PhaseStartDate	1/14/2017	9/12/2016

tblConstructionPhase	PhaseStartDate	12/14/2016	9/21/2016
tblConstructionPhase	PhaseStartDate	1/28/2017	10/6/2016
tblConstructionPhase	PhaseStartDate	2/15/2017	10/24/2016
tblConstructionPhase	PhaseStartDate	3/4/2017	12/6/2016
tblConstructionPhase	PhaseStartDate	10/7/2017	1/11/2016
tblConstructionPhase	PhaseStartDate	2/20/2016	2/22/2016
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tblConstructionPhase	PhaseStartDate	12/30/2016	8/29/2016
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tblConstructionPhase	PhaseStartDate	1/23/2016	1/25/2016
tblConstructionPhase	PhaseStartDate	7/19/2017	7/31/2017
tblConstructionPhase	PhaseStartDate	1/9/2016	12/7/2015
tblGrading	AcresOfGrading	0.00	1.27
tblGrading	AcresOfGrading	0.00	240.00
tblGrading	MaterialExported	0.00	15,200.00
tblGrading	MaterialImported	0.00	200.00
tblLandUse	LandUseSquareFeet	87,200.00	70,136.00
tblLandUse	LandUseSquareFeet	196,000.00	269,639.00
tblLandUse	LotAcreage	1.96	0.00
tblLandUse	LotAcreage	5.16	1.26
tblLandUse	LotAcreage	0.72	0.00
tblOffRoadEquipment	HorsePower	162.00	300.00
tblOffRoadEquipment	HorsePower	400.00	450.00
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tblOffRoadEquipment	HorsePower	84.00	100.00
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tblOffRoadEquipment	HorsePower	199.00	300.00
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tblOffRoadEquipment	HorsePower	62.00	100.00
tblOffRoadEquipment	HorsePower	62.00	100.00
tblOffRoadEquipment	HorsePower	62.00	100.00
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tblOffRoadEquipment	HorsePower	62.00	100.00
tblOffRoadEquipment	LoadFactor	0.38	0.41
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tblOffRoadEquipment	LoadFactor	0.74	0.40
tblOffRoadEquipment	LoadFactor	0.38	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.37
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tblOffRoadEquipment	LoadFactor	0.31	0.48
tblOffRoadEquipment	LoadFactor	0.31	0.48
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tblOffRoadEquipment	LoadFactor	0.31	0.48
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
		·	

	•	-	
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	HaulingTripNumber	74.00	334.00
tblTripsAndVMT	HaulingTripNumber	74.00	334.00
tblTripsAndVMT	HaulingTripNumber	1,925.00	1,356.00
tblTripsAndVMT	WorkerTripNumber	10.00	30.00
tblTripsAndVMT	WorkerTripNumber	10.00	30.00
tblTripsAndVMT	WorkerTripNumber	181.00	200.00
tblTripsAndVMT	WorkerTripNumber	181.00	200.00
tblTripsAndVMT	WorkerTripNumber	181.00	200.00
tblTripsAndVMT	WorkerTripNumber	181.00	200.00
tblTripsAndVMT	WorkerTripNumber	181.00	200.00
tblTripsAndVMT	WorkerTripNumber	181.00	200.00
tblTripsAndVMT	WorkerTripNumber	36.00	200.00
tblTripsAndVMT	WorkerTripNumber	36.00	200.00
	•		

tblTripsAndVMT	WorkerTripNumber	36.00	200.00
tblTripsAndVMT	WorkerTripNumber	36.00	200.00
tblTripsAndVMT	WorkerTripNumber	36.00	200.00
tblTripsAndVMT	WorkerTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	181.00	120.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00
tblTripsAndVMT	WorkerTripNumber	181.00	200.00
tblTripsAndVMT	WorkerTripNumber	181.00	200.00
tblTripsAndVMT	WorkerTripNumber	181.00	200.00
tblTripsAndVMT	WorkerTripNumber	181.00	200.00
tblTripsAndVMT	WorkerTripNumber	36.00	200.00
tblVehicleTrips	ST_TR	7.16	3.81
tblVehicleTrips	ST_TR	49.97	24.34
tblVehicleTrips	SU_TR	6.07	3.81
tblVehicleTrips	SU_TR	25.24	24.34
tblVehicleTrips	WD_TR	6.59	3.81
tblVehicleTrips	WD_TR	42.94	24.34

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							
2015	0.0543	0.6056	0.3454	8.3000e- 004	0.1532	0.0225	0.1757	0.0198	0.0210	0.0408	0.0000	76.5225	76.5225	0.0154	0.0000	76.8452		
2016	1.6623	4.1327	8.2287	0.0159	1.0428	0.1259	1.1687	0.2589	0.1192	0.3781	0.0000	1,304.652 9	1,304.652 9	0.0869	0.0000	1,306.478 5		
2017	4.6344	2.9618	6.8688	0.0137	0.9053	0.1037	1.0090	0.2214	0.0977	0.3191	0.0000	1,085.171 1	1,085.171 1	0.1230	0.0000	1,087.753 8		
Total	6.3510	7.7001	15.4428	0.0304	2.1012	0.2521	2.3533	0.5001	0.2379	0.7380	0.0000	2,466.346 5	2,466.346 5	0.2253	0.0000	2,471.077 5		

Mitigated Construction

	ROG	NOx	СО	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							
2015	0.0543	0.6056	0.3454	8.3000e- 004	0.1532	0.0225	0.1757	0.0198	0.0210	0.0408	0.0000	76.5225	76.5225	0.0154	0.0000	76.8452		
2016	1.6623	4.1327	8.2287	0.0159	1.0428	0.1259	1.1687	0.2589	0.1192	0.3781	0.0000	1,304.652 7	1,304.652 7	0.0869	0.0000	1,306.478 3		
2017	4.6344	2.9618	6.8688	0.0137	0.9053	0.1037	1.0090	0.2214	0.0977	0.3191	0.0000	1,085.170 7	1,085.170 7	0.1230	0.0000	1,087.753 4		
Total	6.3510	7.7001	15.4428	0.0304	2.1012	0.2521	2.3533	0.5001	0.2379	0.7380	0.0000	2,466.345 8	2,466.345 8	0.2253	0.0000	2,471.076 9		

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Area	1.8902	0.0196	1.6854	2.6000e- 004		0.0397	0.0397		0.0397	0.0397	3.2080	7.5642	10.7723	8.3200e- 003	2.7000e- 004	11.0300	
Energy	0.0102	0.0874	0.0403	5.5000e- 004		7.0300e- 003	7.0300e- 003		7.0300e- 003	7.0300e- 003	0.0000	546.8470	546.8470	0.0221	6.0200e- 003	549.1773	
Mobile	0.8819	2.3332	9.0562	0.0174	1.1263	0.0307	1.1570	0.3027	0.0283	0.3310	0.0000	1,316.618 0	1,316.618 0	0.0494	0.0000	1,317.654 3	
Waste			1 			0.0000	0.0000		0.0000	0.0000	25.0166	0.0000	25.0166	1.4784	0.0000	56.0638	
Water			,			0.0000	0.0000		0.0000	0.0000	4.7916	33.4280	38.2197	0.4937	0.0119	52.2858	
Total	2.7823	2.4401	10.7819	0.0182	1.1263	0.0774	1.2037	0.3027	0.0749	0.3776	33.0163	1,904.457 2	1,937.473 5	2.0519	0.0182	1,986.211 3	

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Area	1.8902	0.0196	1.6854	2.6000e- 004		0.0397	0.0397		0.0397	0.0397	3.2080	7.5642	10.7723	8.3200e- 003	2.7000e- 004	11.0300		
Energy	0.0102	0.0874	0.0403	5.5000e- 004		7.0300e- 003	7.0300e- 003	 	7.0300e- 003	7.0300e- 003	0.0000	546.8470	546.8470	0.0221	6.0200e- 003	549.1773		
Mobile	0.8819	2.3332	9.0562	0.0174	1.1263	0.0307	1.1570	0.3027	0.0283	0.3310	0.0000	1,316.618 0	1,316.618 0	0.0494	0.0000	1,317.654 3		
Waste		 	 			0.0000	0.0000	 	0.0000	0.0000	25.0166	0.0000	25.0166	1.4784	0.0000	56.0638		
Water				 		0.0000	0.0000		0.0000	0.0000	4.7916	33.4280	38.2197	0.4936	0.0119	52.2782		
Total	2.7823	2.4401	10.7819	0.0182	1.1263	0.0774	1.2037	0.3027	0.0749	0.3776	33.0163	1,904.457 2	1,937.473 5	2.0518	0.0182	1,986.203 6		

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/7/2015	1/8/2016	5	25	
2	All Phases	Site Preparation	12/7/2015	10/6/2017	5	480	
3	Concrete	Building Construction	1/11/2016	1/22/2016	5	10	
4	Excavation	Grading	1/25/2016	2/19/2016	5	20	
5	Framing	Building Construction	2/22/2016	12/16/2016	5	215	
6	L2 Interior	Building Construction	8/22/2016	12/29/2016	5	94	
7	B1 Interior	Building Construction	8/29/2016	11/29/2016	5	67	
8	L1 Retail Interior	Building Construction	9/5/2016	2/10/2017	5	115	
9	L1 Exterior Finishes	Architectural Coating	9/5/2016	9/30/2016	5	20	
10	L3 Interior	Building Construction	9/6/2016	1/13/2017	5	94	
11	L1 Parking Interior	Building Construction	9/12/2016	12/13/2016	5	67	
12	L4 Interior	Building Construction	9/21/2016	1/27/2017	5	93	
13	L5 Interior	Building Construction	10/6/2016	2/14/2017	5	94	
14	L6 Interior	Building Construction	10/24/2016	3/3/2017	5	95	
15	Exterior Finishes	Building Construction	12/6/2016	6/30/2017	5	149	
16	L2 Exterior Finishes	Architectural Coating	12/14/2016	5/19/2017	5	113	
17	L3 Exterior Finishes	Architectural Coating	1/2/2017	6/2/2017	5	110	
18	L4 Exterior Finishes	Architectural Coating	1/12/2017	6/16/2017	5	112	
19	L5 Exterior Finishes	Architectural Coating	1/31/2017	6/30/2017	5	109	
20	L6 Exterior Finishes	Architectural Coating	2/15/2017	7/18/2017	5	110	
21	Site	Paving	7/31/2017	10/6/2017	5	50	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 91,000; Residential Outdoor: 30,300; Non-Residential Indoor: 152,454; Non-Residential Outdoor: 50,818 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	1	8.00	300	0.41
Demolition	Off-Highway Trucks	2	8.00	450	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Rubber Tired Loaders	1	8.00	300	0.37
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37
All Phases	Forklifts	1	4.00	200	0.41
All Phases	Generator Sets	2	6.00	100	0.40
All Phases	Graders	0	8.00	174	0.41
All Phases	Rubber Tired Dozers	0	7.00	255	0.40
All Phases	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Concrete	Cranes	0	6.00	226	0.29
Concrete	Forklifts	0	6.00	89	0.20
Concrete	Generator Sets	0	8.00	84	0.74
Concrete	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Concrete	Welders	0	8.00	46	0.45
Excavation	Excavators	1	8.00	300	0.41
Excavation	Graders	0	0.00	174	0.41
Excavation	Off-Highway Trucks	2	8.00	450	0.37
Excavation	Rubber Tired Dozers	0	6.00	255	0.40
Excavation	Rubber Tired Loaders	1	8.00	300	0.40
Excavation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Framing	Cranes	0	6.00	226	0.29
Framing	Forklifts	0	6.00	89	0.20

Framing	Generator Sets	0	8.00	84	0.74
Framing	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Framing	Welders	0	8.00	46	0.45
L2 Interior	Cranes	0	6.00	226	0.29
L2 Interior	Forklifts	0	6.00	89	0.20
L2 Interior	Generator Sets	0	8.00	84	0.74
L2 Interior	Tractors/Loaders/Backhoes	0	6.00	97	0.37
L2 Interior	Welders	0	8.00	46	0.45
B1 Interior	Cranes	0	6.00	226	0.29
B1 Interior	Forklifts	0	6.00	89	0.20
B1 Interior	Generator Sets	0	8.00	84	0.74
B1 Interior	Tractors/Loaders/Backhoes	0	6.00	97	0.37
B1 Interior	Welders	0	8.00	46	0.45
L1 Retail Interior	Cranes	0	6.00	226	0.29
L1 Retail Interior	Forklifts	0	6.00	89	0.20
L1 Retail Interior	Generator Sets	0	8.00	84	0.74
L1 Retail Interior	Tractors/Loaders/Backhoes	0	6.00	97	0.37
L1 Retail Interior	Welders	0	8.00	46	0.45
L1 Exterior Finishes	Aerial Lifts	2	8.00	100	0.48
L1 Exterior Finishes	Air Compressors	0	6.00	78	0.48
L3 Interior	Cranes	0	6.00	226	0.29
L3 Interior	Forklifts	0	6.00	89	0.20
L3 Interior	Generator Sets	0	8.00	84	0.74
L3 Interior	Tractors/Loaders/Backhoes	0	6.00	97	0.37
L3 Interior	Welders	0	8.00	46	0.45
L1 Parking Interior		0			
L1 Parking Interior	Cranes	0	6.00	226	0.29
L1 Parking Interior	Forklifts	0	6.00	89	0.20

1.4 5 11 1 1 1					
L1 Parking Interior	Generator Sets	0	8.00	84	
L1 Parking Interior	Tractors/Loaders/Backhoes	0	6.00	97	0.37
L1 Parking Interior	Welders	0	8.00	46	0.45
L4 Interior	Cranes	0	6.00	226	0.29
L4 Interior	Forklifts	0	6.00	89	0.20
L4 Interior	Generator Sets	0	8.00	84	0.74
L4 Interior	Tractors/Loaders/Backhoes	0	6.00	97	0.37
L4 Interior	Welders	0	8.00	46	0.45
L5 Interior	Cranes	0	6.00	226	0.29
L5 Interior	Forklifts	0	6.00	89	0.20
L5 Interior	Generator Sets	0	8.00	84	0.74
L5 Interior	Tractors/Loaders/Backhoes	0	6.00	97	0.37
L5 Interior	Welders	0	8.00	46	0.45
L6 Interior	Cranes	0	6.00	226	0.29
L6 Interior	Forklifts	0	6.00	89	0.20
L6 Interior	Generator Sets	0	8.00	84	0.74
L6 Interior	Tractors/Loaders/Backhoes	0	6.00	97	0.37
L6 Interior	Welders	0	8.00	46	0.45
Exterior Finishes	Aerial Lifts	2	8.00	100	0.29
Exterior Finishes	Cranes	0	6.00	226	0.29
Exterior Finishes	Forklifts	0	6.00	89	0.20
Exterior Finishes	Generator Sets	0	8.00	84	0.74
Exterior Finishes	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Exterior Finishes	Welders	0	8.00	46	0.45
L2 Exterior Finishes	Aerial Lifts	2	8.00	100	0.48
L2 Exterior Finishes	Air Compressors	0	6.00	78	0.48
L3 Exterior Finishes	Aerial Lifts	2	8.00	100	0.48
L3 Exterior Finishes	Air Compressors	0	6.00	78	0.48

