

2715 Adeline Street Project

CEQA Analysis

Prepared for:

City of Oakland
Bureau of Planning
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URBAN PLANNING
ENVIRONMENTAL
ANALYSIS



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- A: City of Oakland Standard—Conditions of Approval
- B: Infill Performance Standards, Per CEQA Guidelines Section 15183.3

TECHNICAL APPENDIXES

(available on attached CD)

- A: Cultural Resources Background Materials
- B: CalEEMod Results
- C: Regulatory Status Update
- D: Environmental Noise Study
- E: Transportation Assessments and Transportation Demand Management Plan

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I: PROJECT CHARACTERISTICS

- 1. Project Title:** 2715 Adeline Street Project
- 2. Lead Agency Name and Address:** City of Oakland
Planning & Building Department
250 Frank H. Ogawa Plaza, Suite 2114
Oakland, CA 94612
- 3. Contact Person and Phone Number:** Maurice Brenyah-Addow, Planner IV
510.238.6342
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Oakland, CA 94612
Brenyah-Addow@oaklandca.gov
- 4. Project Location:** 2715 Adeline Street
Oakland, CA 94607
Assessor's Parcel Numbers 005-0446-001-01, 005-0446-001-02, and 005-0446-008-01
- 5. Project Sponsor's Name and Address:** The Negev
Contact: Jeremy Harris
Pier 54, Suite 202
San Francisco, CA 94158
(858) 449-5270
- 6. Existing General Plan Designation:** Business Mix
- 7. Existing Zoning:** Commercial and Industrial Mix-1 Zone (CIX-1); with a West Oakland Specific Plan Business Enhancement (CIX-1A) and Low Intensity Business (CIX-1B) Overlay, and a Health and Safety Protection Overlay (S-19)

Height Limit: 85 feet
- 8. Requested Permits:** Regular Design Review – for new construction of work/live commercial spaces
Conditional Use Permit – for establishment of work/live uses in the CIX-1A and CIX-1B zones.

II: EXECUTIVE SUMMARY

The proposed 2715 Adeline Street Project (project) would be a 5-story work/live development project.¹ The project is located at 2715 Adeline Street in West Oakland (Assessor's Parcel Numbers [APNs] 005-0446-001-02, 005-0446-001-01, and 005-0446-008-01). The project site fronts Adeline Street to the east, Magnolia Street to the West and 28th Street to the north, and the three parcels comprise approximately 1.27 total acres. An existing fire-damaged 20,328-square-foot portion of the former Coast Sausage building, concrete slab, and associated parking currently occupy the site. The project would retain the existing building façades facing 28th and Adeline Streets and demolish the remainder of the existing building. The new building would be approximately 109,920 square feet in size. The ground floor would contain approximately 14,630 square feet of light manufacturing/industrial space and accessory uses (i.e., parking, loading, utilities space, and courtyard). The upper floor would provide for 106 separate work/live units, each accommodating a primary non-residential activity space with an accessory residential component.

This California Environmental Quality Act (CEQA) Analysis evaluates the environmental effects of the project. The project is eligible for CEQA streamlining and/or tiering provisions under CEQA Guidelines Section 15183, which provides for streamlined review when a project is consistent with a Community or General Plan for which the impacts of the Plan have been analyzed in a certified Program Environmental Impact Report (EIR). The Project is also eligible for CEQA streamlining and/or tiering provisions under CEQA Guidelines Section 15183.3 for certain qualified infill projects by limiting the topics that are subject to review at the project level, provided the effects of infill development have been addressed in a planning level decision or by uniformly applied development policies or standards.

This analysis uses CEQA streamlining and/or tiering provisions under CEQA Guidelines Sections 15183 and 15183.3 to tier from the program-level analysis completed in the City of Oakland (City) General Plan Land Use and Transportation Element (LUTE) and its EIR,² and the West Oakland Specific Plan (WOSP) and its EIR,³ collectively referred to herein as the "Program EIRs" that analyzed environmental impacts associated with adoption and implementation of the General Plan and the WOSP.

¹ A work/live unit accommodates a primary nonresidential activity with an accessory residential component.

² City of Oakland, 1998. General Plan, Land Use and Transportation Element; City of Oakland, 1998. Oakland General Plan Land Use and Transportation Element EIR.

³ City of Oakland, 2014. West Oakland Specific Plan; City of Oakland, 2014. West Oakland Specific Plan EIR.

III: BACKGROUND

The following describes the Program EIRs that constitute the previous CEQA documents considered in this CEQA Analysis. Each of the following documents is hereby incorporated by reference and can be obtained from the City of Oakland Bureau of Planning, at 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, California, 94612, and on the City of Oakland Planning and Building Department website at:

<http://www2.oaklandnet.com/Government/o/PBN/OurServices/Application/DOWD009157>

Applicable Previous CEQA Documents and Program EIRs

Land Use and Transportation Element EIR

The City certified the EIR for its General Plan LUTE in 1998. The LUTE identifies policies to guide land use changes in the City and sets forth an action program to implement the land use policy through development controls and other strategies. The 1998 LUTE EIR is designated a Program EIR under CEQA Guidelines Sections 15168, 15183, and 15183.3. As such, subsequent activities under the LUTE are subject to requirements under each of these CEQA Sections.

Applicable mitigation measures identified in the 1998 LUTE EIR are largely the same as those identified in the other Program EIRs prepared after the 1998 LUTE EIR, either as mitigation measures or newer City Standard Conditions of Approval (SCAs), which are described below.

Environmental Effects Summary – 1998 LUTE EIR

The 1998 LUTE EIR (including its Initial Study Checklist) determined that development consistent with the LUTE would result in less than significant impacts for the following environmental topics:

- aesthetics (scenic resources, light and glare);
- air quality (clean air plan consistency, roadway emissions in downtown, energy use emissions, local/regional climate change);
- biological resources;
- cultural resources (historic context/settings, architectural compatibility);
- energy;
- geology and seismicity;
- hydrology and water quality;
- land use (conflicts in mixed use projects and near transit);
- noise (roadway noise downtown and citywide, multifamily near transportation/transit improvements);
- population and housing (exceeding household projections, housing displacement from industrial encroachment);
- public services (water demand, wastewater flows, stormwater quality, parks services); and
- transportation/circulation (transit demand).

No impacts were identified for agricultural or forestry resources, and mineral resources.

The 1998 LUTE EIR (including its Initial Study Checklist) determined that development consistent with the LUTE would result in potentially significant impacts that would be reduced to less than significant level with the implementation of identified mitigation measures for the following environmental topics:

- aesthetics (views, architectural compatibility and shadow only);
- air quality (construction dust [including PM₁₀] and emissions in the Downtown, odors);
- cultural resources (except as noted above as less than significant);
- hazards and hazardous materials;
- land use (use and density incompatibilities);
- noise (use and density incompatibilities, including from transit/transportation improvements);
- population and housing (induced growth, policy consistency/clean air plan);
- public services (except as noted below as significant); and
- transportation and circulation (intersection operations in the Downtown).

Significant unavoidable impacts were identified for the following environmental topics in the LUTE EIR:

- air quality (regional emissions, roadway emissions in the Downtown);
- noise (construction noise and vibration in Downtown);
- public services (fire safety);
- transportation/circulation (roadway segment operations);
- wind hazards, and
- policy consistency (clean air plan).

Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals of the Land Use and Transportation Element of the General Plan.

West Oakland Specific Plan EIR

The City certified the EIR for the WOSP in 2014. The WOSP identifies policies to guide future development in West Oakland by providing a comprehensive and multi-faceted strategy for development and redevelopment of vacant and/or underutilized commercial and industrial properties in strategic areas (Opportunity Areas) of West Oakland. The WOSP establishes a land use and development framework, identifies needed transportation and infrastructure improvements, and recommends implementation strategies needed to develop these areas. Subsequent activities under the WOSP are subject to environmental review requirements pursuant to the WOSP EIR. The effects of future growth and development within West Oakland were fully considered in the cumulative growth projections factored into the WOSP EIR analysis.

Environmental Effects Summary

The 2014 WOSP EIR (including its Initial Study Checklist) determined that development consistent with the WOSP would result in less than significant impacts related to the following environmental considerations: aesthetics (scenic resources, shadow, lighting, wind), air quality (clean air plan consistency, carbon dioxide concentrations), biological resources (wetlands, riparian, habitat conservation plan conflicts, cumulative impacts), greenhouse gas (GHG) emissions (except as noted below), land use, geology (earthquake/fault rupture, landslides), hydrology and water quality (waste discharge, groundwater, floods, dam failure, seiche/tsunami), noise (traffic, airport noise), population and housing, public services, transportation/circulation (congestion management program, travel times, safety), utilities and service systems, and mineral resources (loss). No impacts were identified for agricultural or forestry resources.

The 2014 WOSP EIR (including its Initial Study Checklist) determined that development consistent with the WOSP would result in potentially significant impacts that would be reduced to a less than significant

level with the implementation of identified mitigation measures and/or SCAs for the following environmental topics:

- aesthetics (light and glare),
- air quality (construction dust),
- biological resources (special status species, movement and breeding, local policy conflicts),
- cultural resources,
- geology (seismic shaking, erosion, unstable/expansive soil),
- hazards and hazardous materials,
- hydrology and water quality (construction water quality and runoff),
- noise (construction and operational, vibration), and
- transportation/circulation (construction period).

Significant unavoidable impacts were identified in the WOSP EIR pertaining to:

- air quality (odors, construction and operational criteria pollutant emissions, operational and exposure to toxic air emissions);
- GHG emissions (new stationary sources of GHG emissions, individual development projects); and
- transportation/circulation (existing plus project, cumulative plus project level of service effects at intersections).

Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals of the West Oakland Specific Plan.

Standard Conditions of Approval

The City established its Standard Conditions of Approval and Uniformly Applied Development Standards in 2008, and they have since been amended and revised several times.⁴ The City's SCAs are applied as conditions of approval regardless of a project's environmental determination. The SCAs incorporate policies and standards from various adopted plans, policies, and ordinances (such as the Oakland Planning and Municipal Codes, Oakland Creek Protection Ordinance, Stormwater Water Management and Discharge Control Ordinance, Oakland Protected Trees Ordinance, Oakland Grading Regulations, National Pollutant Discharge Elimination System [NPDES] permit requirements, Housing Element-related mitigation measures, California Building Code and Uniform Fire Code, among others), which have been found to substantially mitigate environmental effects. The SCAs are adopted as requirements of an individual project when it is approved by the City and are designed to, and will, substantially mitigate environmental effects. Note that the SCAs included in this document (**Attachment A**) are referred to using an abbreviation for the environmental topic area and are numbered sequentially for each topic area—e.g., **SCA-AIR-1**, **SCA -AIR-2**. The SCA title is also provided—i.e., **SCA-AIR-1: Dust Controls – Construction Related**.

Consistent with the requirements of CEQA, a determination of whether the project would have a significant impact occurred prior to approval decision on the proposed project and, where applicable,

⁴ The most recent revision to SCAs was published by the City of Oakland on November 5, 2018.

SCAs have been identified that will mitigate them. In some instances, exactly how the identified SCAs will be achieved awaits completion of future studies, an approach that is legally permissible where SCAs are known to be feasible for the impact identified, where subsequent compliance with identified federal, state, or local regulations or requirements apply, where specific performance criteria is specified and required, and where the proposed project commits to developing measures that comply with the requirements and criteria identified.

IV: PURPOSE AND SUMMARY OF THIS CEQA DOCUMENT

The purpose of this document is to evaluate the CEQA compliance of the project as proposed. Applicable CEQA sections are described below, each of which separately and independently provides a basis for CEQA compliance.

Consistency with Community Plan

Public Resources Code Section 21083.3 and State 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.”

The analysis in the Program EIRs—the LUTE EIR and the WOSP EIR—is applicable to the project and provides the basis for use of the Community Plan Exemption.

Qualified Infill Project

Public Resources Code Section 21094.5 and State CEQA Guidelines Section 15183.3 allow streamlining for certain qualified infill projects by limiting the topics that are subject to review at the project level, provided the effects of infill development have been addressed in a planning level decision, or by uniformly applied 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 adjoins existing qualified urban uses on at least 75 percent of the site’s perimeter;
- able to satisfy the performance standards provided in State CEQA Guidelines Appendix M; and
- are consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy

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

The analysis in the Program EIRs—the LUTE EIR and the WOSP EIR—is applicable to the project and provide the basis for use of Section 15183.3 for qualified infill projects.

Mitigation Measures and SCAs

This CEQA Analysis evaluates the specific environmental effects of the project as proposed and determines whether such impacts were adequately covered by the Program EIRs to allow the provisions of CEQA as listed above to apply. The following Checklist analysis incorporates by reference information contained in the General Plan LUTE and WOSP EIRs. The project is legally required to incorporate and/or comply with applicable requirements of mitigation measures identified in these prior Program EIRs as well as applicable SCAs. Therefore, mitigation measures (as applicable) are required of the project and applicable SCAs are assumed to be included as part of the project. See Attachment A for the full text of

applicable mitigation measures and/or SCAs included in this CEQA Analysis. (Note that this is not an exhaustive list of all SCAs that may be required by the City for the project.)

Project CEQA Compliance

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

Consistency with Community Plan

Based on the analysis conducted in this document, and pursuant to CEQA Guidelines Section 15183, and on a separate and independent basis, the project qualifies for streamlined review as a project consistent with a Community Plan, General Plan, or zoning. This CEQA document considers the analysis of the 1998 LUTE EIR and the 2014 WOSP EIR for the project as underlying Program EIRs. As described within this CEQA Analysis, the project is permitted in the zoning district where the project site is located and is consistent with the bulk, density, and land use standards envisioned in the General Plan and zoning. This CEQA Analysis (with Attachments) concludes that the project would not result in significant impacts that would be peculiar to the project or the project site; not result in new significant impacts not identified as significant project-level, cumulative, or off-site effects in the Program EIRs; and would not result in impacts that were previously identified in the Program EIRs as significant, but now determined as having a more severe adverse impact than that discussed in the Program EIRs. Findings regarding the project's consistency with the General Plan are included in Section V of this document.

Qualified Infill Project

This analysis indicates that the project is also eligible, on a separate and independent basis, for streamlined review as a Qualified Infill project and is generally consistent with the required performance standards for such projects provided in CEQA Guidelines Appendix M, as evaluated in **Attachment B**. This CEQA Analysis supports that the project would not cause any new specific effects or more significant effects than previously identified in applicable planning level EIRs, and that uniformly applicable development policies or standards (i.e., SCAs) would substantially mitigate the effects of the project. The project is proposed for development on a previously developed site in West Oakland and is surrounded by urban uses. Further, the project is consistent with the land use, density, building intensity, and applicable land use policies for the site.

No Further Review

Examination of the analysis, findings, and conclusions of the Program EIRs, as summarized in the CEQA Checklist analysis below, indicates that the prior Program EIRs adequately analyzed and covered the potential environmental impacts associated with the project. The project would not result in a new, peculiar, significant environmental impact or a substantial increase in the severity of a significant environmental impact than determined in the prior Program EIRs. The streamlining and tiering provisions of CEQA apply to the project. Therefore, no further review or analysis under CEQA is required.

SCAs identified in the WOSP EIR that would apply to the project are listed in Attachment A to this document, which is incorporated by reference into this CEQA Analysis. Because the SCAs are mandatory City requirements, the impact analysis for the project assumes that they will be imposed and implemented, which the project sponsor has agreed to do or ensure as part of the project. If this CEQA Analysis or its attachments inaccurately identifies or fails to list a mitigation measure or SCA, the applicability of that mitigation measure or SCA to the project is not affected. Most of the SCAs that are identified for the project were identified in the 2014 WOSP EIR; the 1998 LUTE EIR was developed prior to the City's application of SCAs.

V: SUMMARY OF FINDINGS

An evaluation of the proposed project is provided in the CEQA Checklist Analysis below. This evaluation concludes that the project requires no additional environmental review and that the project is consistent with the development density and land use characteristics established by existing zoning and General Plan policies for which an EIR was certified (i.e., the Program EIRs). As such, the project would be required to comply with the applicable City of Oakland SCAs (see Attachment A for a complete list of SCAs referred to and required by this CEQA Analysis). With implementation of the applicable SCAs, the project would not result in a substantial increase in the severity of significant impacts that were previously identified in the General Plan or any new significant impacts that were not previously identified in the previous EIRs.