L4 Exterior Finishes	Aerial Lifts	2	8.00	100	0.48
L4 Exterior Finishes	Air Compressors	0	6.00	78	0.48
L5 Exterior Finishes	Aerial Lifts	2	8.00	100	0.48
L5 Exterior Finishes	Air Compressors	0	6.00	78	0.48
L6 Exterior Finishes	Aerial Lifts	2	8.00	100	0.48
L6 Exterior Finishes	Air Compressors	0	6.00	78	0.48
Site	Cement and Mortar Mixers	0	6.00	9	0.56
Site	Pavers	0	6.00	125	0.42
Site	Paving Equipment	0	8.00	130	0.36
Site	Rollers	0	7.00	80	0.38
Site	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	30.00	0.00	334.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	30.00	0.00	334.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
All Phases	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Concrete	0	120.00	38.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	4	20.00	0.00	1,356.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Framing	0	200.00	38.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L2 Interior	0	200.00	38.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
B1 Interior	0	200.00	38.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L1 Retail Interior	0	200.00	38.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L1 Exterior Finishes	2	200.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L3 Interior	0	200.00	38.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L1 Parking Interior	0	200.00	38.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L4 Interior	0	200.00	38.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L5 Interior	0	200.00	38.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L6 Interior	0	200.00	38.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Exterior Finishes	2	200.00	38.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L2 Exterior Finishes	2	200.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L3 Exterior Finishes	2	200.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L4 Exterior Finishes	2	200.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L5 Exterior Finishes	2	200.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
L6 Exterior Finishes	2	200.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site	0	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Fugitive Dust					6.0500e- 003	0.0000	6.0500e- 003	9.2000e- 004	0.0000	9.2000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0345	0.4191	0.1872	4.7000e- 004	 	0.0156	0.0156		0.0143	0.0143	0.0000	44.8915	44.8915	0.0134	0.0000	45.1730
Total	0.0345	0.4191	0.1872	4.7000e- 004	6.0500e- 003	0.0156	0.0216	9.2000e- 004	0.0143	0.0153	0.0000	44.8915	44.8915	0.0134	0.0000	45.1730

	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					ton	s/yr							MT	/уг		
Hauling	6.5200e- 003	0.0885	0.0674	1.9000e- 004	9.5200e- 003	1.3300e- 003	0.0109	2.4600e- 003	1.2200e- 003	3.6800e- 003	0.0000	17.7292	17.7292	1.5000e- 004	0.0000	17.7324
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4500e- 003	3.6100e- 003	0.0349	6.0000e- 005	9.6400e- 003	5.0000e- 005	9.6900e- 003	2.4700e- 003	4.0000e- 005	2.5200e- 003	0.0000	4.8735	4.8735	2.9000e- 004	0.0000	4.8797
Total	8.9700e- 003	0.0921	0.1024	2.5000e- 004	0.0192	1.3800e- 003	0.0205	4.9300e- 003	1.2600e- 003	6.2000e- 003	0.0000	22.6027	22.6027	4.4000e- 004	0.0000	22.6120

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					ton	s/yr							MT	⁻ /yr		
Fugitive Dust	11 11				6.0500e- 003	0.0000	6.0500e- 003	9.2000e- 004	0.0000	9.2000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0345	0.4191	0.1872	4.7000e- 004		0.0156	0.0156		0.0143	0.0143	0.0000	44.8915	44.8915	0.0134	0.0000	45.1729
Total	0.0345	0.4191	0.1872	4.7000e- 004	6.0500e- 003	0.0156	0.0216	9.2000e- 004	0.0143	0.0153	0.0000	44.8915	44.8915	0.0134	0.0000	45.1729

	ROG	NOx	СО	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					ton	s/yr				MT	/уг					
Hauling	6.5200e- 003	0.0885	0.0674	1.9000e- 004	9.5200e- 003	1.3300e- 003	0.0109	2.4600e- 003	1.2200e- 003	3.6800e- 003	0.0000	17.7292	17.7292	1.5000e- 004	0.0000	17.7324
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4500e- 003	3.6100e- 003	0.0349	6.0000e- 005	9.6400e- 003	5.0000e- 005	9.6900e- 003	2.4700e- 003	4.0000e- 005	2.5200e- 003	0.0000	4.8735	4.8735	2.9000e- 004	0.0000	4.8797
Total	8.9700e- 003	0.0921	0.1024	2.5000e- 004	0.0192	1.3800e- 003	0.0205	4.9300e- 003	1.2600e- 003	6.2000e- 003	0.0000	22.6027	22.6027	4.4000e- 004	0.0000	22.6120

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					ton	s/yr							MT	/yr		
Fugitive Dust					1.9100e- 003	0.0000	1.9100e- 003	2.9000e- 004	0.0000	2.9000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0100	0.1187	0.0548	1.5000e- 004		4.3700e- 003	4.3700e- 003		4.0200e- 003	4.0200e- 003	0.0000	14.0135	14.0135	4.2300e- 003	0.0000	14.1023
Total	0.0100	0.1187	0.0548	1.5000e- 004	1.9100e- 003	4.3700e- 003	6.2800e- 003	2.9000e- 004	4.0200e- 003	4.3100e- 003	0.0000	14.0135	14.0135	4.2300e- 003	0.0000	14.1023

	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					ton	s/yr				MT	⁻ /yr					
Hauling	1.7900e- 003	0.0241	0.0197	6.0000e- 005	8.7900e- 003	3.1000e- 004	9.1000e- 003	2.2000e- 003	2.9000e- 004	2.4900e- 003	0.0000	5.5316	5.5316	4.0000e- 005	0.0000	5.5324
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e- 004	1.0200e- 003	9.8300e- 003	2.0000e- 005	3.0500e- 003	1.0000e- 005	3.0600e- 003	7.8000e- 004	1.0000e- 005	7.9000e- 004	0.0000	1.4861	1.4861	8.0000e- 005	0.0000	1.4879
Total	2.4800e- 003	0.0251	0.0295	8.0000e- 005	0.0118	3.2000e- 004	0.0122	2.9800e- 003	3.0000e- 004	3.2800e- 003	0.0000	7.0177	7.0177	1.2000e- 004	0.0000	7.0203

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					ton	s/yr							MT	/yr		
Fugitive Dust					1.9100e- 003	0.0000	1.9100e- 003	2.9000e- 004	0.0000	2.9000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0100	0.1187	0.0548	1.5000e- 004		4.3700e- 003	4.3700e- 003	 	4.0200e- 003	4.0200e- 003	0.0000	14.0135	14.0135	4.2300e- 003	0.0000	14.1022
Total	0.0100	0.1187	0.0548	1.5000e- 004	1.9100e- 003	4.3700e- 003	6.2800e- 003	2.9000e- 004	4.0200e- 003	4.3100e- 003	0.0000	14.0135	14.0135	4.2300e- 003	0.0000	14.1022

	ROG	NOx	СО	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					ton	s/yr							МТ	-/yr		
Hauling	1.7900e- 003	0.0241	0.0197	6.0000e- 005	8.7900e- 003	3.1000e- 004	9.1000e- 003	2.2000e- 003	2.9000e- 004	2.4900e- 003	0.0000	5.5316	5.5316	4.0000e- 005	0.0000	5.5324
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e- 004	1.0200e- 003	9.8300e- 003	2.0000e- 005	3.0500e- 003	1.0000e- 005	3.0600e- 003	7.8000e- 004	1.0000e- 005	7.9000e- 004	0.0000	1.4861	1.4861	8.0000e- 005	0.0000	1.4879
Total	2.4800e- 003	0.0251	0.0295	8.0000e- 005	0.0118	3.2000e- 004	0.0122	2.9800e- 003	3.0000e- 004	3.2800e- 003	0.0000	7.0177	7.0177	1.2000e- 004	0.0000	7.0203

3.3 All Phases - 2015
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					ton	s/yr							MT	/yr		
Fugitive Dust					0.1273	0.0000	0.1273	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.0940	0.0512	9.0000e- 005		5.5300e- 003	5.5300e- 003		5.3700e- 003	5.3700e- 003	0.0000	8.3785	8.3785	1.4800e- 003	0.0000	8.4096
Total	0.0104	0.0940	0.0512	9.0000e- 005	0.1273	5.5300e- 003	0.1328	0.0137	5.3700e- 003	0.0191	0.0000	8.3785	8.3785	1.4800e- 003	0.0000	8.4096

	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					ton	s/yr							MT	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e- 004	4.8000e- 004	4.6600e- 003	1.0000e- 005	6.9000e- 004	1.0000e- 005	7.0000e- 004	1.8000e- 004	1.0000e- 005	1.9000e- 004	0.0000	0.6498	0.6498	4.0000e- 005	0.0000	0.6506
Total	3.3000e- 004	4.8000e- 004	4.6600e- 003	1.0000e- 005	6.9000e- 004	1.0000e- 005	7.0000e- 004	1.8000e- 004	1.0000e- 005	1.9000e- 004	0.0000	0.6498	0.6498	4.0000e- 005	0.0000	0.6506

3.3 All Phases - 2015

<u>Mitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Fugitive Dust	ii ii				0.1273	0.0000	0.1273	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.0940	0.0512	9.0000e- 005		5.5300e- 003	5.5300e- 003	 	5.3700e- 003	5.3700e- 003	0.0000	8.3785	8.3785	1.4800e- 003	0.0000	8.4096
Total	0.0104	0.0940	0.0512	9.0000e- 005	0.1273	5.5300e- 003	0.1328	0.0137	5.3700e- 003	0.0191	0.0000	8.3785	8.3785	1.4800e- 003	0.0000	8.4096

	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					ton	s/yr							MT	⁻ /yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e- 004	4.8000e- 004	4.6600e- 003	1.0000e- 005	6.9000e- 004	1.0000e- 005	7.0000e- 004	1.8000e- 004	1.0000e- 005	1.9000e- 004	0.0000	0.6498	0.6498	4.0000e- 005	0.0000	0.6506
Total	3.3000e- 004	4.8000e- 004	4.6600e- 003	1.0000e- 005	6.9000e- 004	1.0000e- 005	7.0000e- 004	1.8000e- 004	1.0000e- 005	1.9000e- 004	0.0000	0.6498	0.6498	4.0000e- 005	0.0000	0.6506

3.3 All Phases - 2016
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					ton	s/yr							MT	/yr		
Fugitive Dust					0.1273	0.0000	0.1273	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1314	1.2085	0.6892	1.2900e- 003		0.0691	0.0691		0.0670	0.0670	0.0000	114.6434	114.6434	0.0196	0.0000	115.0554
Total	0.1314	1.2085	0.6892	1.2900e- 003	0.1273	0.0691	0.1963	0.0137	0.0670	0.0807	0.0000	114.6434	114.6434	0.0196	0.0000	115.0554

	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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9900e- 003	5.9100e- 003	0.0570	1.1000e- 004	9.4800e- 003	8.0000e- 005	9.5600e- 003	2.5200e- 003	7.0000e- 005	2.5900e- 003	0.0000	8.6196	8.6196	4.9000e- 004	0.0000	8.6299
Total	3.9900e- 003	5.9100e- 003	0.0570	1.1000e- 004	9.4800e- 003	8.0000e- 005	9.5600e- 003	2.5200e- 003	7.0000e- 005	2.5900e- 003	0.0000	8.6196	8.6196	4.9000e- 004	0.0000	8.6299

3.3 All Phases - 2016

<u>Mitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Fugitive Dust					0.1273	0.0000	0.1273	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1314	1.2085	0.6891	1.2900e- 003		0.0691	0.0691		0.0670	0.0670	0.0000	114.6433	114.6433	0.0196	0.0000	115.0553
Total	0.1314	1.2085	0.6891	1.2900e- 003	0.1273	0.0691	0.1963	0.0137	0.0670	0.0807	0.0000	114.6433	114.6433	0.0196	0.0000	115.0553

	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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9900e- 003	5.9100e- 003	0.0570	1.1000e- 004	9.4800e- 003	8.0000e- 005	9.5600e- 003	2.5200e- 003	7.0000e- 005	2.5900e- 003	0.0000	8.6196	8.6196	4.9000e- 004	0.0000	8.6299
Total	3.9900e- 003	5.9100e- 003	0.0570	1.1000e- 004	9.4800e- 003	8.0000e- 005	9.5600e- 003	2.5200e- 003	7.0000e- 005	2.5900e- 003	0.0000	8.6196	8.6196	4.9000e- 004	0.0000	8.6299

3.3 All Phases - 2017
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.1273	0.0000	0.1273	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0909	0.8468	0.5155	9.9000e- 004		0.0472	0.0472		0.0458	0.0458	0.0000	87.3319	87.3319	0.0145	0.0000	87.6355
Total	0.0909	0.8468	0.5155	9.9000e- 004	0.1273	0.0472	0.1745	0.0137	0.0458	0.0595	0.0000	87.3319	87.3319	0.0145	0.0000	87.6355

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	2.7100e- 003	4.0500e- 003	0.0388	9.0000e- 005	7.2600e- 003	6.0000e- 005	7.3200e- 003	1.9300e- 003	5.0000e- 005	1.9900e- 003	0.0000	6.3535	6.3535	3.4000e- 004	0.0000	6.3607
Total	2.7100e- 003	4.0500e- 003	0.0388	9.0000e- 005	7.2600e- 003	6.0000e- 005	7.3200e- 003	1.9300e- 003	5.0000e- 005	1.9900e- 003	0.0000	6.3535	6.3535	3.4000e- 004	0.0000	6.3607

3.3 All Phases - 2017

<u>Mitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Fugitive Dust					0.1273	0.0000	0.1273	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0909	0.8468	0.5155	9.9000e- 004		0.0472	0.0472		0.0458	0.0458	0.0000	87.3318	87.3318	0.0145	0.0000	87.6354
Total	0.0909	0.8468	0.5155	9.9000e- 004	0.1273	0.0472	0.1745	0.0137	0.0458	0.0595	0.0000	87.3318	87.3318	0.0145	0.0000	87.6354

	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					ton	s/yr							МТ	/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	2.7100e- 003	4.0500e- 003	0.0388	9.0000e- 005	7.2600e- 003	6.0000e- 005	7.3200e- 003	1.9300e- 003	5.0000e- 005	1.9900e- 003	0.0000	6.3535	6.3535	3.4000e- 004	0.0000	6.3607
Total	2.7100e- 003	4.0500e- 003	0.0388	9.0000e- 005	7.2600e- 003	6.0000e- 005	7.3200e- 003	1.9300e- 003	5.0000e- 005	1.9900e- 003	0.0000	6.3535	6.3535	3.4000e- 004	0.0000	6.3607

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3.4 Concrete - 2016
Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2800e- 003	0.0192	0.0272	5.0000e- 005	1.2300e- 003	2.9000e- 004	1.5200e- 003	3.5000e- 004	2.7000e- 004	6.2000e- 004	0.0000	4.1406	4.1406	3.0000e- 005	0.0000	4.1413
Worker	2.3000e- 003	3.3900e- 003	0.0328	7.0000e- 005	5.4500e- 003	5.0000e- 005	5.4900e- 003	1.4500e- 003	4.0000e- 005	1.4900e- 003	0.0000	4.9538	4.9538	2.8000e- 004	0.0000	4.9597
Total	4.5800e- 003	0.0226	0.0600	1.2000e- 004	6.6800e- 003	3.4000e- 004	7.0100e- 003	1.8000e- 003	3.1000e- 004	2.1100e- 003	0.0000	9.0944	9.0944	3.1000e- 004	0.0000	9.1010

3.4 Concrete - 2016

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
- Oil Roda	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2800e- 003	0.0192	0.0272	5.0000e- 005	1.2300e- 003	2.9000e- 004	1.5200e- 003	3.5000e- 004	2.7000e- 004	6.2000e- 004	0.0000	4.1406	4.1406	3.0000e- 005	0.0000	4.1413
Worker	2.3000e- 003	3.3900e- 003	0.0328	7.0000e- 005	5.4500e- 003	5.0000e- 005	5.4900e- 003	1.4500e- 003	4.0000e- 005	1.4900e- 003	0.0000	4.9538	4.9538	2.8000e- 004	0.0000	4.9597
Total	4.5800e- 003	0.0226	0.0600	1.2000e- 004	6.6800e- 003	3.4000e- 004	7.0100e- 003	1.8000e- 003	3.1000e- 004	2.1100e- 003	0.0000	9.0944	9.0944	3.1000e- 004	0.0000	9.1010

3.5 Excavation - 2016
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					ton	s/yr							MT	/yr		
Fugitive Dust					1.5400e- 003	0.0000	1.5400e- 003	2.0000e- 004	0.0000	2.0000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0335	0.3967	0.1831	5.0000e- 004		0.0146	0.0146		0.0134	0.0134	0.0000	46.6981	46.6981	0.0141	0.0000	46.9939
Total	0.0335	0.3967	0.1831	5.0000e- 004	1.5400e- 003	0.0146	0.0162	2.0000e- 004	0.0134	0.0136	0.0000	46.6981	46.6981	0.0141	0.0000	46.9939

	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					ton	s/yr							МТ	-/yr		
Hauling	0.0151	0.2034	0.1663	5.1000e- 004	0.0114	2.6600e- 003	0.0141	3.1400e- 003	2.4500e- 003	5.5900e- 003	0.0000	46.7863	46.7863	3.5000e- 004	0.0000	46.7936
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e- 004	1.1300e- 003	0.0109	2.0000e- 005	1.8200e- 003	2.0000e- 005	1.8300e- 003	4.8000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.6513	1.6513	9.0000e- 005	0.0000	1.6532
Total	0.0159	0.2046	0.1772	5.3000e- 004	0.0133	2.6800e- 003	0.0159	3.6200e- 003	2.4600e- 003	6.0900e- 003	0.0000	48.4376	48.4376	4.4000e- 004	0.0000	48.4468

3.5 Excavation - 2016

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Fugitive Dust					1.5400e- 003	0.0000	1.5400e- 003	2.0000e- 004	0.0000	2.0000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0335	0.3967	0.1831	5.0000e- 004		0.0146	0.0146		0.0134	0.0134	0.0000	46.6980	46.6980	0.0141	0.0000	46.9938
Total	0.0335	0.3967	0.1831	5.0000e- 004	1.5400e- 003	0.0146	0.0162	2.0000e- 004	0.0134	0.0136	0.0000	46.6980	46.6980	0.0141	0.0000	46.9938

	ROG	NOx	СО	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					ton	s/yr							МТ	√yr		
Hauling	0.0151	0.2034	0.1663	5.1000e- 004	0.0114	2.6600e- 003	0.0141	3.1400e- 003	2.4500e- 003	5.5900e- 003	0.0000	46.7863	46.7863	3.5000e- 004	0.0000	46.7936
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e- 004	1.1300e- 003	0.0109	2.0000e- 005	1.8200e- 003	2.0000e- 005	1.8300e- 003	4.8000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.6513	1.6513	9.0000e- 005	0.0000	1.6532
Total	0.0159	0.2046	0.1772	5.3000e- 004	0.0133	2.6800e- 003	0.0159	3.6200e- 003	2.4600e- 003	6.0900e- 003	0.0000	48.4376	48.4376	4.4000e- 004	0.0000	48.4468

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3.6 Framing - 2016
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					ton	s/yr							MT	/yr		
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	is/yr							МТ	/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	0.0489	0.4131	0.5850	9.8000e- 004	0.0264	6.2200e- 003	0.0326	7.5900e- 003	5.7200e- 003	0.0133	0.0000	89.0225	89.0225	7.2000e- 004	0.0000	89.0376
Worker	0.0823	0.1217	1.1743	2.3300e- 003	0.1952	1.6700e- 003	0.1968	0.0519	1.5300e- 003	0.0534	0.0000	177.5117	177.5117	0.0101	0.0000	177.7228
Total	0.1312	0.5347	1.7593	3.3100e- 003	0.2216	7.8900e- 003	0.2294	0.0595	7.2500e- 003	0.0667	0.0000	266.5343	266.5343	0.0108	0.0000	266.7604

3.6 Framing - 2016

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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					ton	s/yr							МТ	/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	0.0489	0.4131	0.5850	9.8000e- 004	0.0264	6.2200e- 003	0.0326	7.5900e- 003	5.7200e- 003	0.0133	0.0000	89.0225	89.0225	7.2000e- 004	0.0000	89.0376
Worker	0.0823	0.1217	1.1743	2.3300e- 003	0.1952	1.6700e- 003	0.1968	0.0519	1.5300e- 003	0.0534	0.0000	177.5117	177.5117	0.0101	0.0000	177.7228
Total	0.1312	0.5347	1.7593	3.3100e- 003	0.2216	7.8900e- 003	0.2294	0.0595	7.2500e- 003	0.0667	0.0000	266.5343	266.5343	0.0108	0.0000	266.7604

3.7 L2 Interior - 2016
Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	-/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	0.0214	0.1806	0.2558	4.3000e- 004	0.0116	2.7200e- 003	0.0143	3.3200e- 003	2.5000e- 003	5.8200e- 003	0.0000	38.9215	38.9215	3.1000e- 004	0.0000	38.9281
Worker	0.0360	0.0532	0.5134	1.0200e- 003	0.0853	7.3000e- 004	0.0861	0.0227	6.7000e- 004	0.0234	0.0000	77.6098	77.6098	4.3900e- 003	0.0000	77.7021
Total	0.0574	0.2338	0.7692	1.4500e- 003	0.0969	3.4500e- 003	0.1003	0.0260	3.1700e- 003	0.0292	0.0000	116.5313	116.5313	4.7000e- 003	0.0000	116.6301

3.7 L2 Interior - 2016

	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					ton	s/yr							MT	/yr		
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	-/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	0.0214	0.1806	0.2558	4.3000e- 004	0.0116	2.7200e- 003	0.0143	3.3200e- 003	2.5000e- 003	5.8200e- 003	0.0000	38.9215	38.9215	3.1000e- 004	0.0000	38.9281
Worker	0.0360	0.0532	0.5134	1.0200e- 003	0.0853	7.3000e- 004	0.0861	0.0227	6.7000e- 004	0.0234	0.0000	77.6098	77.6098	4.3900e- 003	0.0000	77.7021
Total	0.0574	0.2338	0.7692	1.4500e- 003	0.0969	3.4500e- 003	0.1003	0.0260	3.1700e- 003	0.0292	0.0000	116.5313	116.5313	4.7000e- 003	0.0000	116.6301

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3.8 B1 Interior - 2016
Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	0.0153	0.1287	0.1823	3.1000e- 004	8.2300e- 003	1.9400e- 003	0.0102	2.3600e- 003	1.7800e- 003	4.1500e- 003	0.0000	27.7419	27.7419	2.2000e- 004	0.0000	27.7466
Worker	0.0256	0.0379	0.3660	7.3000e- 004	0.0608	5.2000e- 004	0.0613	0.0162	4.8000e- 004	0.0167	0.0000	55.3176	55.3176	3.1300e- 003	0.0000	55.3834
Total	0.0409	0.1666	0.5482	1.0400e- 003	0.0690	2.4600e- 003	0.0715	0.0185	2.2600e- 003	0.0208	0.0000	83.0595	83.0595	3.3500e- 003	0.0000	83.1300

3.8 B1 Interior - 2016

<u>Mitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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					ton	s/yr							MT	/уг		
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	0.0153	0.1287	0.1823	3.1000e- 004	8.2300e- 003	1.9400e- 003	0.0102	2.3600e- 003	1.7800e- 003	4.1500e- 003	0.0000	27.7419	27.7419	2.2000e- 004	0.0000	27.7466
Worker	0.0256	0.0379	0.3660	7.3000e- 004	0.0608	5.2000e- 004	0.0613	0.0162	4.8000e- 004	0.0167	0.0000	55.3176	55.3176	3.1300e- 003	0.0000	55.3834
Total	0.0409	0.1666	0.5482	1.0400e- 003	0.0690	2.4600e- 003	0.0715	0.0185	2.2600e- 003	0.0208	0.0000	83.0595	83.0595	3.3500e- 003	0.0000	83.1300

3.9 L1 Retail Interior - 2016

<u>Unmitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	is/yr							МТ	/уг		
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	0.0194	0.1633	0.2313	3.9000e- 004	0.0104	2.4600e- 003	0.0129	3.0000e- 003	2.2600e- 003	5.2600e- 003	0.0000	35.1950	35.1950	2.8000e- 004	0.0000	35.2009
Worker	0.0325	0.0481	0.4643	9.2000e- 004	0.0772	6.6000e- 004	0.0778	0.0205	6.0000e- 004	0.0211	0.0000	70.1791	70.1791	3.9700e- 003	0.0000	70.2625
Total	0.0519	0.2114	0.6955	1.3100e- 003	0.0876	3.1200e- 003	0.0907	0.0235	2.8600e- 003	0.0264	0.0000	105.3740	105.3740	4.2500e- 003	0.0000	105.4634

3.9 L1 Retail Interior - 2016

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/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	0.0194	0.1633	0.2313	3.9000e- 004	0.0104	2.4600e- 003	0.0129	3.0000e- 003	2.2600e- 003	5.2600e- 003	0.0000	35.1950	35.1950	2.8000e- 004	0.0000	35.2009
Worker	0.0325	0.0481	0.4643	9.2000e- 004	0.0772	6.6000e- 004	0.0778	0.0205	6.0000e- 004	0.0211	0.0000	70.1791	70.1791	3.9700e- 003	0.0000	70.2625
Total	0.0519	0.2114	0.6955	1.3100e- 003	0.0876	3.1200e- 003	0.0907	0.0235	2.8600e- 003	0.0264	0.0000	105.3740	105.3740	4.2500e- 003	0.0000	105.4634

3.9 L1 Retail Interior - 2017
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
- Oil Mode	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	6.4100e- 003	0.0516	0.0783	1.4000e- 004	3.6900e- 003	7.5000e- 004	4.4400e- 003	1.0600e- 003	6.9000e- 004	1.7500e- 003	0.0000	12.2131	12.2131	1.0000e- 004	0.0000	12.2151
Worker	0.0102	0.0152	0.1457	3.2000e- 004	0.0272	2.2000e- 004	0.0275	7.2400e- 003	2.0000e- 004	7.4500e- 003	0.0000	23.8256	23.8256	1.2800e- 003	0.0000	23.8525
Total	0.0166	0.0668	0.2240	4.6000e- 004	0.0309	9.7000e- 004	0.0319	8.3000e- 003	8.9000e- 004	9.2000e- 003	0.0000	36.0387	36.0387	1.3800e- 003	0.0000	36.0675

3.9 L1 Retail Interior - 2017

<u>Mitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
- Cil rioda	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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												/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	6.4100e- 003	0.0516	0.0783	1.4000e- 004	3.6900e- 003	7.5000e- 004	4.4400e- 003	1.0600e- 003	6.9000e- 004	1.7500e- 003	0.0000	12.2131	12.2131	1.0000e- 004	0.0000	12.2151
Worker	0.0102	0.0152	0.1457	3.2000e- 004	0.0272	2.2000e- 004	0.0275	7.2400e- 003	2.0000e- 004	7.4500e- 003	0.0000	23.8256	23.8256	1.2800e- 003	0.0000	23.8525
Total	0.0166	0.0668	0.2240	4.6000e- 004	0.0309	9.7000e- 004	0.0319	8.3000e- 003	8.9000e- 004	9.2000e- 003	0.0000	36.0387	36.0387	1.3800e- 003	0.0000	36.0675

3.10 L1 Exterior Finishes - 2016 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Archit. Coating	0.8462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8000e- 003	0.0461	0.0542	8.0000e- 005	 	1.8900e- 003	1.8900e- 003		1.7400e- 003	1.7400e- 003	0.0000	7.7754	7.7754	2.3500e- 003	0.0000	7.8247
Total	0.8490	0.0461	0.0542	8.0000e- 005		1.8900e- 003	1.8900e- 003		1.7400e- 003	1.7400e- 003	0.0000	7.7754	7.7754	2.3500e- 003	0.0000	7.8247