In accordance with Public Resources Code Sections 21083.3 and 21094.5, and State CEQA Guidelines Sections 15183 and 15183.3, and as set forth in this CEQA Analysis, the project qualifies for CEQA tiering/streamlining because the following findings can be made:

- **Consistency with Community Plan or Zoning (CEQA Guidelines Section 15183):** The following analysis demonstrates that the project is consistent with the development density established by the General Plan LUTE, the West Oakland Specific Plan and existing zoning for which EIRs were certified (i.e., the Program EIRs). The project is consistent with the WOSP and will not result in significant impacts that were not previously identified as significant project-level, cumulative, or offsite effects in the WOSP EIR.

The project is permitted in the zoning district where the project site is located (CIX-1A and CIX-1B/S-19) with a Conditional Use Permit for the work/live uses, and is consistent with the bulk, density, and land use standards envisioned in the General Plan LUTE and the Oakland Planning Code. The analysis presents substantial evidence that there would be no significant impacts peculiar to the project or its site, and that the project's potentially significant effects have already been addressed as such in the prior Program EIRs or will be substantially mitigated by the imposition of SCAs, as further described in Attachment A. No further environmental documents are required in accordance with CEQA Guidelines Section 15183.

- **Qualified Infill Project (CEQA Guidelines Section 15183.3):** The following analysis demonstrates that the project is located in an urban area and on a site that has been previously developed; satisfies the performance standards provided in CEQA Guidelines Appendix M; and is consistent with the General Plan land use designation, density, building intensity and applicable policies. As such, this environmental review is limited to an assessment of whether the project may cause any unique project-specific effects, and relies on uniformly applicable development policies or standards to substantially mitigate cumulative effects.

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

Edward Manasse, Environmental Review Officer

Date

VI: PROJECT DESCRIPTION

The following section of this document describes the proposed 2715 Adeline Street Project evaluated in this CEQA Analysis and includes a description of the project site, existing site conditions, the proposed development, and the required project approvals.

Project Location

The project site is located on the west side of Adeline Street at 2715 Adeline Street, 1173 28th Street, and 2700 Magnolia Street. The site is located between Adeline Street, 28th Street, and Magnolia Street in Oakland, California. Adeline Street is a north–south connection through the McClymonds neighborhood of West Oakland (**Figure 1**).

The project site consists of three parcels totaling 1.27 acres. The project site's APNs are 005-0446-001-02, 005-0446-001-01, and 005-0446-008-01. The site is located south of Interstate 580 and north of West Grand Avenue.

Existing Conditions and Surrounding Land Uses

The project site includes a fire-damaged 20,328-square-foot portion of the former Coast Sausage building on the east side, the concrete slab for the demolished portion of the former building on the northwest side, and a parking area paved with concrete and asphalt on the southwest side. There are no active uses on the site (**Figure 2**).

Commercial and multifamily buildings are located adjacent to the project site to the south and east. Commercial buildings are also located to the north and west, along Magnolia Street and 28th Street. Single-family residences are on Adeline Street northeast and southeast of the project site.

General Plan and Zoning Designations

General Plan

The Oakland General Plan designates the project site with the Business Mix land use designation. The intent of the Business Mix classification is to, “create, preserve and enhance areas of the City that are appropriate for a wide variety of business and related commercial and industrial establishments.” These areas may accommodate a mix of businesses such as light industrial, manufacturing, food processing, commercial, bioscience and biotechnology, research and development, environmental technology, business and health services, air, truck and rail-related transportation services, warehouse and distribution facilities, office and other uses of similar business character. The maximum floor area ratio (FAR) for this land use classification is 4.0. As indicated in the LUTE:

“The Business Mix classification is a flexible ‘economic development zone’, which strives to accommodate older industries and anticipate new technologies including both commercial and industrial operations. These areas contain a wide range of business and business serving activities. Different examples of development that would fall into this classification include Edgewater Business Park, commercial or other market-supported development on the freeway frontage along I-880, and portions of West Oakland that have historically been very business intensive.

Zoning

The City Zoning Map (**Figure 3**) identifies that zoning of the project site is split between two zoning districts. The easterly portion of the project site fronting along Adeline Street is zoned CIX-1A, and the westerly portion of the project site fronting along Magnolia Street is zoned CIX-1B. Both of these CIX



Figure 1. Project Location

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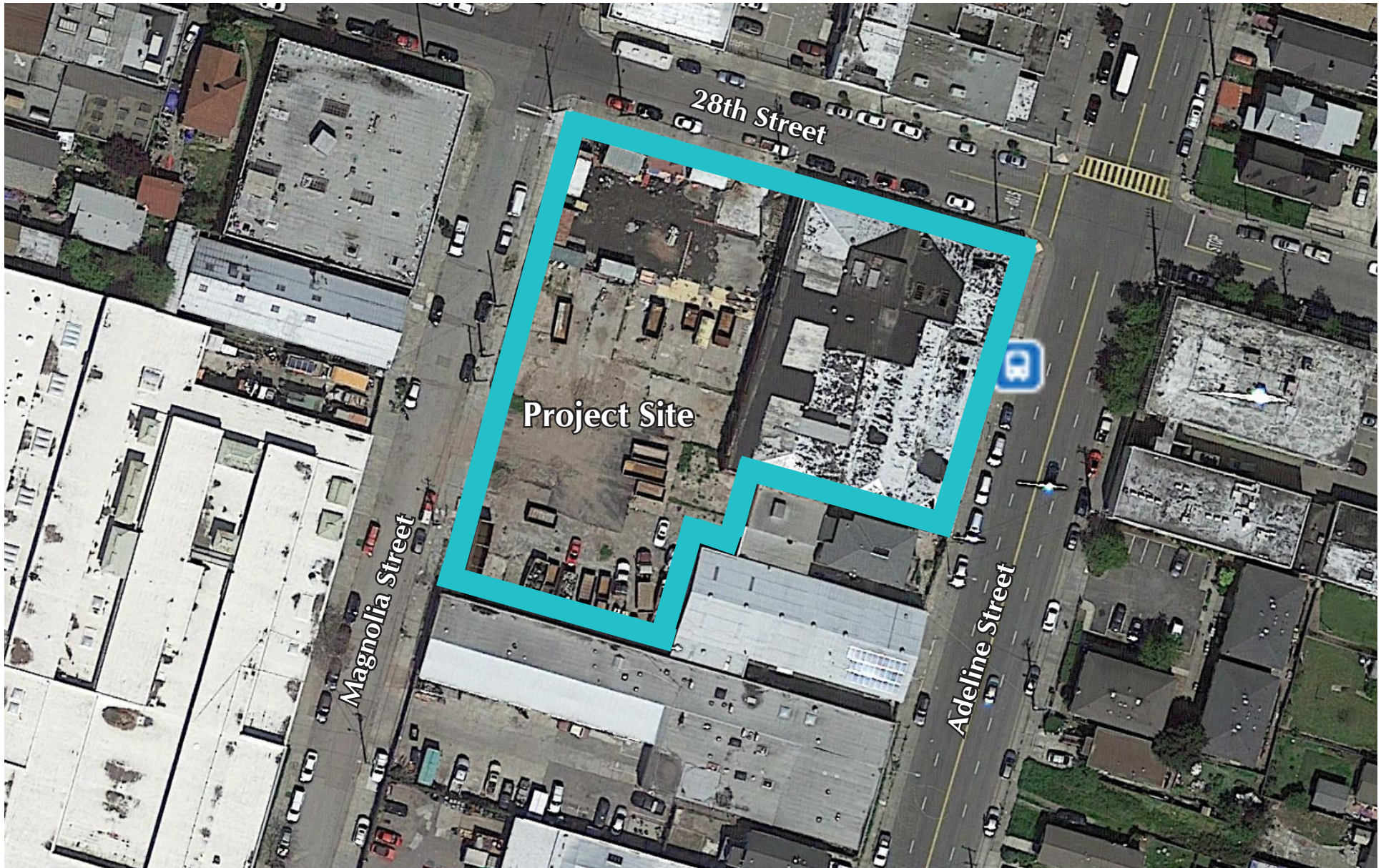


Figure 2. Existing Site

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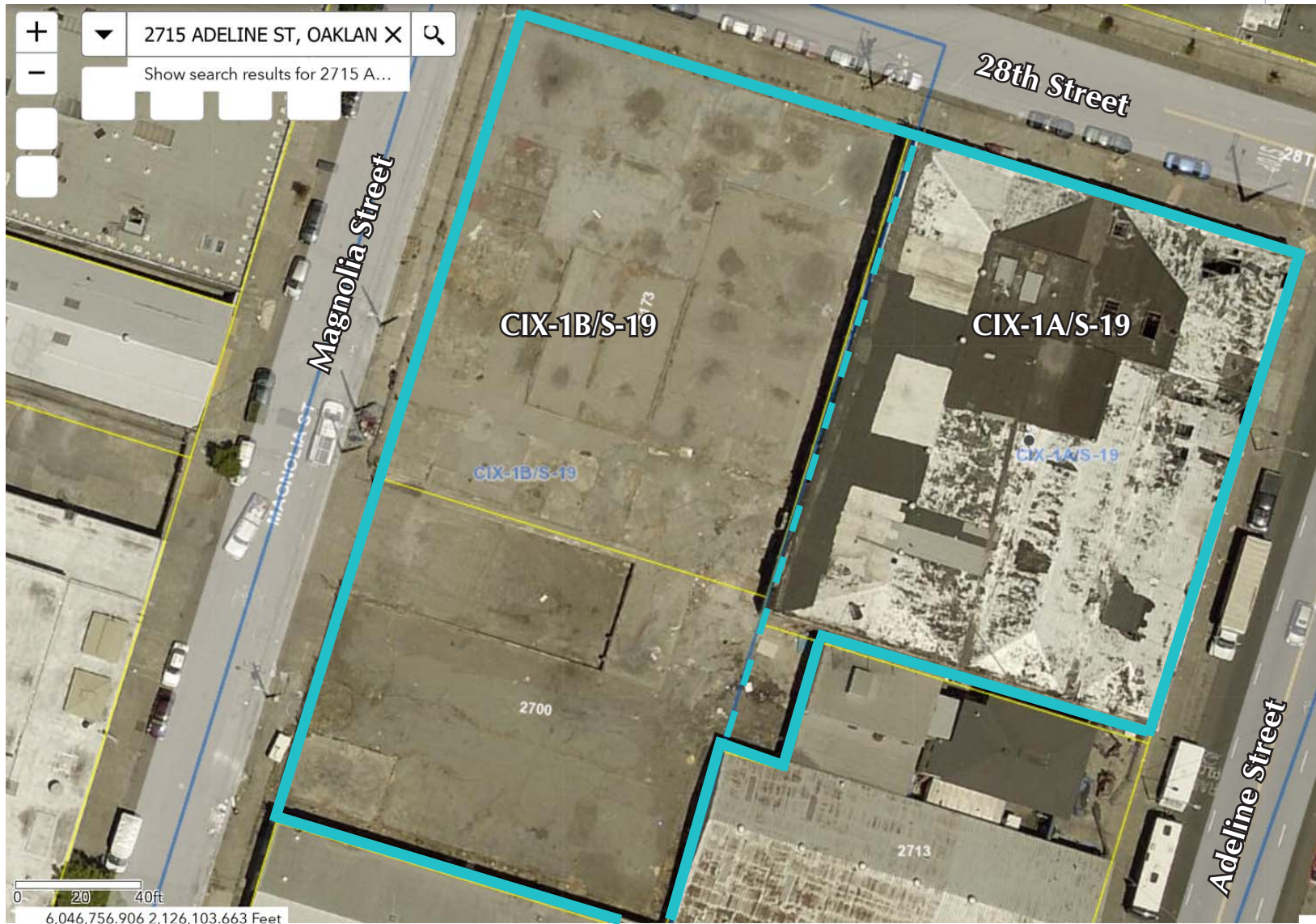


Figure 3. Site Zoning

Source: City of Oakland Zoning Map
September 2019

zones (as well as other CIX, IG, and IO industrial zoning districts) are intended to create, preserve, and enhance areas for industrial uses including manufacturing, scientific and product-related research and development, construction, transportation, warehousing/storage/distribution, recycling/waste-related activities, clean technology, and similar uses. The primary purposes of these areas are to support Oakland's economic base and to provide employment opportunities.

The intent of the CIX-1A and CIX-1B industrial zoning districts is to implement the West Oakland Specific Plan.

- The West Oakland Plan Area, Commercial Industrial Mix-1A Industrial Zone (Business Enhancement – or CIX-1A Zone) is intended to create, preserve, and enhance industrial areas in the West Oakland Specific Plan Area that are appropriate for incubator space for specific industry groups, adaptable space for artisans and craftspeople, and flexible small spaces for start-up businesses.
- The West Oakland Plan Area, Commercial Industrial Mix-1B Industrial Zone (Low Intensity Business – or CIX-1B Zone) is intended to support industrial areas in the West Oakland Specific Plan Area that are appropriate for a broad range of new custom and light manufacturing, light industrial, warehouse, research and development, and service commercial uses.

Health and Safety Protection Overlay (S-19)

The intent of the S-19 Health and Safety Protection Combining Zone is to, “promote the public health, safety and welfare by ensuring that activities which use hazardous material substances or store hazardous materials, hazardous waste, or explosives locate in appropriate locations and develop in such a manner as not to be a serious threat to the environment, or to public health, particularly to residents living adjacent to industrial areas where these materials are commonly used, produced or found.” Accordingly, this overlay zone prohibits electroplating, hazardous waste management, industrial or transfer storage and residuals repositories, and activities that involve manufacturing, storing or use of explosives. The following additional regulations apply within the S-19 Health and Safety Protection Combining Zone:

- Storage and use of all hazardous materials and hazardous waste shall be reviewed and approved by the Fire Department prior to commencement of operation or any alteration of activity. A risk management plan may also be required, per the Certified Program Uniform Assistance (CUPA) Ordinance (O.M.C. Chapter 8.42).
- No storage or use of hazardous materials and waste can be located within three hundred (300) feet of a Residential, Institutional, or Open Space Zone without written approval or consent of the Fire Department.
- The City of Oakland Fire Department may require a Process Hazard Analysis, a Risk Management Plan, and/or a Local Hazardous Materials Business Plan. The Fire Department may also establish limitations on the location for storage or use of hazardous material, containment measures for storage or use of hazardous materials, and/or limitations or prohibitions on the storage or use of specific hazardous materials or specific processes that use or combine hazardous materials.

Proposed Project Description

The project would retain the existing façades of the former Coast Sausage building facing 28th Street and Adeline Street, but would demolish the remaining portions of this existing building. Redevelopment of the site would include construction of an approximately 129,125-square-foot (gross), five-story (85-feet high) building (see architectural renderings, **Figure 4**) that would contain a ground-floor light



1 VIEW FROM ADELINE AND 28TH
N/A



2 VIEW FROM WITHIN THE COURTYARD
N/A



3 VIEW FROM MAGNOLIA AND 28TH
N/A



4 VIEW FROM ADELINE TOWARD 28TH
N/A

industrial/manufacturing use, with work/live units above the ground floor. The building design is unique, as indicated below:

- The ground floor is an “L”-shaped, Type 1 (non-combustible) building with a 10-foot setback along Magnolia Street, the southerly portion of the lower “L” shape at the south property line, and the retained existing façade at the property line along 28th Street and Adeline Street (**Figure 5**). Internally, the ground floor includes approximately 14,630 square feet of light industrial/manufacturing space fronting onto 28th Street and along a portion of Adeline Street, and approximately 17,440 square feet of on-site structured parking area along Magnolia Street and an internal off-street loading zone. Within the corner of the “L” shape of the building is an entry area open to the sky with steel columns and beams, and a landscaped courtyard also open to the sky above.
- Floors 2 through 5 comprise a similar “L” shape that also fronts onto Magnolia Street and 28th Street, but with a narrower depth that provides an internal building step-back from the lower courtyard and from a portion of the parking podium rooftop (see typical floor plans, **Figure 6**). Each leg of these “L” shaped buildings is actually comprised of 2 narrow, rectangular buildings (4 rectangular buildings total), connected by a breezeway corridor. Each of these buildings are Type III-A construction (protected combustible with a minimum 2-hour fire-protected exterior walls). Internally, these 4 rectangular buildings house individual commercial/industrial work and live quarters (work /live spaces).
- Each floor of the project (floors 1 through 5) would provide high floor-to-ceiling heights - 19 feet high on the ground floor and 16 feet high on floors 2 through 5 (see elevations, **Figure 7**). These tall ceiling heights enable a mezzanine level above portions of the ground floor (primarily for utilities and storage), and loft space internal to each work/live space on floors 2 through 5.