	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					ton	s/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
	7.6500e- 003	0.0113	0.1092	2.2000e- 004	0.0182	1.6000e- 004	0.0183	4.8300e- 003	1.4000e- 004	4.9700e- 003	0.0000	16.5127	16.5127	9.3000e- 004	0.0000	16.5324
Total	7.6500e- 003	0.0113	0.1092	2.2000e- 004	0.0182	1.6000e- 004	0.0183	4.8300e- 003	1.4000e- 004	4.9700e- 003	0.0000	16.5127	16.5127	9.3000e- 004	0.0000	16.5324

3.10 L1 Exterior Finishes - 2016 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					ton	s/yr							MT	/yr		
Archit. Coating	0.8462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8000e- 003	0.0461	0.0542	8.0000e- 005		1.8900e- 003	1.8900e- 003		1.7400e- 003	1.7400e- 003	0.0000	7.7754	7.7754	2.3500e- 003	0.0000	7.8247
Total	0.8490	0.0461	0.0542	8.0000e- 005		1.8900e- 003	1.8900e- 003		1.7400e- 003	1.7400e- 003	0.0000	7.7754	7.7754	2.3500e- 003	0.0000	7.8247

	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					ton	s/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	7.6500e- 003	0.0113	0.1092	2.2000e- 004	0.0182	1.6000e- 004	0.0183	4.8300e- 003	1.4000e- 004	4.9700e- 003	0.0000	16.5127	16.5127	9.3000e- 004	0.0000	16.5324
Total	7.6500e- 003	0.0113	0.1092	2.2000e- 004	0.0182	1.6000e- 004	0.0183	4.8300e- 003	1.4000e- 004	4.9700e- 003	0.0000	16.5127	16.5127	9.3000e- 004	0.0000	16.5324

3.11 L3 Interior - 2016

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					ton	s/yr							MT	/yr		
0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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					ton	s/yr							МТ	/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	0.0191	0.1614	0.2286	3.8000e- 004	0.0103	2.4300e- 003	0.0128	2.9600e- 003	2.2300e- 003	5.2000e- 003	0.0000	34.7809	34.7809	2.8000e- 004	0.0000	34.7868
Worker	0.0321	0.0475	0.4588	9.1000e- 004	0.0762	6.5000e- 004	0.0769	0.0203	6.0000e- 004	0.0209	0.0000	69.3534	69.3534	3.9300e- 003	0.0000	69.4359
Total	0.0513	0.2089	0.6874	1.2900e- 003	0.0866	3.0800e- 003	0.0897	0.0232	2.8300e- 003	0.0261	0.0000	104.1343	104.1343	4.2100e- 003	0.0000	104.2227

3.11 L3 Interior - 2016

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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e				
Category		tons/yr											MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				
Vendor	0.0191	0.1614	0.2286	3.8000e- 004	0.0103	2.4300e- 003	0.0128	2.9600e- 003	2.2300e- 003	5.2000e- 003	0.0000	34.7809	34.7809	2.8000e- 004	0.0000	34.7868				
Worker	0.0321	0.0475	0.4588	9.1000e- 004	0.0762	6.5000e- 004	0.0769	0.0203	6.0000e- 004	0.0209	0.0000	69.3534	69.3534	3.9300e- 003	0.0000	69.4359				
Total	0.0513	0.2089	0.6874	1.2900e- 003	0.0866	3.0800e- 003	0.0897	0.0232	2.8300e- 003	0.0261	0.0000	104.1343	104.1343	4.2100e- 003	0.0000	104.2227				

3.11 L3 Interior - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e				
Category		tons/yr											MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				
Vendor	2.1400e- 003	0.0172	0.0261	5.0000e- 005	1.2300e- 003	2.5000e- 004	1.4800e- 003	3.5000e- 004	2.3000e- 004	5.8000e- 004	0.0000	4.0710	4.0710	3.0000e- 005	0.0000	4.0717				
Worker	3.3900e- 003	5.0600e- 003	0.0486	1.1000e- 004	9.0800e- 003	7.0000e- 005	9.1500e- 003	2.4100e- 003	7.0000e- 005	2.4800e- 003	0.0000	7.9419	7.9419	4.3000e- 004	0.0000	7.9508				
Total	5.5300e- 003	0.0223	0.0747	1.6000e- 004	0.0103	3.2000e- 004	0.0106	2.7600e- 003	3.0000e- 004	3.0600e- 003	0.0000	12.0129	12.0129	4.6000e- 004	0.0000	12.0225				

3.11 L3 Interior - 2017

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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			
1	2.1400e- 003	0.0172	0.0261	5.0000e- 005	1.2300e- 003	2.5000e- 004	1.4800e- 003	3.5000e- 004	2.3000e- 004	5.8000e- 004	0.0000	4.0710	4.0710	3.0000e- 005	0.0000	4.0717			
	3.3900e- 003	5.0600e- 003	0.0486	1.1000e- 004	9.0800e- 003	7.0000e- 005	9.1500e- 003	2.4100e- 003	7.0000e- 005	2.4800e- 003	0.0000	7.9419	7.9419	4.3000e- 004	0.0000	7.9508			
Total	5.5300e- 003	0.0223	0.0747	1.6000e- 004	0.0103	3.2000e- 004	0.0106	2.7600e- 003	3.0000e- 004	3.0600e- 003	0.0000	12.0129	12.0129	4.6000e- 004	0.0000	12.0225			

3.12 L1 Parking Interior - 2016

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
- Oil Mode	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	0.0153	0.1287	0.1823	3.1000e- 004	8.2300e- 003	1.9400e- 003	0.0102	2.3600e- 003	1.7800e- 003	4.1500e- 003	0.0000	27.7419	27.7419	2.2000e- 004	0.0000	27.7466
Worker	0.0256	0.0379	0.3660	7.3000e- 004	0.0608	5.2000e- 004	0.0613	0.0162	4.8000e- 004	0.0167	0.0000	55.3176	55.3176	3.1300e- 003	0.0000	55.3834
Total	0.0409	0.1666	0.5482	1.0400e- 003	0.0690	2.4600e- 003	0.0715	0.0185	2.2600e- 003	0.0208	0.0000	83.0595	83.0595	3.3500e- 003	0.0000	83.1300

3.12 L1 Parking Interior - 2016

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					ton	s/yr							MT	/yr		
- Cil rioda	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/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	0.0153	0.1287	0.1823	3.1000e- 004	8.2300e- 003	1.9400e- 003	0.0102	2.3600e- 003	1.7800e- 003	4.1500e- 003	0.0000	27.7419	27.7419	2.2000e- 004	0.0000	27.7466
Worker	0.0256	0.0379	0.3660	7.3000e- 004	0.0608	5.2000e- 004	0.0613	0.0162	4.8000e- 004	0.0167	0.0000	55.3176	55.3176	3.1300e- 003	0.0000	55.3834
Total	0.0409	0.1666	0.5482	1.0400e- 003	0.0690	2.4600e- 003	0.0715	0.0185	2.2600e- 003	0.0208	0.0000	83.0595	83.0595	3.3500e- 003	0.0000	83.1300

3.13 L4 Interior - 2016
Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	0.0166	0.1403	0.1986	3.3000e- 004	8.9700e- 003	2.1100e- 003	0.0111	2.5800e- 003	1.9400e- 003	4.5200e- 003	0.0000	30.2263	30.2263	2.4000e- 004	0.0000	30.2314
Worker	0.0279	0.0413	0.3987	7.9000e- 004	0.0663	5.7000e- 004	0.0668	0.0176	5.2000e- 004	0.0181	0.0000	60.2714	60.2714	3.4100e- 003	0.0000	60.3431
Total	0.0446	0.1816	0.5974	1.1200e- 003	0.0752	2.6800e- 003	0.0779	0.0202	2.4600e- 003	0.0227	0.0000	90.4977	90.4977	3.6500e- 003	0.0000	90.5745

3.13 L4 Interior - 2016

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	0.0166	0.1403	0.1986	3.3000e- 004	8.9700e- 003	2.1100e- 003	0.0111	2.5800e- 003	1.9400e- 003	4.5200e- 003	0.0000	30.2263	30.2263	2.4000e- 004	0.0000	30.2314
Worker	0.0279	0.0413	0.3987	7.9000e- 004	0.0663	5.7000e- 004	0.0668	0.0176	5.2000e- 004	0.0181	0.0000	60.2714	60.2714	3.4100e- 003	0.0000	60.3431
Total	0.0446	0.1816	0.5974	1.1200e- 003	0.0752	2.6800e- 003	0.0779	0.0202	2.4600e- 003	0.0227	0.0000	90.4977	90.4977	3.6500e- 003	0.0000	90.5745

3.13 L4 Interior - 2017

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	4.2700e- 003	0.0344	0.0522	9.0000e- 005	2.4600e- 003	5.0000e- 004	2.9600e- 003	7.1000e- 004	4.6000e- 004	1.1700e- 003	0.0000	8.1420	8.1420	6.0000e- 005	0.0000	8.1434
Worker	6.7700e- 003	0.0101	0.0971	2.2000e- 004	0.0182	1.5000e- 004	0.0183	4.8300e- 003	1.4000e- 004	4.9600e- 003	0.0000	15.8837	15.8837	8.5000e- 004	0.0000	15.9017
Total	0.0110	0.0446	0.1493	3.1000e- 004	0.0206	6.5000e- 004	0.0213	5.5400e- 003	6.0000e- 004	6.1300e- 003	0.0000	24.0258	24.0258	9.1000e- 004	0.0000	24.0450

3.13 L4 Interior - 2017

<u>Mitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	-/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	4.2700e- 003	0.0344	0.0522	9.0000e- 005	2.4600e- 003	5.0000e- 004	2.9600e- 003	7.1000e- 004	4.6000e- 004	1.1700e- 003	0.0000	8.1420	8.1420	6.0000e- 005	0.0000	8.1434
Worker	6.7700e- 003	0.0101	0.0971	2.2000e- 004	0.0182	1.5000e- 004	0.0183	4.8300e- 003	1.4000e- 004	4.9600e- 003	0.0000	15.8837	15.8837	8.5000e- 004	0.0000	15.9017
Total	0.0110	0.0446	0.1493	3.1000e- 004	0.0206	6.5000e- 004	0.0213	5.5400e- 003	6.0000e- 004	6.1300e- 003	0.0000	24.0258	24.0258	9.1000e- 004	0.0000	24.0450

3.14 L5 Interior - 2016
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					ton	s/yr							MT	/yr		
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	0.0141	0.1191	0.1687	2.8000e- 004	7.6200e- 003	1.7900e- 003	9.4100e- 003	2.1900e- 003	1.6500e- 003	3.8400e- 003	0.0000	25.6716	25.6716	2.1000e- 004	0.0000	25.6760
Worker	0.0237	0.0351	0.3386	6.7000e- 004	0.0563	4.8000e- 004	0.0568	0.0150	4.4000e- 004	0.0154	0.0000	51.1894	51.1894	2.9000e- 003	0.0000	51.2503
Total	0.0378	0.1542	0.5073	9.5000e- 004	0.0639	2.2700e- 003	0.0662	0.0172	2.0900e- 003	0.0193	0.0000	76.8610	76.8610	3.1100e- 003	0.0000	76.9263

3.14 L5 Interior - 2016

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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	0.0141	0.1191	0.1687	2.8000e- 004	7.6200e- 003	1.7900e- 003	9.4100e- 003	2.1900e- 003	1.6500e- 003	3.8400e- 003	0.0000	25.6716	25.6716	2.1000e- 004	0.0000	25.6760
Worker	0.0237	0.0351	0.3386	6.7000e- 004	0.0563	4.8000e- 004	0.0568	0.0150	4.4000e- 004	0.0154	0.0000	51.1894	51.1894	2.9000e- 003	0.0000	51.2503
Total	0.0378	0.1542	0.5073	9.5000e- 004	0.0639	2.2700e- 003	0.0662	0.0172	2.0900e- 003	0.0193	0.0000	76.8610	76.8610	3.1100e- 003	0.0000	76.9263

3.14 L5 Interior - 2017

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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					ton	s/yr							МТ	/уг		
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	6.8400e- 003	0.0551	0.0835	1.5000e- 004	3.9300e- 003	8.0000e- 004	4.7300e- 003	1.1300e- 003	7.4000e- 004	1.8700e- 003	0.0000	13.0273	13.0273	1.0000e- 004	0.0000	13.0294
Worker	0.0108	0.0162	0.1554	3.5000e- 004	0.0291	2.4000e- 004	0.0293	7.7300e- 003	2.2000e- 004	7.9400e- 003	0.0000	25.4140	25.4140	1.3700e- 003	0.0000	25.4427
Total	0.0177	0.0713	0.2389	5.0000e- 004	0.0330	1.0400e- 003	0.0340	8.8600e- 003	9.6000e- 004	9.8100e- 003	0.0000	38.4412	38.4412	1.4700e- 003	0.0000	38.4721

3.14 L5 Interior - 2017

<u>Mitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	-/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	6.8400e- 003	0.0551	0.0835	1.5000e- 004	3.9300e- 003	8.0000e- 004	4.7300e- 003	1.1300e- 003	7.4000e- 004	1.8700e- 003	0.0000	13.0273	13.0273	1.0000e- 004	0.0000	13.0294
Worker	0.0108	0.0162	0.1554	3.5000e- 004	0.0291	2.4000e- 004	0.0293	7.7300e- 003	2.2000e- 004	7.9400e- 003	0.0000	25.4140	25.4140	1.3700e- 003	0.0000	25.4427
Total	0.0177	0.0713	0.2389	5.0000e- 004	0.0330	1.0400e- 003	0.0340	8.8600e- 003	9.6000e- 004	9.8100e- 003	0.0000	38.4412	38.4412	1.4700e- 003	0.0000	38.4721

3.15 L6 Interior - 2016

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					ton	s/yr							MT	/yr		
0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr				МТ	/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	0.0114	0.0961	0.1360	2.3000e- 004	6.1400e- 003	1.4500e- 003	7.5900e- 003	1.7600e- 003	1.3300e- 003	3.0900e- 003	0.0000	20.7029	20.7029	1.7000e- 004	0.0000	20.7064
Worker	0.0191	0.0283	0.2731	5.4000e- 004	0.0454	3.9000e- 004	0.0458	0.0121	3.6000e- 004	0.0124	0.0000	41.2818	41.2818	2.3400e- 003	0.0000	41.3309
Total	0.0305	0.1244	0.4091	7.7000e- 004	0.0515	1.8400e- 003	0.0534	0.0138	1.6900e- 003	0.0155	0.0000	61.9847	61.9847	2.5100e- 003	0.0000	62.0373

3.15 L6 Interior - 2016

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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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					ton	s/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	0.0114	0.0961	0.1360	2.3000e- 004	6.1400e- 003	1.4500e- 003	7.5900e- 003	1.7600e- 003	1.3300e- 003	3.0900e- 003	0.0000	20.7029	20.7029	1.7000e- 004	0.0000	20.7064
Worker	0.0191	0.0283	0.2731	5.4000e- 004	0.0454	3.9000e- 004	0.0458	0.0121	3.6000e- 004	0.0124	0.0000	41.2818	41.2818	2.3400e- 003	0.0000	41.3309
Total	0.0305	0.1244	0.4091	7.7000e- 004	0.0515	1.8400e- 003	0.0534	0.0138	1.6900e- 003	0.0155	0.0000	61.9847	61.9847	2.5100e- 003	0.0000	62.0373

3.15 L6 Interior - 2017

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	9.6100e- 003	0.0775	0.1175	2.0000e- 004	5.5300e- 003	1.1300e- 003	6.6500e- 003	1.5900e- 003	1.0400e- 003	2.6200e- 003	0.0000	18.3196	18.3196	1.4000e- 004	0.0000	18.3226
Worker	0.0152	0.0228	0.2185	4.9000e- 004	0.0408	3.3000e- 004	0.0412	0.0109	3.1000e- 004	0.0112	0.0000	35.7384	35.7384	1.9200e- 003	0.0000	35.7787
Total	0.0249	0.1003	0.3360	6.9000e- 004	0.0464	1.4600e- 003	0.0478	0.0125	1.3500e- 003	0.0138	0.0000	54.0580	54.0580	2.0600e- 003	0.0000	54.1013

3.15 L6 Interior - 2017 <u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	9.6100e- 003	0.0775	0.1175	2.0000e- 004	5.5300e- 003	1.1300e- 003	6.6500e- 003	1.5900e- 003	1.0400e- 003	2.6200e- 003	0.0000	18.3196	18.3196	1.4000e- 004	0.0000	18.3226
Worker	0.0152	0.0228	0.2185	4.9000e- 004	0.0408	3.3000e- 004	0.0412	0.0109	3.1000e- 004	0.0112	0.0000	35.7384	35.7384	1.9200e- 003	0.0000	35.7787
Total	0.0249	0.1003	0.3360	6.9000e- 004	0.0464	1.4600e- 003	0.0478	0.0125	1.3500e- 003	0.0138	0.0000	54.0580	54.0580	2.0600e- 003	0.0000	54.1013

3.16 Exterior Finishes - 2016 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					ton	s/yr							MT	/yr		
On Road	1.6100e- 003	0.0265	0.0311	5.0000e- 005		1.0900e- 003	1.0900e- 003	 	1.0000e- 003	1.0000e- 003	0.0000	4.4628	4.4628	1.3500e- 003	0.0000	4.4910
Total	1.6100e- 003	0.0265	0.0311	5.0000e- 005		1.0900e- 003	1.0900e- 003		1.0000e- 003	1.0000e- 003	0.0000	4.4628	4.4628	1.3500e- 003	0.0000	4.4910

	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					ton	s/yr							МТ	/уг		
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	4.3200e- 003	0.0365	0.0517	9.0000e- 005	2.3300e- 003	5.5000e- 004	2.8800e- 003	6.7000e- 004	5.1000e- 004	1.1800e- 003	0.0000	7.8671	7.8671	6.0000e- 005	0.0000	7.8684
Worker	7.2700e- 003	0.0108	0.1038	2.1000e- 004	0.0173	1.5000e- 004	0.0174	4.5900e- 003	1.4000e- 004	4.7200e- 003	0.0000	15.6871	15.6871	8.9000e- 004	0.0000	15.7057
Total	0.0116	0.0473	0.1555	3.0000e- 004	0.0196	7.0000e- 004	0.0203	5.2600e- 003	6.5000e- 004	5.9000e- 003	0.0000	23.5542	23.5542	9.5000e- 004	0.0000	23.5742

3.16 Exterior Finishes - 2016 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					ton	s/yr							МТ	/yr		
1	1.6100e- 003	0.0265	0.0311	5.0000e- 005		1.0900e- 003	1.0900e- 003		1.0000e- 003	1.0000e- 003	0.0000	4.4628	4.4628	1.3500e- 003	0.0000	4.4910
Total	1.6100e- 003	0.0265	0.0311	5.0000e- 005		1.0900e- 003	1.0900e- 003		1.0000e- 003	1.0000e- 003	0.0000	4.4628	4.4628	1.3500e- 003	0.0000	4.4910

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	4.3200e- 003	0.0365	0.0517	9.0000e- 005	2.3300e- 003	5.5000e- 004	2.8800e- 003	6.7000e- 004	5.1000e- 004	1.1800e- 003	0.0000	7.8671	7.8671	6.0000e- 005	0.0000	7.8684
Worker	7.2700e- 003	0.0108	0.1038	2.1000e- 004	0.0173	1.5000e- 004	0.0174	4.5900e- 003	1.4000e- 004	4.7200e- 003	0.0000	15.6871	15.6871	8.9000e- 004	0.0000	15.7057
Total	0.0116	0.0473	0.1555	3.0000e- 004	0.0196	7.0000e- 004	0.0203	5.2600e- 003	6.5000e- 004	5.9000e- 003	0.0000	23.5542	23.5542	9.5000e- 004	0.0000	23.5742

3.16 Exterior Finishes - 2017 <u>Unmitigated Construction On-Site</u>

	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					ton	s/yr							МТ	/yr		
	9.4900e- 003	0.1572	0.2117	3.2000e- 004		5.5500e- 003	5.5500e- 003	 	5.1000e- 003	5.1000e- 003	0.0000	30.0600	30.0600	9.2100e- 003	0.0000	30.2535
Total	9.4900e- 003	0.1572	0.2117	3.2000e- 004		5.5500e- 003	5.5500e- 003		5.1000e- 003	5.1000e- 003	0.0000	30.0600	30.0600	9.2100e- 003	0.0000	30.2535

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	0.0278	0.2238	0.3394	5.9000e- 004	0.0160	3.2500e- 003	0.0192	4.5900e- 003	2.9900e- 003	7.5800e- 003	0.0000	52.9232	52.9232	4.1000e- 004	0.0000	52.9319
Worker	0.0440	0.0658	0.6312	1.4100e- 003	0.1180	9.6000e- 004	0.1190	0.0314	8.8000e- 004	0.0323	0.0000	103.2443	103.2443	5.5500e- 003	0.0000	103.3608
Total	0.0718	0.2896	0.9706	2.0000e- 003	0.1340	4.2100e- 003	0.1382	0.0360	3.8700e- 003	0.0399	0.0000	156.1675	156.1675	5.9600e- 003	0.0000	156.2927

3.16 Exterior Finishes - 2017 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					ton	s/yr							MT	/yr		
	9.4900e- 003	0.1572	0.2117	3.2000e- 004		5.5500e- 003	5.5500e- 003		5.1000e- 003	5.1000e- 003	0.0000	30.0600	30.0600	9.2100e- 003	0.0000	30.2534
Total	9.4900e- 003	0.1572	0.2117	3.2000e- 004		5.5500e- 003	5.5500e- 003		5.1000e- 003	5.1000e- 003	0.0000	30.0600	30.0600	9.2100e- 003	0.0000	30.2534

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	0.0278	0.2238	0.3394	5.9000e- 004	0.0160	3.2500e- 003	0.0192	4.5900e- 003	2.9900e- 003	7.5800e- 003	0.0000	52.9232	52.9232	4.1000e- 004	0.0000	52.9319
Worker	0.0440	0.0658	0.6312	1.4100e- 003	0.1180	9.6000e- 004	0.1190	0.0314	8.8000e- 004	0.0323	0.0000	103.2443	103.2443	5.5500e- 003	0.0000	103.3608
Total	0.0718	0.2896	0.9706	2.0000e- 003	0.1340	4.2100e- 003	0.1382	0.0360	3.8700e- 003	0.0399	0.0000	156.1675	156.1675	5.9600e- 003	0.0000	156.2927

3.17 L2 Exterior Finishes - 2016 <u>Unmitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Archit. Coating	0.0974					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Oil Houd	1.8200e- 003	0.0300	0.0352	5.0000e- 005		1.2300e- 003	1.2300e- 003	 	1.1300e- 003	1.1300e- 003	0.0000	5.0540	5.0540	1.5200e- 003	0.0000	5.0860
Total	0.0992	0.0300	0.0352	5.0000e- 005		1.2300e- 003	1.2300e- 003		1.1300e- 003	1.1300e- 003	0.0000	5.0540	5.0540	1.5200e- 003	0.0000	5.0860

	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					ton	s/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	4.9700e- 003	7.3600e- 003	0.0710	1.4000e- 004	0.0118	1.0000e- 004	0.0119	3.1400e- 003	9.0000e- 005	3.2300e- 003	0.0000	10.7333	10.7333	6.1000e- 004	0.0000	10.7460
Total	4.9700e- 003	7.3600e- 003	0.0710	1.4000e- 004	0.0118	1.0000e- 004	0.0119	3.1400e- 003	9.0000e- 005	3.2300e- 003	0.0000	10.7333	10.7333	6.1000e- 004	0.0000	10.7460

3.17 L2 Exterior Finishes - 2016

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					ton	s/yr							MT	/yr		
Archit. Coating	0.0974					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8200e- 003	0.0300	0.0352	5.0000e- 005		1.2300e- 003	1.2300e- 003	 	1.1300e- 003	1.1300e- 003	0.0000	5.0540	5.0540	1.5200e- 003	0.0000	5.0860
Total	0.0992	0.0300	0.0352	5.0000e- 005		1.2300e- 003	1.2300e- 003		1.1300e- 003	1.1300e- 003	0.0000	5.0540	5.0540	1.5200e- 003	0.0000	5.0860

	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					ton	s/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	4.9700e- 003	7.3600e- 003	0.0710	1.4000e- 004	0.0118	1.0000e- 004	0.0119	3.1400e- 003	9.0000e- 005	3.2300e- 003	0.0000	10.7333	10.7333	6.1000e- 004	0.0000	10.7460
Total	4.9700e- 003	7.3600e- 003	0.0710	1.4000e- 004	0.0118	1.0000e- 004	0.0119	3.1400e- 003	9.0000e- 005	3.2300e- 003	0.0000	10.7333	10.7333	6.1000e- 004	0.0000	10.7460

3.17 L2 Exterior Finishes - 2017 Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Archit. Coating	0.7488					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.2001	0.2696	4.1000e- 004		7.0600e- 003	7.0600e- 003		6.5000e- 003	6.5000e- 003	0.0000	38.2727	38.2727	0.0117	0.0000	38.5190
Total	0.7609	0.2001	0.2696	4.1000e- 004		7.0600e- 003	7.0600e- 003		6.5000e- 003	6.5000e- 003	0.0000	38.2727	38.2727	0.0117	0.0000	38.5190

	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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0339	0.0506	0.4855	1.0800e- 003	0.0908	7.4000e- 004	0.0915	0.0241	6.8000e- 004	0.0248	0.0000	79.4187	79.4187	4.2700e- 003	0.0000	79.5083
Total	0.0339	0.0506	0.4855	1.0800e- 003	0.0908	7.4000e- 004	0.0915	0.0241	6.8000e- 004	0.0248	0.0000	79.4187	79.4187	4.2700e- 003	0.0000	79.5083

3.17 L2 Exterior Finishes - 2017

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					ton	s/yr							MT	/yr		
Archit. Coating	0.7488					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.2001	0.2696	4.1000e- 004		7.0600e- 003	7.0600e- 003		6.5000e- 003	6.5000e- 003	0.0000	38.2727	38.2727	0.0117	0.0000	38.5189
Total	0.7609	0.2001	0.2696	4.1000e- 004		7.0600e- 003	7.0600e- 003		6.5000e- 003	6.5000e- 003	0.0000	38.2727	38.2727	0.0117	0.0000	38.5189

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0339	0.0506	0.4855	1.0800e- 003	0.0908	7.4000e- 004	0.0915	0.0241	6.8000e- 004	0.0248	0.0000	79.4187	79.4187	4.2700e- 003	0.0000	79.5083
Total	0.0339	0.0506	0.4855	1.0800e- 003	0.0908	7.4000e- 004	0.0915	0.0241	6.8000e- 004	0.0248	0.0000	79.4187	79.4187	4.2700e- 003	0.0000	79.5083

3.18 L3 Exterior Finishes - 2017 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.8462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.2201	0.2965	4.5000e- 004		7.7700e- 003	7.7700e- 003		7.1500e- 003	7.1500e- 003	0.0000	42.1000	42.1000	0.0129	0.0000	42.3709
Total	0.8595	0.2201	0.2965	4.5000e- 004		7.7700e- 003	7.7700e- 003		7.1500e- 003	7.1500e- 003	0.0000	42.1000	42.1000	0.0129	0.0000	42.3709

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0373	0.0557	0.5341	1.1900e- 003	0.0998	8.1000e- 004	0.1007	0.0266	7.5000e- 004	0.0273	0.0000	87.3606	87.3606	4.6900e- 003	0.0000	87.4591
Total	0.0373	0.0557	0.5341	1.1900e- 003	0.0998	8.1000e- 004	0.1007	0.0266	7.5000e- 004	0.0273	0.0000	87.3606	87.3606	4.6900e- 003	0.0000	87.4591

3.18 L3 Exterior Finishes - 2017 Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Archit. Coating	0.8462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.2201	0.2965	4.5000e- 004	 	7.7700e- 003	7.7700e- 003		7.1500e- 003	7.1500e- 003	0.0000	42.1000	42.1000	0.0129	0.0000	42.3708
Total	0.8595	0.2201	0.2965	4.5000e- 004		7.7700e- 003	7.7700e- 003		7.1500e- 003	7.1500e- 003	0.0000	42.1000	42.1000	0.0129	0.0000	42.3708

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0373	0.0557	0.5341	1.1900e- 003	0.0998	8.1000e- 004	0.1007	0.0266	7.5000e- 004	0.0273	0.0000	87.3606	87.3606	4.6900e- 003	0.0000	87.4591
Total	0.0373	0.0557	0.5341	1.1900e- 003	0.0998	8.1000e- 004	0.1007	0.0266	7.5000e- 004	0.0273	0.0000	87.3606	87.3606	4.6900e- 003	0.0000	87.4591