The work/live spaces include two floor plan types. Type 1 is an 882-square-foot (gross) lower floor area, and Type 2 has an 800-square-foot (gross) lower floor area. Each work/live space has a workshop/studio (atelier) open to the high ceiling, a small kitchen, bedroom, office space and ADA-accessible bathroom on the floor level, and a small office, bedroom and bath in the loft (or mezzanine) space (see typical work/live floor plans, **Figure 8**).

The project provides for 138 total off-street parking spaces, all within an approximately 17,440 square-foot structured parking area. This is achieved by using mechanized “puzzle” parking lifts that can stack vehicles 4-high for 120 of these parking spaces, with 5 ADA-designated on-grade parking spaces and 13 additional on-grade spaces. Also internal to the parking structure is a truck-loading zone with access to the internal portion of the ground floor. Vehicles would access the parking structure from a single driveway on Magnolia Street.

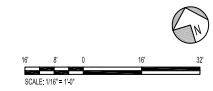
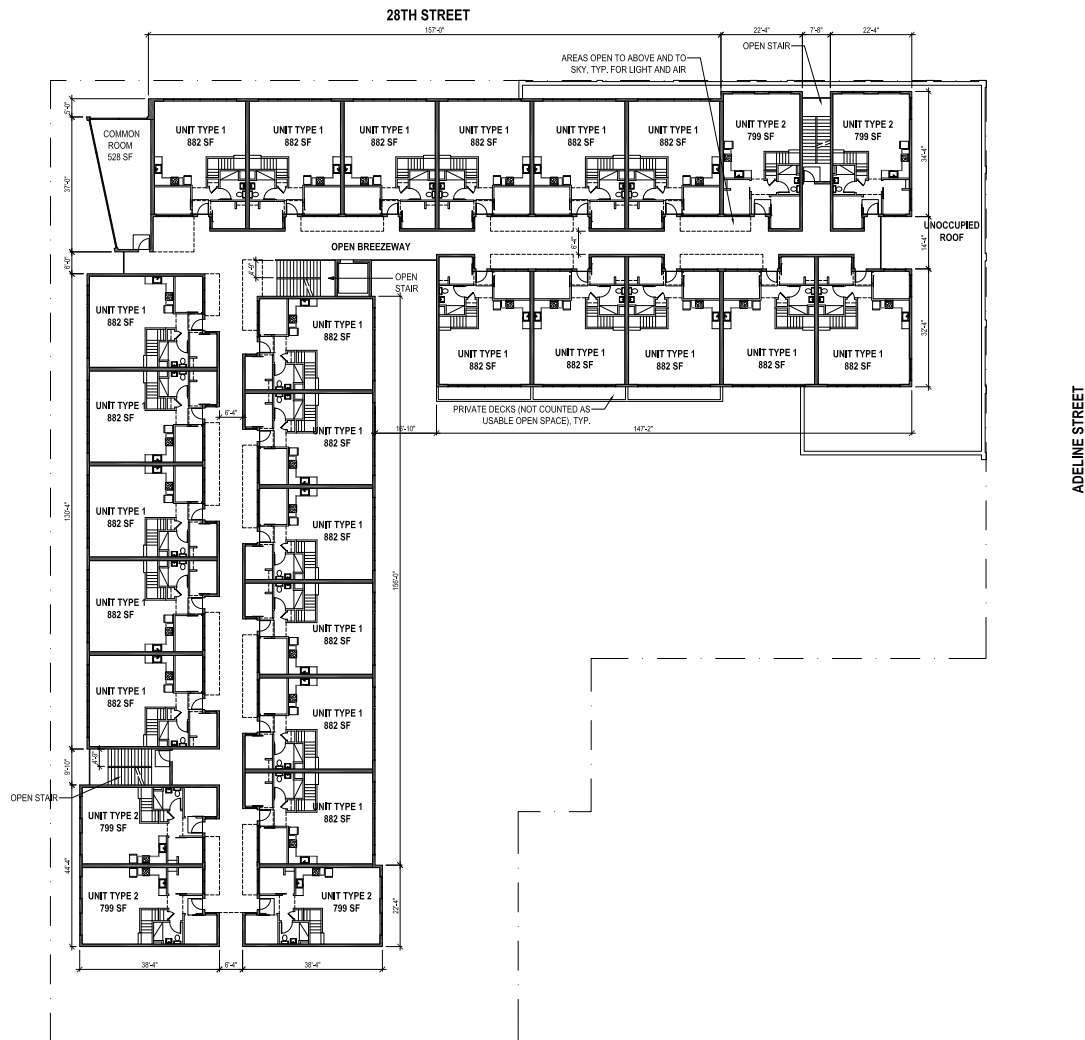
The project site provides public entrances for pedestrian access on both Adeline Street and 28th Street. Pedestrian access to the work/live units would be from Adeline Street, 28th Street and Magnolia Street. An internal staircase and an elevator provide access to the upper floors.

Site improvements include drainage and utility infrastructure, the ground-floor courtyard, roof-mounted solar panels, and new street trees and perimeter landscaping features along the frontages on Magnolia, 28th and Adeline Streets. The project would be connected to existing water, sewer, gas, and electrical lines from the public right-of-way. The project would be served by the East Bay Municipal Utility District (EBMUD) for water service, and would connect to the City of Oakland wastewater system.

Tables 1 and 2 provide a summary of the proposed development.



Source: YHLA Architects
September 2019

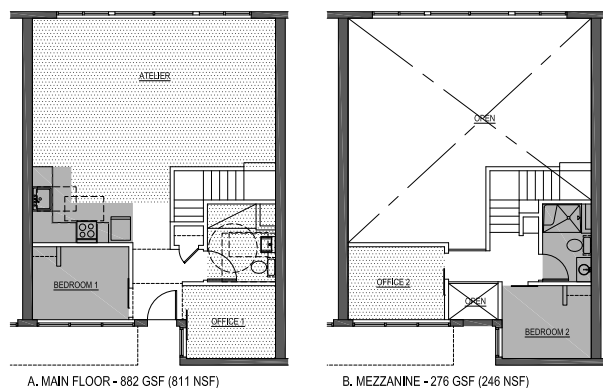


SECOND FLOOR PLAN

Figure 6. Typical Floor Plan

Source: YHLA Architects
September 2019



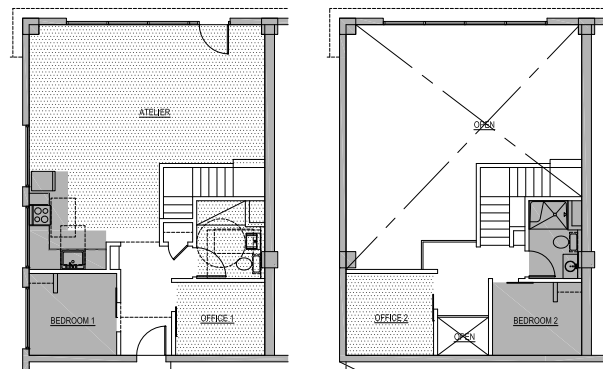


A. MAIN FLOOR - 882 GSF (811 NSF)

B. MEZZANINE - 276 GSF (246 NSF)

WORK/LIVE CALCULATIONS - UNIT TYPE 1		
WORK AREAS	DUAL-PURPOSE AREAS	LIVE AREAS
1. ATELIER - 420 NSF	1. WALKS/STAIRS - 165 NSF	1. KITCHEN - 59 NSF
2. OFFICE 1 - 73 NSF		2. BED 1 - 80 NSF
3. OFFICE 2 - 82 NSF		3. BED 2 - 77 NSF
4. ADA BATH - 61 NSF		4. BATH - 44 NSF
TOTAL: 636 NSF (80%)	TOTAL: 165 NSF (16%)	TOTAL: 256 NSF (24%)

1 UNIT TYPE 1
SCALE: 3/16"=1'-0"

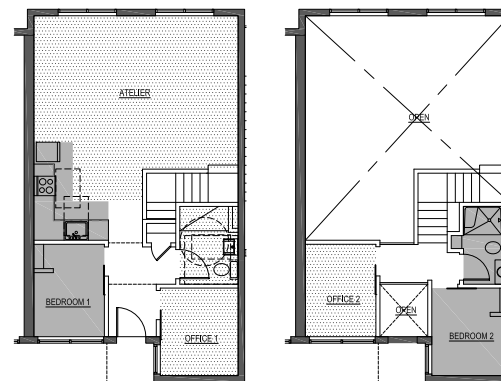


A. MAIN FLOOR - 897 GSF (822 NSF)

B. MEZZANINE - 297 GSF (270 NSF)

WORK/LIVE CALCULATIONS - UNIT TYPE 3		
WORK AREAS	DUAL-PURPOSE AREAS	LIVE AREAS
1. ATELIER - 418 NSF	1. WALKS/STAIRS - 199 NSF	1. KITCHEN - 57 NSF
2. OFFICE 1 - 74 NSF		2. BED 1 - 83 NSF
3. OFFICE 2 - 83 NSF		3. BED 2 - 73 NSF
4. ADA BATH - 61 NSF		4. BATH - 44 NSF
TOTAL: 636 NSF (58%)	TOTAL: 199 NSF (18%)	TOTAL: 257 NSF (24%)

3 UNIT TYPE 3
SCALE: 3/16"=1'-0"



A. MAIN FLOOR - 800 GSF (725 NSF)

B. MEZZANINE - 264 GSF (239 NSF)

WORK/LIVE CALCULATIONS - UNIT TYPE 2		
WORK AREAS	DUAL-PURPOSE AREAS	LIVE AREAS
1. ATELIER - 344 NSF	1. WALKS/STAIRS - 163 NSF	1. KITCHEN - 55 NSF
2. OFFICE 1 - 75 NSF		2. BED 1 - 74 NSF
3. OFFICE 2 - 78 NSF		3. BED 2 - 77 NSF
4. ADA BATH - 54 NSF		4. BATH - 46 NSF
TOTAL: 549 NSF (57%)	TOTAL: 163 NSF (17%)	TOTAL: 252 NSF (26%)

2 UNIT TYPE 2
SCALE: 3/16"=1'-0"



A. MAIN FLOOR - 938 GSF (868 NSF)

B. MEZZANINE - 295 GSF (270 NSF)

WORK/LIVE CALCULATIONS - UNIT TYPE 4		
WORK AREAS	DUAL-PURPOSE AREAS	LIVE AREAS
1. ATELIER - 457 NSF	1. WALKS/STAIRS - 195 NSF	1. KITCHEN - 80 NSF
2. OFFICE 1 - 83 NSF		2. BED 1 - 80 NSF
3. OFFICE 2 - 80 NSF		3. BED 2 - 83 NSF
4. ADA BATH - 60 NSF		4. BATH - 50 NSF
TOTAL: 680 NSF (60%)	TOTAL: 195 NSF (16%)	TOTAL: 273 NSF (24%)

4 UNIT TYPE 4
SCALE: 3/16"=1'-0"

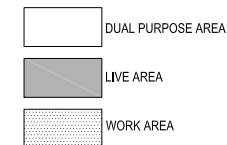


Figure 8. Typical Work/Live Floor Plan

Source: YHLA Architects
September 2019

Table 1. Project Development Summary

<u>Description</u>	<u>Proposed Project</u>
Lot Area	55,293 sf (approx. 1.27 acres)
Gross Building Area (not including loft/mezzanine space)	129,195 sf
Building Height	85 feet
Gross Floor Area (not including loft/mezzanine space, parking, or other misc.)	109,919 sf
Light Industrial/Commercial space	19,460 sf
Work/Live units	106
Courtyard and Roof Deck Open Space	13,042 sf
Vehicle Parking Spaces	138 total (109 work/live spaces, 22 visitor spaces, and 7 spaces for light manufacturing employees)

Table 2: Net Building Space

	<u>Lt. Mfg.</u>	<u>Work/Live</u>				<u>Other</u>	<u>Total</u>
		<u>Work</u>	<u>Live</u>	<u>Dual</u>	<u>Total</u>		
Floor 1	14,630					17,960	32,590
Floor 2		14,553	3,703	3,211	21,467	529	21,996
Loft		2,184	3,189	1,234	6,607		6,607
Floor 3		14,553	3,703	3,211	21,467	529	21,996
Loft		2,184	3,189	1,234	6,607		6,607
Floor 4		14,553	3,703	3,211	21,467	529	21,996
Loft		2,184	3,189	1,234	6,607		6,607
Floor 5		13,607	3,445	2,965	20,017		20,017
Loft		2,032	2,943	1,154	6,129		6,129
Total, Floor Level only	14,630	57,266			84,418	19,547	118,595
Total, with Loft	14,630	65,850	27,064	17,454	110,368	19,547	144,545
		<u>Work</u>	<u>Non-Work</u>			<u>Other</u>	
Work		80,480	44,518			19,547	144,545
Non-Work		56%	31%			14%	100%

Project Construction

Construction of the project would occur after remediation of the site has been completed pursuant to ACDEH approvals, including the Corrective Action Plan, the Corrective Action Implementation Plan, the Construction Soil and Groundwater Management Plan, the Remedial Action Completion Report, and the Vapor Mitigation Engineering Controls Record Report of Construction detailed in Section VIII.7 – Hazards and Hazardous Materials.

Construction is anticipated to last approximately 20 months, with the project built in one phase. Consistent with the City's Noise Ordinance, construction would generally occur between 7:00 a.m. and 7:00 p.m. Monday through Friday and between 9:00 a.m. and 5:00 p.m. on Saturdays. No construction would occur on Sundays or federal holidays. Construction activities would consist of renovating the

existing building façade along Adeline and 28th Street, preparing the site by removing existing hard surfaces and building slab foundations, and constructing new structures. Site preparation would require minor excavation and off-haul of demolished materials. Construction activities would involve the use of heavy equipment such as bulldozers, scrapers, backhoes, loaders, compactors, rollers, and a paving machine. The construction crew would vary depending on the construction phase, but would comprise between approximately 30 to 60 workers on any given day.

Project Approvals

The project requires the following discretionary actions or approvals, including without limitation:

Actions by the City of Oakland

- Regular Design Review for new building construction
- Approval of Conditional Use Permit
- Encroachment permits for construction work within and close to public rights-of-way (Chapter 12.08 of the Oakland Municipal Code)
- Grading and building permits

Actions by Other Agencies

A number of other public agencies' approval and authorization will or may be required to implement the project. These agencies and their approvals include:

- EBMUD – Approval of new service requests and water meter installation.
- Regional Water Quality Control Board (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.
- Bay Area Air Quality Management District (BAAQMD) – Issuance of permits for installation and operation of the emergency generator. Acceptance of notice of asbestos abatement and demolition activities, if any.
- Alameda County Department of Environmental Health (ACDEH) – Approval for any proposed remedial action and required clearances.

VII. PROJECT CONSISTENCY WITH COMMUNITY PLAN OR ZONING: CEQA GUIDELINES SECTION 15183

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 an EIR does not need to be prepared for the project “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.”

The following analysis provides substantial evidence to support a conclusion that the project qualifies for streamlined review under CEQA Guidelines Section 15183 as a project consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified.

Criterion Section 15183 (a): General Plan, Community Plan, and Zoning Consistency

Yes No

☒ ☐ **The project is consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified.**

The project site is within the McClymonds neighborhood in West Oakland, where the existing land use pattern consists of a mix of residential, civic, and commercial uses. Public transit is provided by several AC Transit bus routes located within 0.5 mile of the project site.

The General Plan land use designation for the project site is Business Mix, and the site is within a Commercial Industrial Mix zone (CIX-1). These land use and zoning categories are specifically intended to “create, preserve, and enhance the industrial areas of West Oakland that are appropriate for a wide variety of commercial and industrial establishments,” and to “accommodate existing industries and provide flexibility to anticipate new technologies.” The CIX-1 zone is intended to preserve the industrial areas of West Oakland for a wide range of commercial and industrial establishments, accommodating existing older industries and providing flexibility for new technologies. The CIX-1 zone allows a broad range of custom and light manufacturing, light industrial, warehouse, research and development, clean/green industries, and service commercial uses. The CIX-1 zone allows work/live uses under special conditions.

The project site’s zoning is also specific to the West Oakland Specific Plan, within both a Business Enhancement (CIX-1A) and Low Intensity Business (CIX-1B), and with Health and Safety Protection overlay (S-19). The purpose of the CIX-1A zone is to facilitate more intensive use of existing buildings and facilities which remain structurally sound and economically viable, thereby lowering vacancies and increasing utilization. The purpose of the CIX-1B zone is to identify those sites within West Oakland’s business-oriented Opportunity Areas where new business and light industrial development should occur, generally in similar scale and character as the surrounding industrial and business area. Generally, these sites are vacant or underutilized lots or properties which contain structures so heavily blighted or compromised as to be a hazard or a detriment to the economic development of surrounding properties. Frequently, these sites also have a legacy of soil and groundwater contamination, in need of cleanup and remediation. The S-19 Health and Safety Protection overlay is intended to control the storage or use

of hazardous materials and waste within 300 feet of a residential, institutional, or open space zoning district.

General Plan Consistency

As **Table 3** demonstrates, the project would be consistent with the relevant policies of the General Plan and LUTE.

Table 3: Evaluation of Consistency with General Plan and LUTE

<u>Relevant Policies, Principles, and Guidelines of the General Plan and LUTE</u>	<u>Project Consistency</u>
<p>Policy N1.1 Concentrating Commercial Development. Commercial development in the neighborhoods should be concentrated in areas that are economically viable and provide opportunities for smaller scale, neighborhood-oriented retail.</p>	<p>Consistent. The ground floor light industrial/ commercial space would be accessible directly by pedestrians from the sidewalk and therefore neighborhood-oriented.</p>
<p>Policy N1.2 Placing Public Transit Stops. The majority of commercial development should be accessible by public transit</p>	<p>Consistent. Numerous AC Transit bus routes are all within 0.5 mile of the project site.</p>
<p>Policy N1.5 Designing Commercial Development. Commercial development should be designed in a manner that is sensitive to surrounding residential uses.</p>	<p>Consistent. The design and scale of the proposed light industrial/commercial space would not be visually discordant with the Business Mix character of the surrounding blocks. The proposed retention of existing brick facades of the former industrial building would retain consistency with older surrounding buildings that remain.</p>
<p>Policy N1.6 Reviewing Potential Nuisance Activities. The City should closely review any proposed new commercial activities that have the potential to create public nuisance or crime problems, and should monitor those that are existing. These may include isolated commercial or industrial establishments located within residential areas, alcoholic beverage sales activities (excluding restaurants), adult entertainment, or other entertainment activities.</p>	<p>Consistent. Although no specific tenant has been identified for the proposed ground floor light industrial/commercial space or for any individual work/live spaces, the project is not proposing to include any alcoholic beverage sales activities (excluding restaurants), adult entertainment, or other entertainment activities. The project would not be an isolated commercial or industrial establishment located within residential area.</p>
<p>Policy N3.1 Facilitating Housing Construction. Facilitating the construction of housing units should be considered a high priority for the City of Oakland.</p>	<p>Consistent. The project would involve redevelopment of the site to add 106 work/live units. Although these units are not considered housing units pursuant to the City Housing Element, they would provide “live” space for working tenants of the building.</p>
<p>Policy N3.2 Encouraging Infill Development. In order to facilitate the construction of needed housing units, infill development that is consistent with the General Plan should take place throughout the City of Oakland.</p>	<p>Consistent. The project site is surrounded by development and represents an infill development opportunity.</p>
<p>Policy N3.8 Required High-Quality Design. High-quality design standards should be required of all new residential construction. Design requirements and permitting procedures should be developed and implemented in a manner that is sensitive to the added costs of those requirements and procedures.</p>	<p>Consistent. The project would be designed pursuant to California Building Code and other applicable codes, and would be subject to Design Review approval by the City.</p>
<p>Policy N3.10 Guiding the Development of Parking.</p>	<p>Consistent. The project would provide 133 parking spaces in a covered ground-level garage on the project site, with 106</p>

Off-street parking for residential buildings should be adequate in amount and conveniently located and laid out, but its visual prominence should be minimized.

Policy N7.1 Ensuring Compatible Development.

New residential development in Detached Unit and Mixed Housing Type areas should be compatible with the density, scale, design, and existing or desired character of surrounding development.

Policy N7.2 Defining Compatibility.

Infrastructure availability, environmental constraints and natural features, emergency response and evacuation times, street width and function, prevailing lot size, predominant development type and height, scenic values, distance from public transit, and desired neighborhood character are among the factors that could be taken into account when developing and mapping zoning designations or determining compatibility. These factors should be balanced with the citywide need for additional housing.

Policy N9.7 Creating Compatible but Diverse Development.

Diversity in Oakland's built environment should be as valued as the diversity in population. Regulations and permit processes should be geared toward creating compatible and attractive development, rather than "cookie cutter" development.

Policy N11.4 Alleviating Public Nuisances.

The City should strive to alleviate public nuisances and unsafe and illegal activities. Code Enforcement efforts should be given as high a priority as facilitating the development process. Public nuisance regulations should be designed to allow community members to use City codes to facilitate nuisance abatement in their neighborhood.

Policy C.2.1 Pursuing Environmental Cleanup.

The environmental cleanup of contaminated industrial properties should be actively pursued to attract new users in targeted industrial and commercial areas.

spaces reserved for project tenants, 22 spaces for visitors and 7 spaces for parking to serve the light industrial space. This corresponds to 1.0 space per work/live unit, 1 space per 5 units for visitors, and 1 space per 1,500 square feet of light industrial use – consistent with Oakland Planning Code Section 17.73.040.

Consistent. The project's choice of materials, design features, and scale of development would be compatible with existing character of surrounding development.

Consistent. The project design would be consistent with the values that define compatibility. The project is located near infrastructure for utilities, transit, and community services. In scale, height, and development type, the project would be consistent with existing community character. The work/live uses would be compatible with the Business Mix land use goals in the General Plan.

Consistent. The project's choice of materials, design features, and scale of development would be compatible with existing character of surrounding development and is subject to Design Review approval by the City. Its design is unique, incorporated older brick facades with new modern materials, and is business/industrial in character.

Consistent. The existing vacant and blighted project site would be redeveloped to accommodate new work/live and light industrial/commercial uses.

Consistent. Prior use of the site resulted in contamination of soil, soil vapor, and groundwater beneath the site from petroleum hydrocarbon and volatile organic compounds. Environmental investigation and remediation activities at the project site are being overseen by ACDEH. The applicant has entered into a Voluntary Cleanup Agreement to remediate the project site during construction. The Project will be required to implement the recommendations of the applicable Corrective Action Plan to remediate the site, as well as to continue monitoring of the site and reporting to ACDEH and the Regional Water Quality Control Board.

West Oakland Specific Plan Consistency

As **Table 4** demonstrates, the project would be consistent with the relevant policies and guidelines of the West Oakland Specific Plan.

Table 4: Evaluation of Consistency with General Plan and LUTE

<u>Relevant Policy-Based Strategies of the WOSP</u>	<u>Project Consistency</u>
<p>Business Enhance-1 Retain existing buildings unless infeasible, recognizing the capital investment that has already been made and acknowledging the architectural and historical character that many of these buildings possess.</p>	<p>Consistent. The project would retain the unique brick façade of the existing building facing 28th and Adeline streets.</p>
<p>Business Enhance-2 Build upon existing business activities in West Oakland to create additional living wage job opportunities that provide employment to West Oakland residents.</p>	<p>Consistent. The project would redevelop the site for continued industrial/commercial uses, with the addition of work/live uses.</p>
<p>Business Enhance-6 Discourage removal of existing structures for surface parking for cars or trucks, or for storage of shipping containers. Shipping containers used as an architectural form for new adaptive and perhaps temporary ‘pop-up’ uses may be considered, based on a design review approval.</p>	<p>Consistent. The project would redevelop the site for industrial/commercial and work/live uses with a new building. The existing building has suffered from fire damage and previously associated buildings of this former industrial complex have already been removed. The existing structures would not be replaced by surface parking for cars or trucks, or for storage of shipping containers.</p>
<p>Business Enhance-8 Recognize that there are different business market sectors and types of uses within the various sub-areas of West Oakland, and seek to retain viable existing building space to provide a diversity of rents and land values geared toward these targeted market sectors.</p>	<p>Consistent. The project would redevelop the site for industrial/commercial and work/live uses, providing viable building space for a diversity of rents geared toward a diverse mix of creative economy arts and emerging market sector uses.</p>
<p>Low Intensity Bus-1 Capture a greater share of the shifting regional market, which is seeing a change from traditional industrial use to more modern flexible space that can accommodate a wide variety of business applications.</p>	<p>Consistent. The project would redevelop the site for industrial/commercial and work/live uses, containing modern flexible space that can accommodate a wide variety of business applications.</p>
<p>Low Intensity Bus -2 Develop marketing and outreach programs to target the attraction of advanced manufacturing companies and other “new economy” commercial ventures, as well as the expansion of Oakland's creative economy arts and “makers” industries.</p>	<p>Consistent. The project would redevelop the site for industrial/commercial and work/live uses. These work spaces would serve the expansion of Oakland's creative economy and arts industry.</p>
<p>Low Intensity Bus -4 As new developments occur, leverage the increased investment of private capital to cleanup and redevelop previously contaminated sites.</p>	<p>Consistent. Prior use of the site resulted in contamination of soil, soil vapor, and groundwater beneath the site from petroleum hydrocarbon and volatile organic compounds. Environmental investigation and remediation activities at the project site are being overseen by ACDEH. The applicant has entered into a Voluntary Cleanup Agreement to remediate the project site during construction. The Project will be required to implement the recommendations of the applicable Corrective Action Plan to remediate the site, as well as to continue monitoring of the site and reporting to ACDEH and the Regional Water Quality Control Board.</p>

Low Intensity Bus-6

Limit the permitted Floor Area Ratio of those lots designated for lower intensity business and industrial use as a means of discouraging speculative higher use, retaining the lower intensity character of the area, and preserving relatively affordable rents and land values.

Consistent. The floor area ratio in the CIX-1A and -1B zones is 2.0, which is less than the 4.0 allowed in CIX-1. The floor area ratio for the project would be 2.0, consistent with the CIX-1A and CIX-1B zoning.

Zoning Consistency

As **Table 5** demonstrates, the project would be consistent with the relevant standards of the CIX-1A and CIX-1B zoning district.

Table 5: Evaluation of Consistency with CIX-1 Zone Development Standards

<u>Development Standards</u>	<u>CIX-1A / CIX-1B Overlay Zone</u>	<u>Project Consistency</u>
Minimum Lot Frontage	25 feet	Consistent. The project frontage would meet the minimum of 25 feet.
Minimum Lot Width	25 feet	Consistent. As a 55,293-square-foot site, the project site would meet the minimum lot width.
Minimum Lot Area (square feet)	5,000 sf	Consistent. As a 55,293-square-foot site, the project site would meet the minimum lot area.
Floor Area Ratio <i>Greater than 300 feet of a residential zone boundary</i>	2.0	Consistent. The project floor area ratio would be 2.0.
Maximum Height	85 feet	Consistent. The maximum building height would be 85 feet.
Minimum Front Yard Setback	0 feet	Consistent. The project would meet the minimum front yard setback.
Minimum Rear Yard Setback	0 feet	Consistent. The project would meet the minimum rear yard setback.
Minimum Interior Yard Setback	0 feet	Consistent. The project would meet the minimum interior yard setback.
Minimum Street Side Yard Setback of A Corner Lot	10 feet	Consistent. The project would meet the minimum street side yard setback.
Site Landscaping	5%	Consistent. The ground-floor landscaped courtyard meets the minimum 5% for site landscaping.
Street Trees	Required	Consistent. The project would provide street trees along Adeline, 28 th , and Magnolia streets.
Site and Driveway Access – Minimum Distance from any residential or open space boundary	50 feet	Consistent. The project site and driveway access points are not within 50 feet of any residential or open space boundary.
Driveway Width Maximum	35 feet	Consistent. The maximum width of the project driveway would be 26 feet.

Pedestrian Walkway	Required	Consistent. The project would provide pedestrian walkways along Adeline, 28 th , and Magnolia streets.
Standards for Work/Live Units in CIX-1 Zone		
Required parking	1 parking space per unit plus one additional unassigned visitor or employee parking space per five work/live units	Consistent. The project would provide 133 parking spaces in a covered ground-level garage on the project site, with 109 spaces reserved for project tenants, 22 spaces for visitors, and 7 spaces for parking to serve the light industrial space. This corresponds to 1.0 space per work/live unit, 1 space per 5 units for visitors, and 1 space per 1,500 square feet of light industrial use – consistent with Oakland Planning Code Section 17.73.040.
Required loading	Two berths for 70,000 – 130,000 square feet of facility	Consistent with implementation of Recommendation TRANS-5. The project site plan shows one loading zone for trucks, with access from Magnolia Street. Implementation of Recommendation TRANS-5 would result in the addition of a second loading berth.
Required usable open space	75 square feet of usable open space per unit	Consistent. The project would provide 13,042 square feet of open space, which is approximately 123 square feet per work/live unit.
Minimum size of unit	No individual unit shall be less than 800 square feet of floor area	Consistent. The square footage of individual work/live units would range from 964 net square feet to 1,057 net square feet.

Conclusions

Based on the above, the project is consistent with the development density established by existing zoning, community plan, or General Plan policies for which an EIR was certified. The project therefore qualifies as a project Consistent with a Community Plan or Zoning pursuant to CEQA Guidelines Section 15183.

Since the project is consistent with the development assumptions for the land use classification for the site as provided under the LUTE and West Oakland Specific Plan, the project's potential contribution to cumulatively significant effects of infill development has already been addressed in the prior EIRs. CEQA Guidelines Section 15183 applies to the project, which allows for streamlined environmental review. This document considers whether there are project-specific effects peculiar to the project or its site, and relies on the streamlining provisions of CEQA Guidelines Section 15183 to address cumulative effects.

The Project also qualifies as an infill project under CEQA Guidelines Section 15183.3(b) and CEQA Guidelines Appendix M, as demonstrated in **Attachment B**.

VIII. CEQA CHECKLIST

The analysis in this CEQA Checklist provides a summary of the potential environmental impacts that may result from approval and implementation of the project. It evaluates those potential environmental impacts in relation to the impacts evaluated in the Program EIRs (e.g., the WOSP and LUTE EIRs).

This CEQA Checklist incorporates by reference the discussion and analysis of all potential environmental impact topics as presented in the certified Program EIRs; only those environmental topics that could have a potential project-level environmental impact are included. The significance criteria have been consolidated and abbreviated in this CEQA Checklist for administrative purposes.

The checklist uses the acronym SU for significant and unavoidable and LTS for less than significant and LTS w/ SCAs or MM for impacts that are reduced to LTS with implementation of identified SCAs and/or Mitigation Measures. Topics for which no impact was identified in the LUTE or WOSP EIRs and for which the project would similarly have no impact (e.g., agriculture or mineral resources) are not further discussed in this document.

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

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

The project is required to comply with applicable mitigation measures identified in the Program EIRs and with applicable City of Oakland SCAs. The project sponsor has agreed to incorporate and/or implement the required mitigation measures and SCAs as part of the project. This CEQA Checklist includes references to the applicable mitigation measures and SCAs. A dash (–) used in the checklist below indicates that the WOSP EIR did not identify any MMs or SCAs for the respective environmental impact. The abbreviation N/A is used when an MM or SCA was identified but it does not apply to the project.