3.19 L4 Exterior Finishes - 2017 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.8462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0135	0.2241	0.3019	4.6000e- 004	 	7.9100e- 003	7.9100e- 003		7.2800e- 003	7.2800e- 003	0.0000	42.8655	42.8655	0.0131	0.0000	43.1413
Total	0.8597	0.2241	0.3019	4.6000e- 004		7.9100e- 003	7.9100e- 003		7.2800e- 003	7.2800e- 003	0.0000	42.8655	42.8655	0.0131	0.0000	43.1413

	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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0379	0.0567	0.5438	1.2100e- 003	0.1017	8.3000e- 004	0.1025	0.0270	7.6000e- 004	0.0278	0.0000	88.9490	88.9490	4.7800e- 003	0.0000	89.0493
Total	0.0379	0.0567	0.5438	1.2100e- 003	0.1017	8.3000e- 004	0.1025	0.0270	7.6000e- 004	0.0278	0.0000	88.9490	88.9490	4.7800e- 003	0.0000	89.0493

3.19 L4 Exterior Finishes - 2017 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					ton	s/yr							МТ	/yr		
Archit. Coating	0.8462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0135	0.2241	0.3019	4.6000e- 004		7.9100e- 003	7.9100e- 003		7.2800e- 003	7.2800e- 003	0.0000	42.8654	42.8654	0.0131	0.0000	43.1412
Total	0.8597	0.2241	0.3019	4.6000e- 004		7.9100e- 003	7.9100e- 003		7.2800e- 003	7.2800e- 003	0.0000	42.8654	42.8654	0.0131	0.0000	43.1412

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0379	0.0567	0.5438	1.2100e- 003	0.1017	8.3000e- 004	0.1025	0.0270	7.6000e- 004	0.0278	0.0000	88.9490	88.9490	4.7800e- 003	0.0000	89.0493
Total	0.0379	0.0567	0.5438	1.2100e- 003	0.1017	8.3000e- 004	0.1025	0.0270	7.6000e- 004	0.0278	0.0000	88.9490	88.9490	4.7800e- 003	0.0000	89.0493

3.20 L5 Exterior Finishes - 2017 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.8462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.2181	0.2938	4.5000e- 004		7.7000e- 003	7.7000e- 003		7.0800e- 003	7.0800e- 003	0.0000	41.7173	41.7173	0.0128	0.0000	41.9857
Total	0.8594	0.2181	0.2938	4.5000e- 004		7.7000e- 003	7.7000e- 003		7.0800e- 003	7.0800e- 003	0.0000	41.7173	41.7173	0.0128	0.0000	41.9857

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0369	0.0552	0.5292	1.1800e- 003	0.0989	8.0000e- 004	0.0997	0.0263	7.4000e- 004	0.0271	0.0000	86.5664	86.5664	4.6500e- 003	0.0000	86.6641
Total	0.0369	0.0552	0.5292	1.1800e- 003	0.0989	8.0000e- 004	0.0997	0.0263	7.4000e- 004	0.0271	0.0000	86.5664	86.5664	4.6500e- 003	0.0000	86.6641

3.20 L5 Exterior Finishes - 2017 Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Archit. Coating	0.8462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.2181	0.2938	4.5000e- 004		7.7000e- 003	7.7000e- 003	1 1 1 1	7.0800e- 003	7.0800e- 003	0.0000	41.7172	41.7172	0.0128	0.0000	41.9856
Total	0.8594	0.2181	0.2938	4.5000e- 004		7.7000e- 003	7.7000e- 003		7.0800e- 003	7.0800e- 003	0.0000	41.7172	41.7172	0.0128	0.0000	41.9856

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0369	0.0552	0.5292	1.1800e- 003	0.0989	8.0000e- 004	0.0997	0.0263	7.4000e- 004	0.0271	0.0000	86.5664	86.5664	4.6500e- 003	0.0000	86.6641
Total	0.0369	0.0552	0.5292	1.1800e- 003	0.0989	8.0000e- 004	0.0997	0.0263	7.4000e- 004	0.0271	0.0000	86.5664	86.5664	4.6500e- 003	0.0000	86.6641

3.21 L6 Exterior Finishes - 2017 Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Archit. Coating	0.8462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.2201	0.2965	4.5000e- 004		7.7700e- 003	7.7700e- 003	i i	7.1500e- 003	7.1500e- 003	0.0000	42.1000	42.1000	0.0129	0.0000	42.3709
Total	0.8595	0.2201	0.2965	4.5000e- 004		7.7700e- 003	7.7700e- 003		7.1500e- 003	7.1500e- 003	0.0000	42.1000	42.1000	0.0129	0.0000	42.3709

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0373	0.0557	0.5341	1.1900e- 003	0.0998	8.1000e- 004	0.1007	0.0266	7.5000e- 004	0.0273	0.0000	87.3606	87.3606	4.6900e- 003	0.0000	87.4591
Total	0.0373	0.0557	0.5341	1.1900e- 003	0.0998	8.1000e- 004	0.1007	0.0266	7.5000e- 004	0.0273	0.0000	87.3606	87.3606	4.6900e- 003	0.0000	87.4591

3.21 L6 Exterior Finishes - 2017 Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Archit. Coating	0.8462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.2201	0.2965	4.5000e- 004		7.7700e- 003	7.7700e- 003	 	7.1500e- 003	7.1500e- 003	0.0000	42.1000	42.1000	0.0129	0.0000	42.3708
Total	0.8595	0.2201	0.2965	4.5000e- 004	-	7.7700e- 003	7.7700e- 003		7.1500e- 003	7.1500e- 003	0.0000	42.1000	42.1000	0.0129	0.0000	42.3708

	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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0373	0.0557	0.5341	1.1900e- 003	0.0998	8.1000e- 004	0.1007	0.0266	7.5000e- 004	0.0273	0.0000	87.3606	87.3606	4.6900e- 003	0.0000	87.4591
Total	0.0373	0.0557	0.5341	1.1900e- 003	0.0998	8.1000e- 004	0.1007	0.0266	7.5000e- 004	0.0273	0.0000	87.3606	87.3606	4.6900e- 003	0.0000	87.4591

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3.22 Site - 2017
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	1.6900e- 003	2.5300e- 003	0.0243	5.0000e- 005	4.5400e- 003	4.0000e- 005	4.5800e- 003	1.2100e- 003	3.0000e- 005	1.2400e- 003	0.0000	3.9709	3.9709	2.1000e- 004	0.0000	3.9754
Total	1.6900e- 003	2.5300e- 003	0.0243	5.0000e- 005	4.5400e- 003	4.0000e- 005	4.5800e- 003	1.2100e- 003	3.0000e- 005	1.2400e- 003	0.0000	3.9709	3.9709	2.1000e- 004	0.0000	3.9754

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3.22 Site - 2017

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					ton	s/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	1.6900e- 003	2.5300e- 003	0.0243	5.0000e- 005	4.5400e- 003	4.0000e- 005	4.5800e- 003	1.2100e- 003	3.0000e- 005	1.2400e- 003	0.0000	3.9709	3.9709	2.1000e- 004	0.0000	3.9754
Total	1.6900e- 003	2.5300e- 003	0.0243	5.0000e- 005	4.5400e- 003	4.0000e- 005	4.5800e- 003	1.2100e- 003	3.0000e- 005	1.2400e- 003	0.0000	3.9709	3.9709	2.1000e- 004	0.0000	3.9754

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Mitigated	0.8819	2.3332	9.0562	0.0174	1.1263	0.0307	1.1570	0.3027	0.0283	0.3310	0.0000	1,316.618 0	1,316.618 0	0.0494	0.0000	1,317.654 3
Unmitigated	0.8819	2.3332	9.0562	0.0174	1.1263	0.0307	1.1570	0.3027	0.0283	0.3310	0.0000	1,316.618 0	1,316.618 0	0.0494	0.0000	1,317.654 3

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	746.76	746.76	746.76	1,667,042	1,667,042
Enclosed Parking Structure	0.00	0.00	0.00		
Regional Shopping Center	766.71	766.71	766.71	1,344,276	1,344,276
Total	1,513.47	1,513.47	1,513.47	3,011,318	3,011,318

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

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LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.541886	0.062086	0.167674	0.111244	0.030873	0.004589	0.019191	0.049690	0.001782	0.003683	0.005673	0.000204	0.001425

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					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	446.1751	446.1751	0.0202	4.1700e- 003	447.8927
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	446.1751	446.1751	0.0202	4.1700e- 003	447.8927
NaturalGas Mitigated	0.0102	0.0874	0.0403	5.5000e- 004		7.0300e- 003	7.0300e- 003		7.0300e- 003	7.0300e- 003	0.0000	100.6719	100.6719	1.9300e- 003	1.8500e- 003	101.2845
NaturalGas Unmitigated	0.0102	0.0874	0.0403	5.5000e- 004	 	7.0300e- 003	7.0300e- 003	 : : :	7.0300e- 003	7.0300e- 003	0.0000	100.6719	100.6719	1.9300e- 003	1.8500e- 003	101.2845

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							MT	/yr		
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	151200	8.2000e- 004	7.4100e- 003	6.2300e- 003	4.0000e- 005		5.6000e- 004	5.6000e- 004		5.6000e- 004	5.6000e- 004	0.0000	8.0686	8.0686	1.5000e- 004	1.5000e- 004	8.1177
Apartments Mid Rise	1.73532e +006	9.3600e- 003	0.0800	0.0340	5.1000e- 004		6.4600e- 003	6.4600e- 003		6.4600e- 003	6.4600e- 003	0.0000	92.6033	92.6033	1.7700e- 003	1.7000e- 003	93.1668
Total		0.0102	0.0874	0.0403	5.5000e- 004		7.0200e- 003	7.0200e- 003		7.0200e- 003	7.0200e- 003	0.0000	100.6719	100.6719	1.9200e- 003	1.8500e- 003	101.2845

Mitigated

	NaturalGa s Use	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center		8.2000e- 004	7.4100e- 003	6.2300e- 003	4.0000e- 005		5.6000e- 004	5.6000e- 004		5.6000e- 004	5.6000e- 004	0.0000	8.0686	8.0686	1.5000e- 004	1.5000e- 004	8.1177
Apartments Mid Rise	1.73532e +006	9.3600e- 003	0.0800	0.0340	5.1000e- 004		6.4600e- 003	6.4600e- 003		6.4600e- 003	6.4600e- 003	0.0000	92.6033	92.6033	1.7700e- 003	1.7000e- 003	93.1668
Total		0.0102	0.0874	0.0403	5.5000e- 004		7.0200e- 003	7.0200e- 003		7.0200e- 003	7.0200e- 003	0.0000	100.6719	100.6719	1.9200e- 003	1.8500e- 003	101.2845

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Apartments Mid Rise	708609	206.1424	9.3200e- 003	1.9300e- 003	206.9360
Enclosed Parking Structure	459391	133.6421	6.0400e- 003	1.2500e- 003	134.1565
Regional Shopping Center	365715	106.3907	4.8100e- 003	1.0000e- 003	106.8003
Total		446.1751	0.0202	4.1800e- 003	447.8927

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	708609	206.1424	9.3200e- 003	1.9300e- 003	206.9360
Enclosed Parking Structure	459391	133.6421	6.0400e- 003	1.2500e- 003	134.1565
Regional Shopping Center	365715	106.3907	4.8100e- 003	1.0000e- 003	106.8003
Total		446.1751	0.0202	4.1800e- 003	447.8927

6.0 Area Detail

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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					ton	s/yr							MT	/yr		
Mitigated	1.8902	0.0196	1.6854	2.6000e- 004		0.0397	0.0397		0.0397	0.0397	3.2080	7.5642	10.7723	8.3200e- 003	2.7000e- 004	11.0300
Unmitigated	1.8902	0.0196	1.6854	2.6000e- 004		0.0397	0.0397		0.0397	0.0397	3.2080	7.5642	10.7723	8.3200e- 003	2.7000e- 004	11.0300

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Architectural Coating	0.2428					0.0000	0.0000	i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4500		i			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1520	2.5800e- 003	0.2175	1.9000e- 004		0.0317	0.0317	i i	0.0317	0.0317	3.2080	5.1825	8.3906	5.9600e- 003	2.7000e- 004	8.5986
Landscaping	0.0454	0.0170	1.4679	8.0000e- 005		8.0100e- 003	8.0100e- 003	1	8.0100e- 003	8.0100e- 003	0.0000	2.3817	2.3817	2.3700e- 003	0.0000	2.4314
Total	1.8902	0.0196	1.6854	2.7000e- 004		0.0397	0.0397		0.0397	0.0397	3.2080	7.5642	10.7723	8.3300e- 003	2.7000e- 004	11.0300

6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	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					ton	s/yr							MT	/уг		
Architectural Coating	0.2428					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4500					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1520	2.5800e- 003	0.2175	1.9000e- 004		0.0317	0.0317	 	0.0317	0.0317	3.2080	5.1825	8.3906	5.9600e- 003	2.7000e- 004	8.5986
Landscaping	0.0454	0.0170	1.4679	8.0000e- 005		8.0100e- 003	8.0100e- 003	! ! ! !	8.0100e- 003	8.0100e- 003	0.0000	2.3817	2.3817	2.3700e- 003	0.0000	2.4314
Total	1.8902	0.0196	1.6854	2.7000e- 004		0.0397	0.0397		0.0397	0.0397	3.2080	7.5642	10.7723	8.3300e- 003	2.7000e- 004	11.0300

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		MT	√yr	
Willigatou	38.2197	0.4936	0.0119	52.2782
Crimingatod	38.2197	0.4937	0.0119	52.2858

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	7/yr	
Apartments Mid Rise	12.7702 / 8.05077	32.3504	0.4174	0.0101	44.2437
Enclosed Parking Structure	0/0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.33328 / 1.43008	5.8692	0.0763	1.8400e- 003	8.0421
Total		38.2197	0.4937	0.0119	52.2858

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
Apartments Mid Rise	12.7702 / 8.05077	32.3504	0.4173	0.0101	44.2373
Enclosed Parking Structure	0/0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.33328 / 1.43008	5.8692	0.0763	1.8400e- 003	8.0409
Total		38.2197	0.4936	0.0119	52.2782

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	√yr	
gateu	25.0166	1.4784	0.0000	56.0638
- Cimingated	25.0166	1.4784	0.0000	56.0638