1. Aesthetics, Shadow, and Wind

		Project			
		Relationship to LUTE/WOSP EIR Findings			
Impact Topics	WOSP EIR Findings with Implementation of SCAs or Mitigation Measures (if required)	Equal or Less Severity	Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of Significance
Scenic Vistas or Resources	LTS	☒	☐	—	LTS
Visual Character or Quality	LTS	☒	☐	—	LTS
Light or Glare	LTS w/ SCA	☒	☐	SCA-AES-4: Lighting	LTS w/ SCA
Shadows	LTS	☒	☐	—	LTS
Wind	LTS	☒	☐	—	LTS

Prior Program EIR Findings

Land Use and Transportation Element EIR

Scenic vistas, scenic resources, visual character, and light and glare, and shadow were analyzed in the 1998 LUTE EIR, which found that the effects to these topics would be less than significant. The 1998 LUTE EIR did identify a significant and unavoidable impact regarding wind hazards for wind speeds at locations in the Downtown. The 1998 LUTE EIR identified mitigation that is functionally equivalent to current SCAs to reduce potential wind effects. However, wind impacts remained significant and unavoidable. The project is not in the Downtown Showcase District and the recommended mitigation measure would not apply.

West Oakland Specific Plan EIR

The WOSP EIR found that impacts related to scenic vistas, scenic resources, visual character, light and glare, and shadow would be less than significant with the implementation of SCAs. Specifically, the WOSP EIR concluded:

- No scenic vistas or view corridors would be substantially obstructed, degraded or adversely affected by development in accordance with the Specific Plan.
- Development and public realm improvements in accordance with the Specific Plan would not substantially damage scenic resources including trees or historic buildings, but rather would improve the quality of views of the Planning Area from the I-580 scenic highway.
- Infill development and redevelopment would repair the existing inconsistent urban fabric where such inconsistencies exist, and result in a more unified and coherent development character. The proposed land use patterns and development types, and focusing change in the Opportunity Areas while preserving established residential neighborhoods, would provide sensitive transitions to existing development, reinforce the character of residential and non-residential

areas, and harmonize existing incompatibilities. Gateway and streetscape improvements, and development of new activity nodes, would improve visual quality and reinforce community identity.

- Development facilitated by the Specific Plan would create new sources of light and glare, but these new sources would be consistent with typical light and glare conditions. New lights would be required to meet the lighting power allowances as required by Building Energy Efficiency Standards and subsequent individual projects would also be required to implement SCAs requiring a Lighting Plan.
- Modeling of shadow impacts conducted for the WOSP EIR found that development pursuant to the WOSP would shadow only a limited portion of five West Oakland parks, and only for a limited duration. No shadows would be cast on the 23 other parks, open spaces and school grounds in the Planning Area. With evaluation of shadows as part of the City's standard design and environmental review of development applications, development allowed by the Specific Plan would not cast substantial shadows on solar collectors or passive solar heating, or onto historic resources with light-sensitive features.
- The WOSP Planning Area does not lie within the area identified by the City as requiring modeling for evaluation of wind impacts.

Project Analysis

Scenic Vistas or Resources

The project site is located approximately 0.5 mile south of Interstate 580. From that distance, the project would not result in a noticeable change that would substantially damage scenic resources within a scenic highway. The project vicinity contains a mix of multi-story industrial, commercial, and residential buildings. No public scenic vistas, view corridors, or scenic resources would be substantially obstructed, degraded, or adversely affected by the project. The project's impacts on scenic vistas and resources would be less than significant, consistent with the conclusions of the prior Program EIRs.

Visual Character or Quality

The project site contains a vacant and partially burned building, and is in blighted condition. The project would preserve the existing brick façade of the former industrial building along Adeline Street and 28th Street, integrating that brick façade into a more modern, five-floor work/live structure's commercial/industrial architectural design. By retaining the existing brick façade, the project would incorporate design elements that are compatible with the industrial mix character of the area and would blend-in with surrounding development. The structure would match the height of other surrounding buildings. The project's open area is designed with columns and steel beams that would visually integrate the structure. The project would improve visual quality and reinforce community identity, and its impact on the visual character and quality of the area would be less than significant, consistent with the conclusions of the prior Program EIRs.

Pursuant to Section 17.73.015 of the Oakland Planning Code, the project is subject to Design Review. Typical requirements pursuant to that design review process (in addition to verification of the project's consistency with Design Review criteria) include implementation of **SCA-AES-1: Trash and Blight Removal**, **SCA-AES-2: Graffiti Control**, and **SCA-AES-3: Public Art for Private Development**.

Light and Glare

The project would include new exterior lighting fixtures. These fixtures would be subject to **SCA-AES-4: Lighting**, which requires new exterior lighting fixtures to be adequately shielded to prevent unnecessary glare onto adjacent properties. This condition would be satisfied prior to final building permits and would be monitored and inspected by the City's Bureau of Building. With implementation of SCA-AES-4, the project would not result in a new source of light or glare that would adversely affect views in the area, consistent with the conclusions of the prior Program EIRs.

Shadows

The building directly south of the project site at 2713 Adeline Street contains a 28-panel photovoltaic solar collector system that would be shaded by the project. A shade analysis for the project was conducted by Michael Baker International to determine the significance of the project's impacts to the functionality of this solar collector system.⁵ Using SunCalc.org's on-line interactive map and shadow length tools, shadows were simulated for the 85-foot project at various times of the day and year to determine when the project would shade these nearby solar collectors. Shading was found to occur during the late afternoons, from early spring to late summer only, thus allowing peak-hour energy collection to continue to occur. Shadows cast by the project would not substantially impair function of the solar collector system at 2713 Adeline Street. There is no public or quasi-public park, lawn, garden, light-sensitive historic resource or open space adjacent to the project site that would be adversely affected by project-generated shadows. The effects of project-generated shadows would be less than significant, consistent with the conclusions of the prior Program EIRs.

Wind

The project site is within the WOSP Planning Area, which does not lie within the area identified by the City as requiring modeling for evaluation of wind impacts.

Conclusions – Aesthetics

Based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the project would not substantially increase the severity of any significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to aesthetics or visual resources that were not previously identified. The Program EIRs did not identify any mitigation measures related to aesthetics or visual resources that would apply to the project, and none are needed. SCAs identified in Attachment A to this CEQA Checklist related to aesthetics (not including likely Design Review conditions) that would apply to the project include:

- SCA-AES-1: Trash and Blight Removal
- SCA-AES-2: Graffiti Control
- SCA-AES-3: Public Art for Private Development
- SCA-AES-4: Lighting

⁵ Interactive map used for shade analysis available at: <https://www.suncalc.org>

2. Air Quality

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Project			
		Relationship to LUTE/WOSP EIR Findings		Applicable SCAs or Mitigation Measures	Level of Significance
		Equal or Less Severity	Substantial Increase in Severity		
Construction-period Emissions	LTS w/SCAs	<input checked="" type="checkbox"/>		SCA-AIR-1 Dust Controls – Construction Related SCA-AIR-2 Criteria Air Pollutant Controls – Construction-Related SCA-AIR-3 Diesel Particulate Matter Controls – Construction Related	LTS w/SCAs
Operational Criteria Air Pollutant Emissions	SU (cumulative)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	LTS
Generation of Toxic Air Contaminants	SU (cumulative)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-AIR-4: Asbestos in Structures SCA- AIR-5: Stationary Sources of Air Pollution - Toxic Air Contaminants (formerly WOSP EIR MM Air-9)	LTS w/SCAs
Exposure to Toxic Air Contaminants	Non-CEQA threshold			SCA-AIR-6: Exposure to Air Pollution (Toxic Air Contaminants)	

Prior Program EIR Findings

Land Use and Transportation Element EIR

The LUTE EIR concluded that implementation of the LUTE would not be consistent with population and vehicle miles traveled assumptions used in air quality planning for the then-current BAAQMD Clean Air Plan, and increased traffic would result in significant and unavoidable cumulative effects related to increased criteria pollutants. Transportation control measures were recommended as mitigation to address the impacts of operation-related emissions for projects located in Downtown and in the Coliseum Showcase District and for other larger scale developments to reduce these impacts. The project is neither a larger-scale project nor is it located in Downtown or the Coliseum District. The 1998 LUTE EIR did not quantify or address cumulative health risks.

West Oakland Specific Plan EIR

The WOSP EIR found the following specific impacts related to air quality:

- Development facilitated by the Specific Plan would not fundamentally conflict with the 2010 Bay Area Clean Air Plan because the rate of increase in vehicle miles travelled and vehicle trips generated would be less than the projected rate of population increase, and because the Specific Plan demonstrates reasonable efforts to implement control measures contained in the Clean Air Plan.
- Development in accordance with the Specific Plan could expose a substantial number of new people to existing and new objectionable odors. This analysis examined potential effects of the environment on the project (i.e. siting new receptors near existing sources of odors) and was provided as information to the public and decision-makers. Based on recent CEQA case law, effects of the environment on the project are not CEQA threshold matters and this impact is not considered a significant impact under CEQA.
- During construction, individual development projects pursuant to the Specific Plan will generate fugitive dust from demolition, grading, hauling and construction activities. These impacts can be reduced to less than significant levels with implementation of SCAs pertaining to Construction-Related Air Pollution Controls for Dust and Equipment Emissions.
- During construction, individual development projects pursuant to the Specific Plan will generate criteria pollutants from construction equipment exhaust. For most individual development projects, construction emissions will be effectively reduced to a level of less than significant with implementation of required SCAs. However, larger individual construction projects could generate emissions of criteria air pollutants that would exceed the City's thresholds of significance.
- New development pursuant to the Specific Plan will generate operational emissions of criteria pollutants as a result of increased motor vehicle traffic and area source emissions. Traffic emissions combined with anticipated area source emissions would generate levels of criteria air pollutants that would exceed the City's project-level thresholds of significance. Although SCAs requiring Parking and Traffic Management Plans were identified, this impact remained significant and unavoidable.
- New development pursuant to the Specific Plan would not exposure sensitive uses and would not generate emissions leading to significant concentrations of carbon monoxide that would violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation.
- Development pursuant to the West Oakland Specific Plan would include new light industrial, custom manufacturing and other similar land uses, as well as the introduction of new diesel generators that could emit toxic emissions. The EIR identified SCAs related for Exposure to Air Pollution (Toxic Air Contaminants), BAAQMD regulations, Mitigation Measure AIR-9: Risk Reduction Plans, Mitigation Measure Air-9B regarding loading docks locations and Mitigation Measure Air-9C regarding truck fleet emission standards. Even will all available SCAs and Mitigation Measures, this impact remained significant and unavoidable.
- Certain future development projects could result in new sensitive receptors being exposed to existing levels of toxic air contaminants (TACs) or concentrations of PM_{2.5} that could result in increased cancer risk or other health hazards. Potential effects of the environment on a project are legally not required to be analyzed or mitigated under CEQA, but the WOSP provided this analysis (i.e. siting new receptors near existing TAC sources) to provide information to the public and decision-makers. It recommended SCAs pertaining to Exposure to Air Pollution (Toxic Air Contaminants) and Mitigation Measure Air-10 requiring future discretionary development projects that would place new sensitive receptors in areas subject to cancer risks and exposure

to diesel PM concentrations that exceed applicable thresholds to incorporate best management practices (BMPs) for air quality.

Project Analysis

Construction-period Emissions

The project's construction activities would result in fugitive dust and emissions of criteria pollutants (including PM₁₀ and PM_{2.5} from exhaust) on a temporary and intermittent basis. These construction-related emissions are not peculiar to the project as they would be emitted from standard construction equipment similar to equipment used at other projects under construction in Oakland. The site's proximity to sensitive receptors is typical of other project sites in this urbanized area.

BAAQMD has published screening criteria for air quality emissions from projects.⁶ Projects that do not exceed the screening criteria are presumed to have less than significant air quality effects. The screening size for construction emissions attributable to mid-rise apartment projects is 240 dwelling units, and the screening size attributable to general light industry uses is 259,000 square feet. At 106 dwelling units and 80,480 square feet of light industrial/work land use (see prior Table 2), the project represents approximately 44% of the residential screening size and approximately 31% of the industrial screening size (less than 100% total) and thus would not exceed applicable construction screening level sizes for criteria pollutants, and construction-related emission would not exceed threshold levels.

Irrespective of CEQA impacts, **SCA-AIR-1: Dust Controls – Construction Related** and **SCA-AIR-2: Criteria Air Pollutant Controls – Construction Related (Basic)** applies to all projects involving construction activities, and **SCA-AIR-3 Diesel Particulate Matter Controls – Construction Related** applies to all construction activities involving greater than 100 dwelling units or 50,000 square feet of non-residential floor area (e.g., the project). With implementation of SCA-AIR-1, SCA-AIR-2, and SCA-AIR-3, and with required compliance with the City's Dust Control Measures Ordinance, project construction would not result in significant construction-period criteria air pollutant emissions or diesel TAC emissions. Project impacts due to construction-related emissions would be less than significant, generally consistent with the conclusions of the prior Program EIRs.

Operational Criteria Pollutant Emissions

BAAQMD also publishes screening criteria for operational-related air quality emissions from projects. Projects that do not exceed the screening criteria are presumed to have less than significant air quality effects. The screening size for operational emissions attributable to mid-rise apartment projects is 494 dwelling units, and the screening size attributable to general light industry uses is 541,000 square feet. At 106 dwelling units and 80,480 square feet of light industrial/work space, the project represents approximately 21% of the residential screening size and approximately 15% of the industrial screening size (less than 100% total), and thus would not exceed applicable operational screening sizes for criteria pollutants, and operational-related emission would not exceed threshold levels. Project impacts due to operations-related criteria pollutant emissions would be less than significant, and would not exceed the significance conclusions of the prior Program EIRs.

⁶ BAAQMD, CEQA Air Quality Guidelines, 2017

Generation of Toxic Air Contaminants

The project proposes to retain portions of the existing façade and to demolish the remaining portions of the existing building, which has the potential to release airborne asbestos that may be within the building materials of this existing building. The project applicant would be required to implement and comply with **SCA-AIR-4: Asbestos in Structures**, thereby reducing potential impacts related to airborne asbestos to a level of less than significant.

The project includes an elevator, which will require an emergency generator in case of power outages (the California Building Code requires back-up generators for all buildings over 70 feet tall). Although the project does not indicate any specific stationary sources of air pollution, subsequent industrial and work/live tenants of the building could include uses that may generate air pollutants, including TACs. A diesel generator and any industrial equipment that would emit TACs would be considered stationary source of TACs and would be subject to BAAQMD rules and regulations. BAAQMD Regulation 2, Rule 5 requires that new stationary sources meet applicable BAAQMD risk evaluation requirements to ensure that health risks associated with TAC emissions would be acceptable. Sources of air pollutant emissions complying with applicable BAAQMD permit requirements generally would not be considered to have an individual significant air quality impact. Stationary sources that are exempt from BAAQMD permit requirements due to low emissions would also be considered to not have a significant air quality impact. Per its Policy and Procedure Manual, the BAAQMD would deny an Authority to Construct, or would deny a permit to operate any new or modified source of TACs that exceeds a cancer risk of 10 in one million or a chronic or acute hazard index of 1.0.

Although the BAAQMD permit requirements (as may apply to future uses within the project) would ensure that TAC emissions from the project would be reduced to below applicable threshold limits, the City of Oakland adopted mitigation measures (now incorporated as SCA-AIR-5) that applies to all projects that involve a stationary pollutant source requiring a permit from BAAQMD, including but not limited to back-up diesel generators. **SCA-AIR-5: Stationary Sources of Air Pollution (Toxic Air Contaminants)** requires the project applicant to incorporate appropriate measures to reduce the potential health risk due to on-site stationary sources of toxic air contaminants by either preparing a Health Risk Assessment that concludes that health risks are at or below acceptable levels or incorporating health risk reduction measures to reduce health risk to acceptable levels, or installing non-diesel fueled generators (if feasible) or installing diesel generators with an Environmental Protection Agency-certified Tier 4 engine or engines that are retrofitted with a California Air Resources Board Level 3 Verified Diesel Emissions Control Strategy. With installation of clean diesel generators and other strategies as may be required of future tenants of the building pursuant to a Risk Reduction Plan, potential cancer risks associated with any future emission source would be reduced to less than 10 in one million, or below threshold levels. Project impacts due to operation of stationary pollutant sources would be less than significant, and would not exceed the significance conclusions of the prior Program EIRs.

Exposure to Toxic Air Contaminants

Because work/live units are dwelling units, they are considered sensitive receptors for TACs. Pursuant to SCA-AIR-5 (above) the risks associated with on-site sources of TAC would be less than 10 in one million (i.e., less than significant), but multiple sources, if concentrated in the area, could result in cumulative risks exceeding 100 in one million (a significant cumulative effect). A screening level cumulative health risk assessment has been performed for the project using the Stationary Source Screening Analysis Tool for Alameda County (BAAQMD 2012) and the screening methodology established in the BAAQMD (2017a) CEQA Guidelines. One permitted stationary source of TAC emissions with significant associated

risk is located within 1,000 feet of the proposed project. Plant 146, CASS Inc. is approximately 675 feet northwest of the project site and has a listed excess cancer risk of 1,030 in a million.

Based on this screening assessment, future sensitive receptors at the project site may be exposed to excess health risks, and City of Oakland **SCA-AIR-6: Exposure to Air Pollution (Toxic Air Contaminants)** would apply. SCA-AIR-6 requires the project applicant to either, 1) retain a qualified air quality consultant to prepare a Health Risk Assessment in accordance with the California Air Resources Board and the Office of Environmental Health and Hazard Assessment requirements including identifying risk reduction measures if the health risks exceed acceptable levels, or 2) to incorporate into the design of the project a series of health risk reduction measures including air filtration rated MERV-16 or higher. With implementation of SCA-AIR-6, health risks associated with exposing new sensitive receptors to existing or new sources of TACs would be less than significant, and would not exceed the significance conclusions of the prior Program EIRs.

Conclusions – Air Quality

Based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the project would not substantially increase the severity of significant impacts identified in the prior Program EIRs, nor would it result in new significant impacts related to air quality that were not identified in those prior Program EIRs. SCAs and mitigation measures from the prior Program EIRs now incorporated as City of Oakland SCA would apply to the project. SCAs identified in Attachment A to this CEQA Checklist related to air quality that would apply to the project include:

- SCA-AIR-1: Dust Controls – Construction Related
- SCA-AIR-2: Criteria Air Pollutant Controls – Construction Related (Basic)
- SCA-AIR-3 Diesel Particulate Matter Controls – Construction Related
- SCA-AIR-4: Asbestos in Structures
- SCA-AIR-5: Stationary Sources of Air Pollution (Toxic Air Contaminants)
- SCA-AIR-6: Exposure to Air Pollution (Toxic Air Contaminants)

3. Biological Resources

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Project			
		Relationship to WOSP EIR Findings		Applicable SCAs or Mitigation Measures	Level of Significance
		Equal or Less Severity	Substantial Increase in Severity		
Special-Status Species, Wildlife Corridors, Riparian/ Sensitive Habitat, Wetlands	LTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	—	LTS
Migratory Birds and Mammals	LTS w/SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-BIO-1: Tree Removal During Breeding Season	LTS with SCAs
Tree Protection	LTS w/SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	LTS

Prior Program EIR Findings

Land Use and Transportation Element EIR

The 1998 LUTE EIR determined that impacts on biological resources would be less than significant.

West Oakland Specific Plan EIR

The WOSP EIR found that impacts related on candidate, sensitive, or special status species; riparian habitat or other sensitive natural community; protected wetlands; migratory fish or wildlife species; and protected trees would be less than significant with the implementation of SCAs. The WOSP concluded that future development pursuant to the Specific Plan would not have a substantial direct adverse effect on any species identified as a candidate, sensitive, or special status species, would not have a substantial adverse effect on any riparian habitat or other sensitive natural community, would not have a substantial adverse effect on federally protected wetlands, and would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The WOSP EIR did conclude that tree removal, building demolition and other construction activities can cause disturbance, noise, or loss of habitat for resident or migratory birds and mammals (including bat roosts), and required implementation of SCA pertaining to tree removal during breeding season and bird collision reduction. The WOSP EIR also concluded that future development pursuant to or consistent with the Specific Plan may require the removal of trees that are protected by the City of Oakland Tree Protection Ordinance, and required implementation of SCAs pertaining to tree removal permits, tree replacement plantings, and tree protection during construction.

Project Analysis

Special-Status Species, Wildlife Corridors, Riparian/ Sensitive Habitat, Wetlands

The project area is urbanized and lacks vegetation and has no value as wildlife habitat. No known special-status species are found in the WOSP area. The project site is in a developed portion of the city

that does not contain riparian habitat or other sensitive natural communities and the project would not involve the direct removal or fill of wetlands or indirectly affect the hydrology, soil, vegetation, or wildlife of wetlands. The property does not contain any trees, and no rivers, streams, or creeks that would accommodate aquatic species or habitat. The project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan, as there are no such plans in the project vicinity. The project's impacts on these biological resources would be less than significant, consistent with the conclusions of the prior Program EIRs.

Nesting Birds or Mammals

Although the project site does not contain any trees potentially containing active nests, project construction could eliminate bat roosts and harm young bats that are incapable of flight. Pursuant to **SCA-BIO-1: Tree Removal During Breeding Season**, the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3800, the project would be required to conduct preconstruction surveys. If bat roosts of a special-status bat species are identified, a qualified biologist would ensure that bats are safely flushed from any areas where roosting habitat is planned to be removed prior to roosting season (typically May to August) and prior to the onset of construction activities. With implementation of the SCA and other regulatory requirements, the project's potential impacts on nesting birds and mammals these biological resources would be less than significant, consistent with the conclusions of the prior Program EIRs.

Tree Protection

The project would not conflict with local tree preservation policies. The project would not require the removal of any trees as there are no trees on the project site. Additionally, there are no nearby trees that would be impacted by project construction.

Conclusions – Biological Resources

Based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the project would not substantially increase the severity of significant biological impacts identified in the prior Program EIRs, nor would it result in new significant impacts related to biological resources that were not identified in those prior Program EIRs. SCAs identified in Attachment A to this CEQA Checklist related to biological resources that would apply to the project include:

- SCA-BIO-1: Tree Removal During Breeding Season, as well as provisions of the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3800 regarding potential bat roosts in the existing building

4. Cultural Resources

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Project			
		Relationship to WOSP EIR Findings		Applicable SCAs or Mitigation Measures	Level of Significance
		Equal or Less Severity	Substantial Increase in Severity		
Historical Resources	LTS w/SCAs	☒	☐	N/A	LTS
Archaeological, Paleontological, and Tribal Resources and Human Remains	LTS w/SCAs	☒	☐	SCA-CUL-1: Archaeological and Paleontological Resources – Discovery During Construction	LTS w/SCAs
				SCA-CUL-2: Human Remains – Discovery During Construction	

This section was prepared using the WOSP EIR, results of a Northwest Information Center records search, a field survey, and a California Register of Historical Resources evaluation of a built environment resource located on the project site at 2715 Adeline Street (**Appendix A**).

Prior Program EIR Findings

Land Use and Transportation Element EIR

The 1998 LUTE EIR found that excavation of development sites consistent with the LUTE could unearth archaeological resources, some of which could have scientific or cultural importance. The LUTE EIR identified mitigation measures to reduce the potentially significant impacts on archaeological resources paleontological resources and human remains to less than significant. These mitigation measures are now incorporated into the applicable City SCAs.

West Oakland Specific Plan EIR

The WOSP EIR determined that the Specific Plan does not propose demolition of any historic properties to allow for new development, and requires that any changes to historic properties adhere to the Secretary of the Interior's Standards for the Treatment of Historic Properties. Implementation of the Specific Plan was not found to cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5, but SCAs pertaining to vibrations adjacent to historic structures was required. The WOSP also concluded that compliance with Policy 3.7 of the Historic Preservation Element (Property Relocation Rather than Demolition) would likely not be feasible for most of the Local Register properties located within the West Oakland Opportunity Areas given their size, design and materials, and the importance of their location and setting). No additional mitigation measures were identified. The WOSP also found that development in accordance with the Specific Plan could cause a substantial adverse change in the significance of an archaeological resource or destroy a unique paleontological resource or site or unique geologic feature. SCAs pertaining to the discovery and treatment of discovered archaeological resources, sensitive sites, human remains and paleontological resources were identified as reducing these potential impacts to less than significant.

Project Analysis

Historical Resources

An evaluation of the existing building on the project site was conducted (Michael Baker International, see Appendix A). The following summary information is derived from that evaluation. This building was constructed ca. 1950 as part of a larger complex of buildings by the Holly Meat Packing Company of the John Morrell & Co., and is known as the Coast Sausage Company Building. It was originally used as an industrial meat processing plant but is now vacant. Its architectural style is Mid-twentieth Century Utilitarian. The Coast Sausage Company building complex was evaluated in 1992 pursuant to the criteria for local historic resources as set forth for the Heritage Survey. The site was evaluated in its entirety, including all of the buildings associated with the complex (located on three distinct parcels). The subject property at 2715 Adeline Street is rated as “D3” (no asterisk due to increased age), and is therefore not eligible for listing as an Oakland Landmark or as a Heritage Property. It is not located within a local historic district and is not located in an area identified as having potential for historic designation, nor is it in an area of secondary importance. In 1993, the western half of the building burned. The remaining portion of the building (2715 Adeline Street) fell into disrepair and was cited multiple times for blight, including graffiti, dumping, and overgrown weeds.

The 2019 Michael Baker International evaluation of the buildings does not recommend that the buildings are eligible for inclusion in the National Register or California Register. The property no longer meets National Register of California Register criteria because of loss of integrity due to the demolition of the other original buildings associated with this business (over half of the building was demolished in 2013). Based on this information, the existing building on the site is not an historic resource and removal of this building would be a less than significant impact, consistent with the conclusions of the prior Program EIRs.

Archaeological Resources

Project construction would involve ground-disturbing activities that could result in unanticipated or accidental discovery of archaeological and paleontological resources, as well as human remains. Implementation of **SCA-CUL-1: Archaeological and Paleontological Resources–Discovery During Construction** and **SCA-CUL-2: Human Remains–Discovery During Construction** will be required for the project to ensure that appropriate procedures would be followed in the event of accidental discovery of archaeological resources, paleontological resources, or human remains to minimize potential risks of impact during project construction. With required implementation of these SCAs, potential adverse effects on as-yet undiscovered archaeological resources would be reduced. Therefore, the effect of the project would be less than significant impact, consistent with the conclusions of the prior Program EIRs.

Conclusions – Cultural Resources

Based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the project would not substantially increase the severity of significant impacts to historic or cultural resources as identified in the prior Program EIRs, nor would it result in new significant impacts related to historic or cultural resources that were not identified in those prior Program EIRs. SCAs identified in Attachment A to this CEQA Checklist related to cultural resources that would apply to the project include:

- SCA-CUL-1: Archaeological and Paleontological Resources–Discovery During Construction
- SCA-CUL-2: Human Remains–Discovery During Construction

5. Geology, Soils, and Geologic Hazards

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Project			
		Relationship to LUTE/WOSP EIR Findings		Applicable SCAs or Mitigation Measures	Level of Significance
		Equal or Less Severity	Substantial Increase in Severity		
Seismic Hazards and Unstable Soil	LTS w/SCAs	☒	☐	SCA-GEO-1: Construction-Related Permit(s) SCA-GEO-2: Seismic Hazards Zone (Landslide/Liquefaction)	LTS w/SCAs
Soil Erosion	LTS w/SCAs	☒	☐	SCA-HYDRO-1: Erosion and Sedimentation Control Plan for Construction SCA-HYDRO-2: State General Construction Permit	LTS w/SCAs

Prior Program EIR Findings

Land Use and Transportation Element EIR

The 1998 LUTE EIR determined that impacts related to geology, soils, and geological hazards would be less than significant.

West Oakland Specific Plan EIR

The WOSP EIR found that geologic hazards are fully addressed through compliance with the Seismic Hazards Mapping Act and the California Building Code, as well as the seismic requirements of the City of Oakland Building Code. The WOSP EIR also found implementation of SCAs would reduce all potential impacts related to geologic hazards to less than significant levels.

Project Analysis

Earthquake fault, Ground Shaking and Seismic-related Ground Failure, Landslides

There are no Alquist-Priolo Earthquake Fault Zones and no known earthquake fault traces in the project area (U.S. Geological Survey 2000). The project would not expose people or structures to substantial adverse effects including the risk of loss, injury, or death as a result of the surface rupture of a known earthquake fault. The California Geological Survey (2003) has identified West Oakland as being located in a seismic hazard zone due to underlying sands and shallow groundwater levels that could result in high levels of liquefaction. The project site is located in a seismic hazards zone, and these hazards are fully addressed through compliance with the California Building Code, as well as the seismic requirements of the City of Oakland Building Code as required pursuant to **SCA-GEO-1: Construction-Related Permit(s)** and geotechnical investigation and soils report as required pursuant to City **SCA-GEO-2: Seismic Hazards Zones**. The project area is flat and far from hillsides, and is not subject to risk from

landslides as mapped by the Association of Bay Area Governments (ABAG; 2012), based on data from the U.S. Geological Survey. There would be no landslide-related impacts.

Erosion or Loss of Topsoil

The project site has previously been developed, is flat and is covered by impervious surfaces. Project construction, including land clearing, grading and excavation would disturb on-site soils, temporarily exposing them to wind and water erosion. Once exposed, these soils could be subject to erosion and sedimentation from stormwater runoff. The project would require excavation of soil for new building foundations and to remove contaminated soils (see Hazards and Hazardous Materials section). Projects in the City that propose to excavate more than 50 cubic yards of soil are required to obtain a grading permit pursuant to Oakland Municipal Code Section 15.04.3.2240. The project would be required to comply with local and state construction requirements, including California Building Code requirements, in design and during building. Construction activities that could result in soil erosion or the loss of topsoil are required to implement **SCA-HYDRO-1: Erosion and Sedimentation Control Plan for Construction** and **SCA-HYDRO-2: State General Construction Permit** to reduce the risk of soil erosion impacts. With required implementation of these SCAs, potential adverse effects related to soil erosion would be less than significant, consistent with the conclusions of the prior Program EIRs.

Other Geology and Soils Hazards

There are no known wells, pits, swamps, mounds, tank vaults, or unmarked sewer lines located below the surface of the site that would be disturbed by project development, and there is no evidence to suggest that the site had been previously used as a landfill. The site would continue to be served by existing municipal sewage systems, and no septic tanks or alternative wastewater disposal systems are necessary or proposed for the project. Therefore, the project would have no impact related to the capacity of local soils to adequately support the use of septic tanks or alternative wastewater disposal systems.

Conclusions – Geology and Soils

Based on an examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the project would not substantially increase the severity of significant impacts related to geology and soils as identified in the prior Program EIRs, nor would it result in new significant impacts related to geology and soils that were not identified in those prior Program EIRs. SCAs identified in Attachment A to this CEQA Checklist related to geology and soils that would apply to the project include:

- SCA-GEO-1: Construction-Related Permits
- SCA-GEO-2: Seismic Hazards Zone
- SCA-HYDRO-1: Erosion and Sedimentation Control Plan for Construction
- SCA-HYDRO-2: State General Construction Permit

6. Greenhouse Gases and Climate Change

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Project			
		Relationship to LUTE/WOSP EIR Findings		Applicable SCAs or Mitigation Measures	Level of Significance
		Equal or Less Severity	Substantial Increase in Severity		
Cumulative GHG Emissions	LTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	LTS
Project-Specific Emissions	Unknown, conservatively determined SU	<input checked="" type="checkbox"/>		N/A	LTS
Consistency with Applicable GHG Plans	LTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	–	LTS

Prior Program EIR Findings

Land Use and Transportation Element EIR

GHG emissions and climate change were not expressly addressed in the 1998 LUTE EIR.