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Apartments Mid Rise	90.16	18.3017	1.0816	0.0000	41.0152
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	33.08	6.7149	0.3968	0.0000	15.0486
Total		25.0166	1.4784	0.0000	56.0638

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Apartments Mid Rise	90.16	18.3017	1.0816	0.0000	41.0152
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	33.08	6.7149	0.3968	0.0000	15.0486
Total		25.0166	1.4784	0.0000	56.0638

9.0 Operational Offroad

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

10.0 Vegetation

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23rd/Valdez Backup Generator

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)63

Climate Zone 5 Operational Year 2017

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 641.35
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Operational Off-Road Equipment - operational emergency generator set

Land Use -

Construction Phase -

Off-road Equipment - Zeroed out for operation-only emissions

Trips and VMT - Zeroed out for operation-only emissions

Grading -

Table Name	Column Name	Default Value	New Value
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	5.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	10.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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					ton	s/yr							МТ	/yr		
Area	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	1.7800e- 003	0.0140	0.0118	2.0000e- 005		9.4000e- 004	9.4000e- 004		9.4000e- 004	9.4000e- 004	0.0000	1.7663	1.7663	1.4000e- 004	0.0000	1.7693
Waste	;					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.7800e- 003	0.0140	0.0118	2.0000e- 005	0.0000	9.4000e- 004	9.4000e- 004	0.0000	9.4000e- 004	9.4000e- 004	0.0000	1.7663	1.7663	1.4000e- 004	0.0000	1.7693

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	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					ton	s/yr							МТ	T/yr		
Area	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000	1 1 1	0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	1.7800e- 003	0.0140	0.0118	2.0000e- 005		9.4000e- 004	9.4000e- 004	,	9.4000e- 004	9.4000e- 004	0.0000	1.7663	1.7663	1.4000e- 004	0.0000	1.7693
Waste				1		0.0000	0.0000	,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water				1		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.7800e- 003	0.0140	0.0118	2.0000e- 005	0.0000	9.4000e- 004	9.4000e- 004	0.0000	9.4000e- 004	9.4000e- 004	0.0000	1.7663	1.7663	1.4000e- 004	0.0000	1.7693

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	100.00	100.00	99.92	100.00	0.00	100.00	100.00	0.00	100.00	100.00	0.00	100.00	100.00	100.00	0.00	100.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/1/2015	12/31/2014	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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					ton	s/yr							MT	/yr		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Commercial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Commercial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.541334	0.061893	0.168156	0.111955	0.031019	0.004607	0.019268	0.049011	0.001782	0.003693	0.005649	0.000207	0.001427

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	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					ton	s/yr							МТ	/yr		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Mitigated	,	 	1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							MT	/yr		
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s 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					ton	s/yr							MT	/yr		
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	⁻/yr	
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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					ton	s/yr							MT	/yr		
Mitigated	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Unmitigated	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

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6.2 Area by SubCategory <u>Unmitigated</u>

	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	0.0000		!			0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000		1 1 1			0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Total	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

Mitigated

	ROG	NOx	СО	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	0.0000					0.0000	0.0000	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000	·	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Total	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		MT	⁻ /yr	
Cimiligated	0.0000	0.0000	0.0000	0.0000
Willigatod	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
User Defined Commercial	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
User Defined Commercial	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	/yr	
gatea	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000			
Total		0.0000	0.0000	0.0000	0.0000			

9.0 Operational Offroad

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Generator Sets	1	10.00	5	84	0.74	Diesel

UnMitigated/Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	t Type tons/yr							MT	√yr							
Generator deta	1.7800e- 003	0.0140	0.0118	2.0000e- 005		9.4000e- 004	9.4000e- 004		9.4000e- 004	9.4000e- 004	0.0000	1.7663	1.7663	1.4000e- 004	0.0000	1.7693
Total	1.7800e- 003	0.0140	0.0118	2.0000e- 005		9.4000e- 004	9.4000e- 004		9.4000e- 004	9.4000e- 004	0.0000	1.7663	1.7663	1.4000e- 004	0.0000	1.7693

10.0 Vegetation

ATTACHMENT G: 23RD & VALDEZ PROJECT – TRANSPORTATION ASSESSMENT



DRAFT MEMORANDUM

Date: March 11, 2015

To: Kirsten Chapman, ICF

From: Sam Tabibnia

Subject: 23rd and Valdez Project – Transportation Assessment

OK14-0036

This memorandum summarizes the focused transportation assessment that Fehr & Peers conducted for the proposed 23rd and Valdez mixed-use development in the City of Oakland. Fehr & Peers estimated the trip generation for the project, reviewed the proposed project for consistency with the assumptions in the Broadway Valdez District Specific Plan (BVSP) EIR, and assessed the project site plan for potential impacts on safety.

Our major findings include:

- The proposed project is estimated to generate about 74 AM and 138 PM peak hour automobile trips.
- The total automobile trips generated by the proposed project combined with the under construction, approved, and other proposed development projects in the Plan Area would remain below the levels estimated by the BVSP Draft EIR for the entire Plan Area, the Valdez Triangle, and Subdistrict 2.
- Since the project location, uses, and access points are consistent with the assumptions in the BVSP Draft EIR, and the BVSP Draft EIR analyzed impacts at all signalized intersections in the immediate vicinity of the project site, the proposed project would not cause additional impacts beyond the locations analyzed in the BVSP Draft EIR; nor would the project increase the magnitude of the impacts identified in the BVSP Draft EIR.
- The automobile traffic generated by the proposed project combined with the under construction, approved, and other proposed development projects in the Plan Area, would trigger the following mitigation measures as identified in the BVSP Draft EIR:



- Mitigation Measure TRANS-2 at the Perry Place/I-580 Eastbound Ramps/ Oakland Avenue intersection.
- Mitigation TRANS-10 at the 27th Street/24th Street/Bay Place/Harrison Street intersection.
- o Mitigation TRANS-22 at the 27th Street/Broadway intersection.
- Based on a review of a project site plan dated November 21, 2014, the proposed project
 would not cause a significant impact on safety; however, this memorandum includes
 recommendations to improve access and circulation at the project site.
- The proposed project would need to provide 26 additional long-term bicycle parking spaces and as many as 13 additional short-term bicycle parking spaces to meet City of Oakland Planning Code requirements.
- The proposed project is required to implement a Transportation Demand Management (TDM) program.

Our analysis assumptions and findings are detailed below.

PROJECT DESCRIPTION

The project is at the northeast corner of the 23rd Street/ Valdez Street intersection in Oakland. Based on a site plan dated November 21, 2014, the proposed project would consist of a six-level building providing 196 multi-family dwelling units and about 31,500 square feet of retail along the Valdez Street frontage. Currently, the project site is primarily used as public parking with about 250 spaces in surface lots and a one-story structure. The site is also occupied by an active auto-detailing shop.

The proposed project would provide 209 parking spaces in the following two parking facilities:

- **Retail** 62 parking spaces on the ground level with a driveway on 23rd Street about 100 feet east of Valdez Street and pedestrian access on Valdez Street.
- **Residential** 147 parking spaces in the basement level with a gate-controlled driveway on Waverly Street about 160 feet north of 23rd Street.

The project would also provide one loading dock accessible on 23rd Street just west of the retail parking driveway.

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Both the residential and retail components of the project would have direct pedestrian access on Valdez Street. In addition, the project would also improve sidewalks along the project frontage and construct a bulbout at the northeast corner of the 23rd Street/Valdez Street intersection.

The project would provide long-term bicycle parking for 76 bicycles in a separate secure facility accessible from Waverly Street. Short-term bicycle parking for 17 bicycles would be provided through bicycle racks on the retail parking level and along the Valdez Street and 23rd Street frontages.

TRIP GENERATION

Trip generation refers to the process of estimating the amount of vehicular traffic a project would add to the local roadway network. **Table 1** summarizes the trip generation for the proposed Project. The estimates are based on rates and equations published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual* (9th Edition) with the following adjustment:

• Non-Automobile Travel Modes - The ITE trip generation rates are based on data collected at mostly single-use suburban sites where the automobile is often the only travel mode. However, the Project site is in a mixed-use urban environment with robust transit available and where many trips are walk, bike, or transit trips. Since the proposed project is less than one-half mile from the 19th Street BART Station, this analysis reduces the ITE based trip generation by 43 percent to account for the non-automobile trips. This reduction is consistent with City of Oakland Transportation Impact Study Guidelines and is based on the Bay Area Travel Survey (BATS) 2000 which shows that the non-automobile mode share within one-half mile of a BART Station in Alameda County is about 43 percent. A 2011 research study shows reducing ITE based trip generation using BATS data results in a more accurate estimation of trip generation for mixed use developments than just using ITE based trip generation.¹

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



TABLE 1 23RD AND VALDEZ PROJECT AUTOMOBILE TRIP GENERATION

		ITE		Weekda	ay AM Pe	ak Hour	Weekda	ay PM Pe	ak Hour
Land Use	Units ¹	Code	Daily	In	Out	Total	In	Out	Total
Residential	196 DU	220 ²	1,311	20	80	100	81	44	125
Retail	31.5 KSF	820 ³	1,345	19	11	30	56	61	117
Subtotal			2,656	39	91	130	137	105	242
Non-Auto Reduction (-43%) ⁴		-1,142	-17	-39	-56	-59	-45	-104	
Net New Project Trips		1,514	22	52	74	78	60	138	

- 1. DU = Dwelling Units, KSF = 1,000 square feet.
- 2. ITE Trip Generation (9th Edition) land use category 220 (Apartments):

Daily: T = 6.06(X) + 123.56

AM Peak Hour: T = 0.49(X) + 3.73 (20% in, 80% out)

PM Peak Hour: T = 0.55(X) + 17.65 (65% in, 35% out)

3. ITE *Trip Generation (9th Edition)* land use category 820 (Shopping Center):

Daily: T = 42.7 * X

AM Peak Hour: T = 0.96* X (88% in, 12% out)

PM Peak Hour: T = 3.71* X (17% in, 83% out)

4. Reduction of 43.0% assumed. Based on City of Oakland *Transportation Impact Study Guidelines* using BATS 2000 data for development in an urban environment within 0.5 miles of a BART Station.

Source: Fehr & Peers, 2014.

In addition, the project trip generation presented in Table 1 does not account for the following in order to present a "worst case" scenario:

- **Existing Trips** The project would eliminate about 250 existing public parking spaces and an auto-detail shop. The trip generation estimates conservatively do not account for the existing trips generated by these uses. Although the demolition of the public parking spaces is expected to eliminate some of the automobile trips generated by the existing facilities, other off-street parking facilities in the vicinity would provide adequate spaces to accommodate most of the motorists that currently park at the project site. Thus, these motorists would continue to travel to and from this area after the completion of the Project.
- Pass-by and Diverted Trips Pass-by trips are defined as trips attracted to a site from
 adjacent or nearby roadways as an intermediate stop on the way to a final destination.
 Pass-by and diverted trips alter travel patterns in the immediate study area but do not
 add new vehicle trips to the roadway network, and therefore, are typically excluded from



trip generation estimates. Since the proposed project is within two blocks of Broadway and Harrison Street, which are two heavily traveled arterials, it is expected that many motorists on these roadways would be attracted to the proposed project. According to ITE's *Trip Generation Handbook* (3rd Edition), the average weekday PM peak hour pass-by reduction for retail uses is 34 percent. To be conservative, this analysis does not reduce the retail trip generation estimates.

As summarized in Table 1, the project would generate approximately 1,510 daily, 74 AM peak hour, and 138 PM peak hour trips.

Trip Generation for Non-Auto Travel Modes

Consistent with City of Oakland *Transportation Impact Study Guidelines*, **Table 2** presents the estimates of project trip generation for all travel modes.

TABLE 2
23RD AND VALDEZ PROJECT
TRIP GENERATION BY TRAVEL MODE

Mode	Mode Share Adjustment Factors ¹	Daily AM Peak Hour		PM Peak Hour
Automobile	57.0%	1,514	74	138
Transit	30.4%	807	39	74
Bike	3.9%	104	5	9
Walk	23.0%	611	30	56
	Total Trips	3,036	148	277

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

Sources: Fehr & Peers, 2014.

Trip Generation Consistency with BVSP EIR

The BVSP Draft EIR included analyzed the impacts of the Broadway Valdez Development Program on the roadway network serving the Plan Area. As noted in the Draft EIR, the Development Program represents the reasonably foreseeable development expected to occur in the next 20 to 25 years in the Plan Area. The Specific Plan and the EIR intend to provide flexibility in the location, amount, and type of development. Thus, the traffic impact analysis in the Draft EIR does not assign land uses to individual parcels; rather, land uses are distributed to five subdistricts



within the Plan Area.² Therefore, as long as the trip generation for each subdistrict and the overall Plan Area remain below the levels estimated in the Draft EIR, the traffic impact analysis presented in the Draft EIR continues to remain Valid.

Table 3 lists the development projects within BVSP that are currently under construction, approved, and/or proposed. The proposed 23rd and Valdez project is the only currently proposed development project in Subdistrict 2.

TABLE 3 DEVELOPMENTS IN BVSP¹

	6.1.1	5	Amount of Development ²			
Development	Subdistrict Status		Residential (DU)	Commercial (KSF)		
3001 Broadway (Sprouts)	Subdistrict 5	Under Construction	0	36.0		
2345 Broadway (HIVE)	Subdistrict 1	Under Construction	105	94.3		
2425 Valdez Street	Subdistrict 3	Approved	70	0		
3093 Broadway	Subdistrict 5	Proposed	435	24.0		
2302 Valdez Street (23rd and Valdez)	Subdistrict 2	Proposed	196	31.5		
2270 Broadway	Subdistrict 1	Proposed	223	5.0		
2315 Valdez Street	Subdistrict 1	Proposed	235	15.0		
		Total	1,264	205.8		

^{1.} Information provided by City of Oakland in November 2014.

Table 4 presents the combined trip generation of the currently under construction, approved, and proposed development projects for the Plan Area (Subdistricts 1 through 5), the Valdez Triangle (Subdistricts 1 through 3) and Subdistrict 2 using similar assumptions and methodology used to estimate the Development Program Buildout in the BVSP Draft EIR. The trip generation by these projects combined is about 27 percent of the AM peak hour and 31 percent of the PM peak hour trips that the Draft EIR estimated for the entire Development Program and about 39 percent of the AM peak hour and 38 percent of the PM peak hour trips that the Draft EIR estimated for the Development Program in the Valdez Triangle. As shown in Table 4, automobile trips generated

-

^{2.} DU = Dwelling Units, KSF = 1,000 square feet

Sources: Fehr & Peers, 2014.