West Oakland Specific Plan EIR

The WOSP EIR concluded that development facilitated by the Specific Plan would allow for the construction and operation of land uses that would produce greenhouse gas emissions. The level of emissions is expected to exceed the project-level threshold of 1,100 metric tons carbon dioxide equivalent (MTCO₂e) per year, but would not exceed the project-level efficiency threshold of 4.6 MTCO₂e of annual emissions per service population nor would it exceed the Plan-level threshold of 6.6 MTCO₂e annually per service population. Development facilitated by the Specific Plan was thus not expected to generate greenhouse gas emissions at levels that would result, in the aggregate, in significant or cumulatively considerable GHG emissions. The WOSP EIR also concluded that the Specific Plan did not conflict with applicable plans, policies and regulations adopted for the purpose of reducing GHG emissions. The West Oakland Specific Plan would not be in conflict with current plans or policies the policies adopted for the purpose of reducing GHG emissions as it would not exceed the numeric thresholds at either the Plan or Project level.

The WOSP noted that future development pursuant to the Specific Plan would be required to comply with applicable requirements of the City's Energy and Climate Action Plan, and that new industrial and commercial growth facilitated by the Specific Plan could introduce new stationary sources of greenhouse gases that, on an individual basis, could exceed project-level GHG thresholds. Until such projects are proposed and evaluated, the efficacy of any measures in reducing GHG emissions below relevant thresholds cannot be determined with certainty, and this impact was conservatively considered significant and unavoidable.

Project Analysis

GHG Emissions

The City of Oakland considers GHG impacts, by their nature, to be cumulative impacts because one project by itself cannot cause global climate change. The City's threshold of significance for GHGs would be exceeded if the project's emissions exceed 1,100 MTCO₂e per year and the efficiency threshold of 4.6 MTCO₂e per service population per year. Construction and operation of the project would contribute additional sources of GHG emissions, primarily through consumption of fuel for transportation and energy usage on an ongoing basis. The project is not anticipated to include stationary sources of GHGs that would generate emissions approaching the stationary source threshold of 10,000 MTCO₂e per year. Any new stationary sources would be subject to the BAAQMD requirement for New Source Review, and BAAQMD may impose conditions that would lead to emissions reductions from any new stationary sources that may be proposed.

A GHG emissions analysis was prepared for the project (Lamphier-Gregory, **Appendix B**) to assess the project's individual GHG emissions and to determine the applicability of the City's SCA requiring a GHG Reduction Plan. The following assumptions were included in this analysis:

- Per CEQA Guidelines Section 15183.5(c), environmental documents for certain residential and mixed-use projects and transit priority projects (as defined in Section 21155 of the Public Resources Code) need not analyze global warming impacts resulting from cars and light duty trucks if the projects are consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in an applicable Sustainable Communities Strategy or alternative planning strategy. If a project meets the definition of a transit priority project, its mobile source emissions need not be included in the assessment of GHG impacts. Because the project is in a transit priority development area of Plan Bay Area, the mobile source emissions of the project are not be included in the assessment of GHG impacts of the Project.⁷
- The emissions attributed to the "work" portions of the work/live joint quarters were analyzed under CalEEMod's "general office building" land use category. This land use category was used as it is more representative of the types of area source GHG emission that would likely be attributable to these spaces than would CalEEMod's "industrial" land use category, and because it assignment as also consistent with the transportation analysis of the project. This does not imply that workspace within the work/live quarters would preclude light manufacturing or other light industrial types of activities.
- The modeling conservatively "double-counts" the work/live space by also assuming each "live" component also counts as an apartment unit (for a total of 109 apartment spaces).

As shown in **Table 6**, even under these conservative assumptions the construction and operation of the project would not exceed the 1,100 MTCO₂e per year threshold. The per service population efficiency threshold assessment is not required, but is also shown for informational purposes. The project would not result in a significant GHG emissions impact and therefore does not require a GHG Reduction Plan.

⁷ The CalEEMod results presented in Appendix B conservative include analysis of mobile source emissions, which are not required for Transit Priority Projects. Table 6 (below) reflects the results excluding mobile source emissions.

Table 6. Greenhouse Gas Emissions

Description	MTCO_{2e} per Year
Project Emissions, Operational	673
Construction Emissions (averaged over 40 years)	8
Project Emissions, Total	681
Threshold	1,100
Exceed the Threshold?	No
Project Service Population (assumes 2 residents per work/live unit))	218
Project Emissions (per Service Population)	3.12
Project Service Population Significance Threshold	4.6

Source: Lamphier-Gregory's compiled CalEEMod results are included as Appendix B.

Conflict with GHG Plan

Pursuant to BAAQMD screening criteria for GHG emissions, a project located in a community with an adopted qualified GHG Reduction Strategy may be considered less than significant if it is consistent with the GHG Reduction Strategy. The City of Oakland Energy and Climate Action Plan was adopted in 2012 as an environmental policy to address the issues of climate change and energy consumption. The purpose of the Energy and Climate Action Plan is to identify and prioritize City actions to reduce energy consumption and GHG emissions associated with Oakland. This plan recommends GHG reduction actions, a framework for coordinating implementation, and monitoring and reporting on progress. The goal of the Energy and Climate Action Plan is to reduce 2005 GHG emissions by 36% in 15 years.

To meet the City's GHG reduction goals as provided in its Energy and Climate Action Plan, the City requires a GHG reduction plan for projects that produce total GHG emissions exceeding the City's established thresholds of significance. The project would not exceed the City's established thresholds of significance, and therefore the project is not required to prepare a GHG Reduction Plan. The project would be required to comply with applicable SCAs that would reduce GHG emissions. These include but are not limited to **SCA-UTIL-3: Green Building Requirements** and **SCA-UTIL-6: Construction and Demolition Waste Reduction and Recycling Plan**.

The project is consistent with the land use designations of the WOSP, and its contribution of GHG emissions attributable to cumulative WOSP area emissions (from residents, employees, vehicle use, and energy use) is consistent with and included in the WOSP EIR's analysis of GHG emissions.

Conclusions – Greenhouse Gas Emissions

Based on an examination of the analysis, findings, and conclusions of the prior Program EIRs, implementation of the project would not substantially increase the severity of significant GHG emissions impacts as identified in the prior Program EIRs, nor would it result in new significant GHG emissions that were not identified in those prior Program EIRs. SCAs identified in Attachment A to this CEQA Checklist related to GHG emission that would apply to the project include:

- SCA-UTIL-3: Green Building Requirements
- SCA-UTIL-6: Construction and Demolition Waste Reduction and Recycling

7. Hazards and Hazardous Materials

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Relationship to WOSP EIR Findings		Project	
		Equal or Less Severity	Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of Significance
Hazardous Materials during Construction	LTS w/ SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-HAZ-1: Hazardous Materials Related to Construction SCA-HAZ-2: Hazardous Building Materials and Site Contamination SCA-AIR-3: Asbestos in Structures	LTS w/ SCAs
Use, Exposure, Storage, & Disposal of Hazardous Materials	LTS w/SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-HAZ-3: Hazardous Materials Business Plan	LTS
Exposure to Hazardous Materials in the Subsurface, Cortese List	LTS w/ SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-HAZ-2: Hazardous Building Materials and Site Contamination	LTS
Airports, Emergency Response or Evacuation, Wildfire Hazards	LTS w/ SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-TRANS-2: Construction Activity in the Public Right-of-Way	LTS w/ SCAs

Prior Program EIR Findings

Land Use and Transportation Element EIR

The 1998 LUTE EIR found effects regarding hazards and hazardous materials including risk of upset in school proximity and emergency response/evacuation plans would be less than significant. The LUTE EIR identified mitigation requiring the preparation and implementation of site-specific health and safety plans to reduce potentially significant effects from hazardous substance exposure of workers and the public to less than significant. This mitigation measure is now incorporated into the applicable City SCAs.

West Oakland Specific Plan EIR

The WOSP EIR found asbestos and lead based paint present within older structures in the Planning Area and that could be released into the environment during demolition or construction activities, which could result in soil contamination or pose a health risk to construction workers or future occupants. With required implementation of City of Oakland SCAs and compliance with all other applicable federal, state, and local laws, regulations, standards and oversight currently in place, these impacts were found reduced to a level of less than significant.

The WOSP EIR concluded that development allowed by the Specific Plan could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The Specific Plan could also facilitate the addition of new businesses that emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of a school. However, with required implementation of City of Oakland SCAs and compliance with all other applicable federal, state, and local laws, regulations, standards and oversight currently in place, these impacts were found reduced to a level of less than significant.

The WOSP EIR found that the West Oakland Planning Area contains numerous sites that are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Continued occupancy and use or future redevelopment of these hazardous materials sites in accordance with the Specific Plan could create a significant hazard to the public or the environment. However, with required implementation of City of Oakland SCAs and required compliance with local, state and federal regulations for treatment, remediation, or disposal of contaminated soil or groundwater, these impacts were found reduced to a level of less than significant.

The WOSP EIR concluded that the West Oakland Planning Area is not located within an airport land use plan area or within two miles of a public airport or public use airport, or near a private airstrip, and that it is an urbanized part of Oakland and not within a High or Very High Fire Hazard Severity Zone. These impacts were considered to be less than significant.

Project Analysis

Hazardous Materials during Construction

Construction activities associated with the project would involve the routine transport, use, and disposal of hazardous materials. These activities could result in the accidental release of hazardous materials (including asbestos and lead-based paint) and may involve the handling, transport, or use of small quantities of hazardous materials. Hazardous materials used during project construction would be used in compliance with applicable regulations. The project would also involve demolition of an existing structure. Because of the structure's age, there is the potential for hazardous materials to be in building components, including lead-based paint, asbestos in insulation, flooring, walls, or ceilings, and polychlorinated biphenyls (PCBs) in electrical equipment. If these materials are not properly managed during renovation activities, the project could result in adverse human health or environmental risks resulting from the inadvertent or accidental release of hazardous materials into the air or soil surrounding the structure.

The project would be required to conform to Title 49 of the Code of Federal Regulations; US Department of Transportation; State of California; and local laws, ordinances, and procedures. Implementation of **SCA-HAZ-1: Hazards Materials Related to Construction**, **SCA-HAZ-2: Hazardous Building Materials and Site Contamination**, and **SCA-AIR-3: Asbestos in Structures** will be required for the project to minimize the risk of hazardous materials exposure to the public during construction. SCA-HAZ-2 specifically requires that the project applicant submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials, lead-based paint, PCBs, and any other building materials or stored materials classified as hazardous materials by state or federal law. The applicant would also be required to submit specifications for the stabilization or removal of identified hazardous material. With implementation of these SCAs during or in advance of construction, impacts related to hazardous material use or the

encounter of hazardous materials during construction would be reduced to less than significant, consistent with the conclusions of the prior Program EIRs.

Use, Exposure, Storage, & Disposal of Hazardous Materials

The projects' light industrial/commercial uses and work/live spaces could involve the transport, use or disposal of hazardous materials (e.g., paint, cleaning supplies), but these uses are not anticipated to include significant quantities of such hazardous materials. Pursuant to **SCA-HAZ-3: Hazardous Materials Business Plan**, the project's tenants/users will be required to follow all applicable laws and regulations related to transportation, use, storage, and disposal of all hazardous materials, and to safeguard workers and the general public. The McClymonds High School football field is located within one-quarter mile of the project site. The US Department of Transportation regulates the classification, packaging, communication, and handling of hazardous materials during transport, as well as employee training and incident reporting. The transportation of hazardous materials is subject to both the federal Resource Conservation and Recovery Act and to US Department of Transportation regulations.

Pursuant to the regulations of the S-19 Health and Safety Protection Combining Zone that are applicable to the project, following land use activities are prohibited:

- Electroplating
- hazardous waste management, industrial/transfer storage and residuals repositories
- activities which involve manufacturing, storing, or use of explosives

Also pursuant to the S-19 zoning overlay, storage and use of all hazardous materials and hazardous waste shall be reviewed and approved by the Fire Department prior to commencement of operation or any alteration of activity. A Risk Management Plan may also be required, per the CUPA Ordinance (Oakland Municipal Code Chapter 8.42). No storage or use of hazardous materials and waste can be located within three hundred (300) feet of a residential, institutional, or open space zone without written approval or consent of the Fire Department. The McClymonds High School football field is located approximately 350 feet away, but within one-quarter mile of the project site. Other regulations that may be required by the Fire Department include preparation of a Process Hazard Analysis, a Risk Management Plan, and a Local Hazardous Materials Business Plan, and the Fire Department may establish any of the following limitations:

- Limitations on the location for storage or use of hazardous material
- Containment measures for storage or use of hazardous materials
- Limitations or prohibitions on the storage or use of specific hazardous materials; or specific processes that use or combine hazardous materials

Compliance with all other requirements that may be imposed under other federal, state, or local rules, statutes, codes, or regulations are also required.

With implementation of all required SCA, regulations of the S-19 Health and Safety Protection Combining Zone, and all other requirements that may be imposed under other federal, state, or local rules, statutes, codes, or regulations, the project's impacts related to the use, transport or disposal of hazardous materials would be reduced to less than significant, consistent with the conclusions of the prior Program EIRs.

Exposure to Hazardous Materials in the Subsurface, Cortese List

The project site is listed on the State Water Resources Control Board's (SWRCB) GeoTracker website as a Leaking Underground Storage Tank (LUST) Cleanup Program Site (Case #T0600194544) with a cleanup

status of “Completed”. It is also listed as an “Open” Site Cleanup Program Case (#RO0003282) due to non-UST chemicals of concern that have since been detected. Petroleum hydrocarbons and fuel-related constituents and chlorinated solvents have been detected in soil, soil vapor, and groundwater on all three of the project’s parcels at concentrations above the 2019 San Francisco RWQCB’s Environmental Screening Levels (ESLs).

Because of this listing, the project is not eligible for certain CEQA exemptions (e.g., is not eligible as a Class 32 Infill Exemption pursuant to CEQA Guidelines Section 15332). However, the project remains eligible for certain CEQA streamlining provisions as a project consistent with a Community Plan (pursuant to CEQA Guidelines Section 15183) and as a Qualified Infill Project (pursuant to CEQA Guidelines Section 15183.3), provided that this environmental effect was analyzed in the prior Program EIR, and that uniformly applied development standards will substantially mitigate environmental effects when applied to the project (Sections 15183[f] and 15183.3[c]).

- As indicated above, the WOSP EIR found that the West Oakland Planning Area contains numerous sites included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and therefore this condition is not unique or peculiar to this site.
- The WOSP also found that future redevelopment of these sites could create a significant hazard to the public or the environment, but that this effect would be reduced to less than significant with required implementation of City of Oakland SCAs and required compliance with local, state, and federal regulations for treatment, remediation or disposal of contaminated soil or groundwater.

The project will be required to implement SCA-HAZ-2: Hazardous Building Materials and Site Contamination and **SCA-GEN-1: Regulatory Permits and Authorizations from Other Agencies**, and will also be required to submit to the City evidence of approved permits/authorizations from ACDEH, SWRCB, and/or RWQCB as applicable, along with evidence demonstrating compliance with regulatory permit/authorization conditions of approval. More detailed information on this topic follows.

Known Site Conditions: Site investigations and regulatory processes associated with this site include the following. In 2001, a former LUST Cleanup Program Case (No. RO0002562) was opened, including site investigations relating to the release of petroleum hydrocarbons and related fuel constituents at the two northern properties. In November 2002, two underground storage tanks (USTs) were removed from the site. Results from tank removal activities indicated that groundwater concentrations of gasoline-range petroleum hydrocarbons, benzene and lead were reported above applicable 2019 ESLs. In 2006, additional sub-surface investigations reported impacts above present day ESLs, including diesel-range petroleum hydrocarbons in soil, and benzene and ethylbenzene in soil vapor. In 2010 the RWQCB issued a site closure for these properties, with required site management under the then-current vacant land use at the property. Between 2006 and 2015, chlorinated solvents were detected in soil, soil vapor, and groundwater during subsequent environmental investigations. Due to non-UST chemicals of concern that were detected, a Site Cleanup Program Case (SCP Case #RO0003282) was opened.