² See page 4.13-36 of the BVSP Draft EIR for more detail.



by the proposed 23rd and Valdez Project would be about 20 percent of the AM peak hour and 15 percent of the PM peak hour trips that the BVSP Draft EIR assumed Subdistrict 2 would generate at buildout.

TABLE 4 TRIP GENERATION COMPARISON

	Weekd	ay AM Pe	ak Hour	Weekd	ay PM Pea	k Hour
	In	Out	Total	In	Out	Total
Plan Area (Subdistricts 1 through 5)						
Under Construction, Approved, and Proposed Development Projects ¹	167	364	531	629	503	1,132
Development Program Buildout ²	1,152	829	1,981	1,702	2,007	3,709
% Completed	14%	44%	27%	37%	25%	31%
Valdez Triangle (Subdistricts 1 through 3)						
Under Construction, Approved, and Proposed Development Projects ¹	114	241	355	427	345	772
Development Program Buildout ²	457	442	899	1,013	993	2,006
% Completed	25%	55%	39%	42%	35%	38%
Subdistricts 2						
Under Construction, Approved, and Proposed Development Projects ³	22	52	74	78	60	138
Development Program Buildout ²	161	200	361	475	435	910
% Completed	14%	26%	20%	16%	14%	15%

- 1. Based on application of the BVSP trip generation model with the developments shown in Table 3.
- 2. Based on Table 4.13-10 on page 4.13-43 of BVSP Draft EIR.
- 3. See Table 1 for details

Source: Fehr & Peers, 2014.

The project location, uses, and access points are consistent with the assumptions for the traffic impact analysis for BVSP Draft EIR. Therefore, the trip distribution and trip assignment assumptions used in the BVSP Draft EIR continue to remain valid for the proposed project. Considering the project trip generation, and that the BVSP Draft EIR analyzed the impacts of the BVSP Development Program at signalized intersections along Broadway, 27th Street, Harrison Street, and Grand Avenue that provide direct access to the project site, the proposed project would not add 50 or more trips to any signalized intersection that was not analyzed in the BVSP Draft EIR. Therefore, the proposed project would not result in impacts on traffic operations at the

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intersections beyond the ones identified in the BVSP Draft EIR. The proposed project would not also increase the magnitude of the impacts identified in the Draft EIR.

IMPACTS AND MITIGATION MEASURE TRIGGERS

The BVSP Draft EIR identifies 28 significant impacts at intersections serving the Plan Area. For each impact and associated mitigation measures, the Draft EIR identifies specific triggers based on the level of development in the entire Plan Area and/or each subdistrict. Based on the review of the Draft EIR and the trip generation for the proposed project and the currently planned developments, the proposed project combined with the other planned developments would trigger the following impacts and mitigation measures:

• The proposed project combined with other under construction, approved, and proposed development projects in the Plan Area would trigger Impact TRANS-2 under Existing Plus Project Conditions (and also Impact TRANS-7 under 2020 Plus Project and Impact TRANS-17 under 2035 Plus Project Conditions) at the Perry Place/I-580 Eastbound Ramps/Oakland Avenue intersection because these projects combined would generate more than 15 percent of the total traffic generated by the Development Program.

Mitigation Measure TRANS-2 in the Drat EIR includes the following imporvements at this intersection:

- o Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the PM peak hour
- o Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. This intersection is under the jurisdiction of Caltrans so any equipment or facility upgrades must be approved by Caltrans prior to installation.

If implemented, the mitigation measure would mitigate the significant impact at this intersection. However, it is not certain that this mitigation measure could be implemented because the intersection is under the jurisdiction of Caltrans. City of Oakland, as lead agency, does not have jurisdiction at this intersection and the mitigation would need to be approved and implemented by Caltrans. Therefore, the BVSP Draft EIR considered the impact significant and unavoidable.

• The proposed project combined with other under construction, approved, and proposed development projects in the Plan Area would trigger **Impact TRANS-10** under 2020 Plus



Project Conditions (and also Impact TRANS-24 under 2035 Plus Project Conditions) at the 27th Street/24th Street/Bay Place/Harrison Street intersection because these projects combined would generate more than 10 percent of the total traffic generated by the Development Program.

Mitigation Measure TRANS-10 in the Drat EIR includes the following imporvements at this intersection:

- Reconfigure the 24th Street approach at the intersection to restrict access to 24th Street to right turns only from 27th Street and create a pedestrian plaza at the intersection approach.
- Convert 24th Street between Valdez and Harrison Streets to two-way circulation and allow right turns from 24th Street to southbound Harrison Street south of the intersection, which would require acquisition of private property in the southwest corner of the intersection.
- Modify eastbound 27th Street approach from the current configuration (one rightturn lane, two through lanes, and one left-turn lane) to provide one right-turn lane, one through lane, and two left-turn lanes.
- o Realign pedestrian crosswalks to shorten pedestrian crossing distances.
- Reduce signal cycle length from 160 to 120 seconds, and optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection).
- o Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.
- The proposed project combined with other under construction, approved, and proposed development projects in the Plan Area would trigger Impact TRANS-22 under 2035 Plus Project Conditions at the 27th Street/Broadway intersection because these projects combined would generate more than 30 percent of the total traffic generated by the Development Program.

Mitigation Measure TRANS-22 in the Drat EIR includes the following imporvements at this intersection:

- o Upgrade traffic signal operations at the intersection to actuated-coordinated operations
- Reconfigure westbound 27th Street approach to provide a 150-foot left-turn pocket, one through lane, and one shared through/right-turn lane.
- o Provide protected left-turn phase(s) for the northbound and southbound approaches.
- o Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection).
- o Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group.

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The proposed mitigation measure would not mitigate the impact to a less than significant level. Therefore, the BVSP Draft EIR considered the impact significant and unavoidable.

According to the BVSP DEIR, the project sponsor shall fund the cost of preparing and funding these mitigation measures. Alternatively, if City of Oakland adopts the BVSP Transportation Impact Fee (TIF) program, the applicant may pay the TIF to mitigate the project impacts.

SITE PLAN REVIEW

An evaluation of access and circulation for all travel modes, based on the site plan dated November 21, 2014, is summarized below.

Vehicle Access and Circulation

As previously described, the proposed project would provide two levels of parking with retail parking accessed on 23rd Street and residential parking accessed on Waverly Street. Based on the provided site plan, the two project driveways may not provide adequate sight distance between exiting motorists and pedestrians on the adjacent sidewalks.

Both levels of parking provide several dead-end drive aisles where vehicles would not be able to turn around. The dead-end drive aisle in the north side of the retail parking level may result in queuing and circulation issues if all parking spaces in the aisle are full and motorists looking for a parking space drive down the aisle and cannot turn around at the end of the aisle. The dead-end aisles in the residential level would result in minimal conflicts because parking would be limited to residents who only drive to and from their assigned spaces.

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

- Ensure that both project driveways on 23rd Street and Waverly Street would provide adequate sight distance between motorists exiting the driveways and pedestrians on adjacent sidewalks.
- Eliminate the north most parking space on the dead-end drive aisle at the north end of the retail parking level to provide an automobile turnaround space.
- Consider providing a real-time parking information system at the retail parking driveway on 23rd Street to inform motorists of the number of available parking spaces in the retail parking level (consistent with Policy C-6.11 of the Specific Plan).

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Waverly Street Closure

The Broadway Valdez District Specific Plan (Policy C-4.3) includes the potential for temporary or permanent closure of Waverly Street between 23rd and 24th Streets to through traffic. However, the proposed project would locate the only driveway for residential parking on Waverly Street, preventing the permanent and full closure of the street.

The closure of Waverly Street is currently not feasible because the street provides the only and/or the primary automobile access for most of the existing uses on the street. If most of these existing uses are redeveloped and their primary access relocated to adjacent streets, a partial and/or temporary closure of Waverly Street may be feasible. Since the majority of the existing uses on Waverly Street are expected to remain, the permanent full closure of Waverly Street is not considered feasible regardless of the proposed project.

Overall, the project is not in conflict with the Specific Plan policy to close Waverly Street because a temporary and/or partial closure of Waverly Street may be feasible after project is completed.

Bicycle Access and Bicycle Parking

Chapter 17.117 of the Oakland Municipal Code requires long-term and short-term bicycle parking for new buildings. Long-term bicycle parking includes lockers or locked enclosures and short-term bicycle parking includes bicycle racks. **Table 5** summarizes the bicycle parking requirement for the project. The project is required to provide 52 long-term and 17 or 26 short-term parking spaces. The site plan shows long-term bicycle parking in a facility with direct access from Waverly Street and short-term bicycle parking on the retail parking level and along the sidewalks on Valdez Street and 23rd Street. The proposed project would meet the long-term or short-term bicycle parking required by City of Oakland Municipal Code.



TABLE 5 BICYCLE PARKING REQUIREMENTS

		Long-Term		Shor	t-Term
Land Use	Size ¹	Spaces per Unit ²	Spaces	Spaces per Unit ²	Spaces
Apartments	196 DU	1:2 DU	98	1:15 DU	14
Retail	31.5 KSF	1:8 KSF	4	1:2 KSF or 1:3 KSF ³	11 or 16
Tota	al Required Bio	102		25 or 30	

- 1. DU = dwelling unit; KSF = 1,000 square feet
- 2. Based on Oakland Municipal Code Sections 17.117.090 and 17.117.110 for D-BV zone.
- 3. The short-term bicycle parking requirements depend on the specific retail uses.

Source: Fehr & Peers, 2014

Pedestrian Access and Circulation

Primary access to the residential component of the project would be through a lobby on Valdez Street that includes elevators and a stairwell. Additional stairwells would be provided on Waverly Street and 23rd Street. The retail uses would be directly accessed on Valdez Street.

Consistent with the Specific Plan (Figures 6.7 and 6.8), the proposed project would widen the sidewalks along the project frontage on Valdez Street and 23rd Street to 15 feet and 14.5 feet, respectively. All sidewalks along the project frontage provide a minimum eight-foot pedestrian clear zone. The project also proposes a bulbout at the northeast corner of the 23rd Street/ Valdez Street intersection, which is consistent with the Specific Plan goals.

Transit Access

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

BART provides regional rail service throughout the East Bay and across the Bay. The nearest BART station to project site is the 19th Street BART Station, about 0.4 miles southwest. The proposed project would not modify access between the project site and the BART Station.

AC Transit is the primary bus service provider in the City of Oakland. AC Transit operates the following major routes in the vicinity of the project:

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- Route 51A along Broadway with the nearest stop at Grand Avenue, about 850 feet west
 of the project site.
- Route 12 along Grand Avenue with the nearest stop at Valdez Street, about 300 feet south of the project site.
- Route 11 along Harrison Street with the nearest stop at Grand Avenue, about 750 feet southeast of the project site.

In addition, the Oakland Free Broadway shuttle ("Free B") also operates along Broadway with the nearest stop at Grand Avenue.

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

TRANSPORTATION DEMAND MANAGEMENT

Since the proposed project would generate more than 50 net new PM peak hour trips, The City's Standard Condition of Approval (SCA), which requires the preparation of a Transportation Demand Management (TDM) plan as described below, is applicable.

SCA TRA-1: Parking and Transportation Demand Management. Prior to issuance of a final inspection of the building permit.

The project applicant shall submit a Transportation and Parking Demand Management (TDM) plan for review and approval by the City. The intent of the TDM plan shall be to reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable consistent with the potential traffic and parking impacts of the project.

The goal of the TDM shall be to achieve the following project vehicle trip reductions (VTR):

- Projects generating 50 to 99 net new AM or PM peak hour vehicle trips: 10 percent VTR
- Projects generating 100 or more net new AM or PM peak hour vehicle trips: 20 percent VTR

The TDM plan shall include strategies to increase pedestrian, bicycle, transit, and carpool use, and reduce parking demand. All four modes of travel shall be considered, as appropriate. VTR strategies to consider include, but are not limited to, the following:



- a) 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 Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement.
- b) Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority Bikeway Projects, on-site signage and bike lane striping.
- c) Installation of safety elements per the Pedestrian Master Plan (such as cross walk 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.
- d) Installation of amenities such as lighting, street trees, trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan.
- e) Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements.
- f) 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).
- g) Provision of a transit subsidy to employees or residents, determined by the project sponsor and subject to review by the City, if the employees or residents use transit or commute by other alternative modes.
- h) Provision of an ongoing contribution to AC Transit service to the area between the development and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle or streetcar service; and 3) Establishment of new shuttle or streetcar service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario3).
- i) Guaranteed ride home program for employees, either through 511.org or through separate program.
- j) Pre-tax commuter benefits (commuter checks) for employees.
- k) 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.
- l) Onsite carpooling and/or vanpooling program that includes preferential (discounted or free) parking for carpools and vanpools.
- m) Distribution of information concerning alternative transportation options.

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- n) 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.
- o) Parking management strategies; including attendant/valet parking and shared parking spaces.
- p) Requiring tenants to provide opportunities and the ability to work off-site.
- q) 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, tenhour days; allowing employees to work from home two days per week).
- r) 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 proposed based on published research or guidelines. 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.

The project applicant shall implement the approved TDM Plan on an ongoing basis. For projects that generate 100 or more net new AM or PM peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR. 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.

The proposed project includes several features that are consistent with the TDM program that the project is required to implement. These include:

- Improvements to the sidewalks adjacent to the project site
- Providing dedicated parking spaces for car-sharing. The project site plan identifies
 three car-share spaces on the retail parking level and two car-share spaces on the
 residential parking level.

Attachment G

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Recommendation 3: Consistent with the Broadway Valdez Specific Plan, consider implementing the following strategies as part of the required TDM program for the proposed project:

- Consistent with Planning Code Section 17.116.110.D, the project shall unbundle the cost of parking from the cost of housing where residents pay separately for their parking spaces (Policy C-6.8).
- Consistent with Planning Code Section 17.116.110.D, explore allowing non-residents to use the parking level designated for residents for a fee during typical weekday business hours when residential demand is the lowest. At a minimum, consider allowing retail employees to use the residential parking during weekday business hours (Policies C-6.4 and C-6.5).
- Provide long-term and short-term bicycle parking beyond the minimum required by City of Oakland Planning Code.
- Cooperate with City of Oakland and/or other regional agencies to allow installation of a potential bike share station along the project frontage.
- Designate a TDM coordinator for the project.
- Provide all new residents and retail employees with information on the various transportation options available.

Please contact Sam with questions or comments.