On-Going Investigations and Regulatory Actions: Although the former Case #T0600194544 has a cleanup status of “Completed”, the SWRCB’s post-closure Site Management Requirements provide that no excavation of contaminated soil may occur without agency review and approvals, and that the applicable regulatory agency be notified prior to any development or subsurface work. Due to the proposed change in land use (i.e., the project development), ACDEH has been notified and consulted, and soil, groundwater and soil vapor investigation activities are being conducted to further delineate the vertical and lateral extent of petroleum-related constituents and chlorinated solvents in the subsurface and to evaluate the associated risk to potential on- and off-site sensitive receptors. This work is being

conducted pursuant to RWQCB Case # RO0003282, with regulatory oversight by ACDEH. The project applicants have caused several documents to be prepared in furtherance of additional site investigations, leading toward a corrective action plan (CAP) for the property to mitigate risks to on- and off-site receptors from exposure to residual subsurface contamination (Roux Associates, Inc., Site Conceptual Model, February 15, 2019; Data Gaps Work Plan, February 15, 2019; and Site Redevelopment Schedule, June 6, 2019).

As indicated in their letter of June 14, 2019 (attached as **Appendix C**), ACDEH has reviewed these Roux Associates documents and the case file for the site, and has conditionally approved the Work Plan, the SCM and Redevelopment Schedule for implementation, provided that certain technical comments as listed in the June 2019 letter are addressed. The ACDEH letter indicates that proposed site investigation activities may be conducted, provided that the applicant submits the requisite documents and implements all ACDEH-approved corrective actions. This letter further requires the applicant to submit deliverable to the SWRCB GeoTracker website, with notification sent to ACDEH, including but not limited to the following:

- A CAP that includes, among other requirements, identification of contaminants of concern, proposed cleanup goals and corrective action objectives, a description of proposed engineering controls to mitigate potentially complete exposure pathways (including but are not limited to a Permeable Reactive Barrier, soil or hardscape cap, vapor intrusion mitigation systems and trench dams
- A Corrective Action Implementation Plan (CAIP) that includes the results of any additional soil, soil vapor and groundwater investigation proposed in the CAP, with a comprehensive design and detailed plan for implementing the corrective actions identified in the ACDEH-approved CAP
- A Construction Soil and Groundwater Management Plan describing the procedures to be followed by environmental consultants, construction contractors and workers, and other property owner representatives during redevelopment construction, identifying safety and training requirements for construction workers, establishing procedures for assessing and managing contaminated media
- Vapor Mitigation Engineering Controls (VMECs) design documents, if corrective actions include installation of VMEC or vapor mitigation system beneath buildings, and/or trench dams and plugs within utility corridors
- Remedial soil excavation documentation for any source excavation, with confirmation of sampling and analytical results, and soil import documentation (if required for backfill) to confirm compliance with ACDEH's Fill Material Characterization Guidance
- A Remedial Action Completion Report documenting the implementation of the CAIP measures and demonstrating that corrective action objectives have been met, or identifying any corrective action objectives that have not yet been met
- A VMEC Record Report of Construction documenting the construction quality assurance activities and observation and findings during construction of the VMEC, including vapor mitigation systems beneath buildings and trench dams/plugs in utility corridors
- VMECs Post Construction Performance Monitoring Report, recordation of institutional controls including a Land Use Covenant and Disclosure Covenants and Conditions and Restrictions, a financial instrument to assure ACDEH of implementation and maintenance of the VMECs, a Site Management Plan for long-term site management to facilitate compliance with the requirements of the Land Use Covenant, an implementation project schedule updated and re-

submitted as-needed to be reflective of the actual project timetables, and other compliance documentations and controls

As also indicated in their letter, ACDEH is of the opinion that, “implementation of the proposed corrective action and mitigation measures outlined . . . will minimize risk to on- and off-site receptors from exposure to residual subsurface contamination. Installation of potential VMECs and a vapor mitigation system including trench plugs, etc., will also mitigate risk to occupants of the proposed new redevelopment building from potential TPH and volatile organic compound impacted soil gas.”⁸

With required implementation of ACDEH requirements and pursuant to SCA-HAZ-2: Hazardous Building Materials and Site Contamination, the project applicant will be required to submit to the City evidence of ACDEH approvals of all required deliverables, demonstrating compliance with regulatory permit/authorization conditions of approval. These regulatory requirements will ensure that the environmental effects associated with existing on-site contamination will be reduced to levels of less than significant, consistent with the conclusions of the prior Program EIRs.

Airports, Emergency Response or Evacuation, Wildfire Hazards

The project site is not within the Oakland International Airport Influence Area (Alameda County Airport Land Use Commission 2010), and there are no private airstrips within 10 miles of the project site (Federal Aviation Administration 2017). The project site, which is in urbanized Oakland, is not within a Fire Hazard Severity Zone subject to significant wildfire hazard. The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. The project would not change the surrounding streets or roadways, or limit emergency access or plans. The project would not result in changes to the main evacuation arteries identified in the Oakland General Plan Safety Element for the area.

Any temporary roadway closures required during construction would be subject to City review and approval to ensure consistency with City requirements, pursuant to **SCA-TRANS-2: Construction Activity in the Public Right-of-Way**. This SCA requires obtaining an obstruction permit and to create a traffic control plan for work within a City right-of-way. With implementation of SCA-TRANS-2, the project would not fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would remain less than significant, consistent with the conclusions of the prior Program EIRs.

Conclusions – Hazards and Hazardous Materials

Based on an examination of the analysis, findings, and conclusions of the prior Program EIRs, implementation of the project would not substantially increase the severity of significant impacts related to hazards or hazardous substances that were identified in the prior Program EIRs, nor would it result in any new significant hazard or hazardous substance impacts that were not identified in those prior Program EIRs. SCAs identified in Attachment A to this CEQA Checklist related to hazards and hazardous materials that would apply to the project include:

- SCA-HAZ-1: Hazardous Materials Related to Construction (this SCA applies to all projects involving construction activities)

⁸ Alameda County Department of Environmental Health, Local Oversight Program for Hazardous Materials Releases, *Subject: Site Cleanup Program Case No. RO0003282 and GeoTracker Global ID T10000011160*, June 14, 2019

- SCA-HAZ-2: Hazardous Building Materials and Site Contamination (these SCAs apply to all projects involving redevelopment or change of use of a historically industrial or commercial site, to Cortese List sites and to sites where remediation activities are required based on an environmental site assessment)
- SCA-HAZ-3: Hazardous Materials Business Plan (this SCA applies to all projects involving the handling, storage, or transportation of hazardous materials during business operations)
- SCA-GEN-1: Regulatory Permits and Authorizations from Other Agencies
- SCA-AIR-3: Asbestos in Structures
- SCA-TRANS-2: Construction Activity in the Public Right-of-Way

8. Hydrology and Water Quality

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Project			
		Relationship to LUTE/WOSP EIR Findings		Applicable SCAs or Mitigation Measures	Level of Significance
		Equal or Less Severity	Substantial Increase in Severity		
Construction-period Water Quality and Drainage	LTS w/ SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-HYDRO-1: Erosion and Sedimentation Control Plan for Construction SCA-HYDRO-2: State Construction General Permit SCA-HYDRO-3: NPDES C.3 Stormwater Requirements for Regulated Projects	LTS w/ SCAs
Operational Water Quality and Drainage	LTS with SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-HYDRO-3: NPDES C.3 Stormwater Requirements for Regulated Projects	LTS w/ SCAs
Use of Groundwater	LTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	–	LTS
Flooding & Substantial Risk from Flooding	LTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	–	LTS

Prior Program EIR Findings

Land Use and Transportation Element EIR

The 1998 LUTE EIR found impacts related to hydrology or water quality would be less than significant, primarily given required adherence to existing regulatory requirements. The LUTE EIR acknowledged that areas considered under that EIR could potentially occur within a 100-year flood boundary. Adherence to existing regulatory requirements that are incorporated in the City's SCAs would address potentially significant effects regarding flooding.

West Oakland Specific Plan EIR

The WOSP EIR found that implementation of City of Oakland SCAs would reduce potentially significant impacts to water quality from construction and from operational runoff to less than significant. Other hydrology and water quality impacts related to waste discharge, groundwater, floods, dam failure, and seiche/tsunami were found to be less than significant.

Project Analysis

Construction-Period Water Quality

Construction activities would disturb and expose soils to water erosion. If left unprotected during construction, such exposed soils could be carried via stormwater runoff into the storm drain system and/or into adjacent surface water, resulting in increased sedimentation. Refueling and parking of construction equipment and other vehicles on-site, and other construction activities could result in oil, grease, and other pollutant leaks and spills that could mix with stormwater runoff, leading to potential water quality impacts during construction.

Pursuant to City of Oakland SCAs, the project would be required to apply for and comply with provisions of applicable NPDES permits, which also serve as waste discharge requirements to control water pollution. These permits would include the Municipal NPDES permit for stormwater discharges (Alameda Countywide NPDES Municipal Stormwater Permit Water Quality Order No. R2-2003-0021, NPDES No. CAS0029831). The project would implement **SCA-HYDRO-1: Erosion and Sedimentation Control Plan for Construction** and **SCA-HYDRO-2: State Construction General Permit** which require the project to implement BMPs to reduce erosion, sedimentation, and water quality impacts. Coverage under the State Construction General Permit requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) for review and approval by the City, and evidence of approval of the SWPPP by the State Water Resources Control Board. At a minimum, the SWPPP will 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. Implementation of SCA-HYDRO-1 and SCA-HYDRO-2 would ensure that water quality impacts resulting from the project's construction activities would be reduced to a level of less than significant, consistent with the conclusions of the prior Program EIRs.

Operational-Period Water Quality and Drainage

The entire Project site (approximately 55,000 square feet or 1.26 acres) is currently impervious surface area. Redevelopment of the project would replace this impervious area and is therefore subject to Provision C.3 of the Municipal Regional Stormwater Permit pursuant to NPDES. The City's requirements for NPDES compliance for the project are set forth in **SCA-HYDRO-3: NPDES C.3 Stormwater Requirements for Regulated Projects**. This SCA requires the project applicant to comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit by submitting a Post-Construction Stormwater Management Plan (SWMP) to the City for review and eventual approval. The SWMP must identify the location and size of new and replaced impervious surfaces, directional surface flow of stormwater runoff, the location of proposed on-site storm drain lines, site design measures to reduce the amount of impervious surface area, source control measures to limit stormwater pollution, and stormwater treatment measures to remove pollutants from stormwater runoff.

The project includes a preliminary SWMP (**Figure 9**). This preliminary SWMP indicates that the project would be developed with approximately 85% of the site, or approximately 45,012 square feet as impervious surfaces (rooftops and paving), and approximately 15% of the site, or approximately 7,729 square feet would be pervious, low impact development (LID; including the courtyard and landscaping).

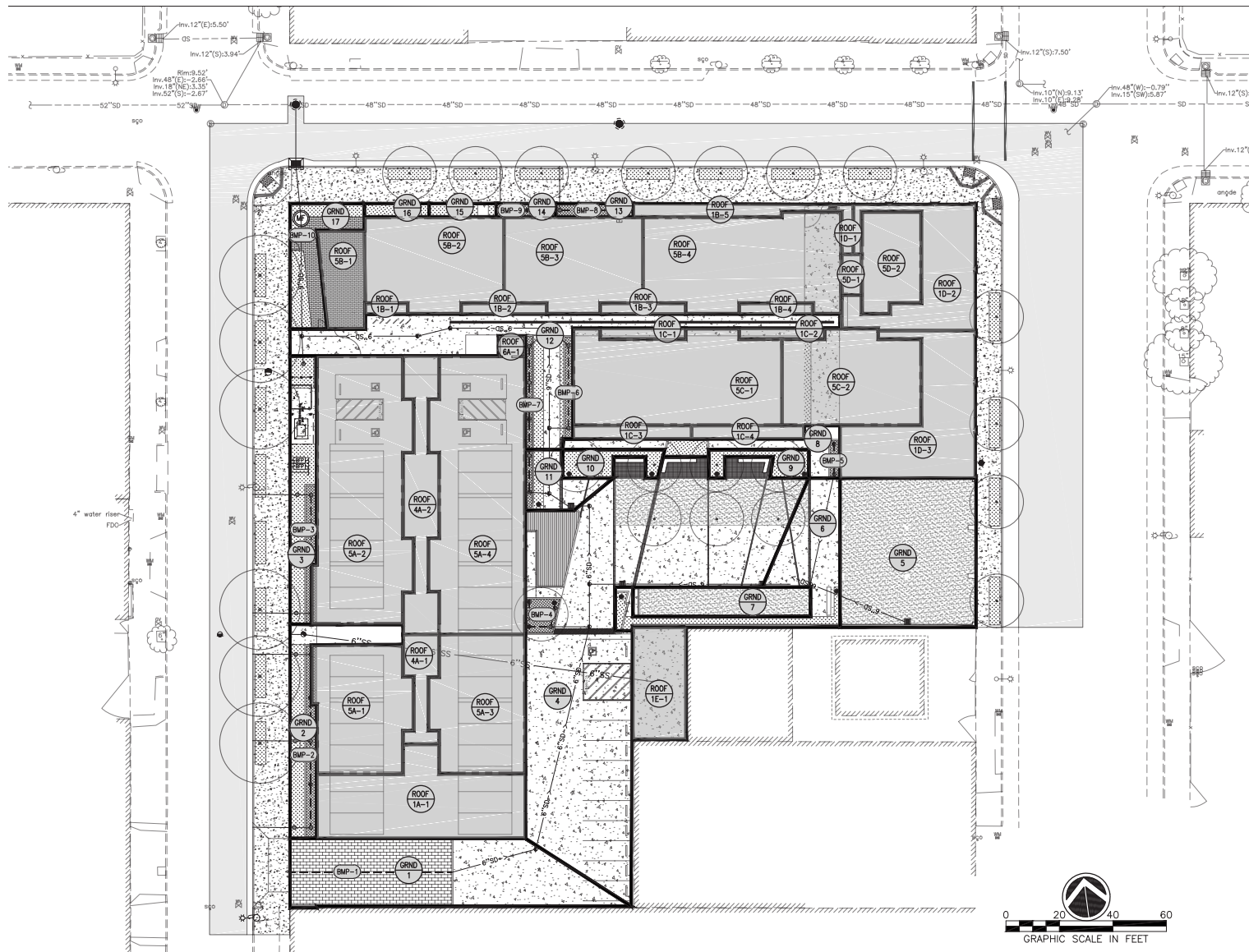


Figure 9. Stormwater Plan

Source: YHLA Architects
September 2019

As indicated in the preliminary SWMP, the project is eligible as a Category C Project, having a 45% non-LID treatment reduction credit.⁹ Based on these SWMP design requirements, the project is required to provide BMPs for the treatment of 55% of its total impervious surfaces, or approximately 24,737 square feet of BMP surface area. The project proposes to provide approximately 21,016 square feet of surface area BMPs, supplemented with a specialized manhole stormwater filter (an available option for Category C Projects) to meet the NPDES Provision C.3 requirements. The final SWMP will need to be reviewed and approved as to compliance prior to issuance of building permits. By meeting the NPDES provision C.3 requirements, the project will reduce its potential impact to stormwater quality pollution to a less than significant level, consistent with the conclusions of the prior Program EIRs.

Use of Groundwater

No wells or other activities that would deplete groundwater supply are proposed as part of the project.

Flooding & Substantial Risk from Flooding

The project site is not within a 100-year floodplain or a dam failure inundation area. The site is located east of Mandela Parkway, outside the City's mapped tsunami run-up zone. The site is not close enough to the San Francisco Bay to be affected by a seiche. The site is flat and is not subject to risk from landslides or mudflow. There are no rivers, creeks, or streams located on or in the vicinity of the project site. The project would have no impact that would substantially alter existing drainage patterns or increase the rate or amount of flow to a creek, river, or stream in a manner that would result in substantial on- or off-site erosion, siltation, or flooding. The project would not introduce features that would significantly modify natural flows or water capacity, deposit substantial amounts of new material into a creek, or cause substantial bank erosion or instability. Consequently, the project would not pose a substantial danger to public or private property, nor would it threaten public health or safety.

Conclusions – Hydrology and Water Quality

Based on an examination of the analysis, findings, and conclusions of the prior Program EIRs, implementation of the project would not substantially increase the severity of significant hydrology or water quality impacts as identified in the prior Program EIRs, nor would it result in new significant impacts related to hydrology or water quality that were not identified in those prior Program EIRs. Adherence to existing regulatory requirements and City SCAs is required for the project. SCAs identified in Attachment A to this CEQA Checklist related to hydrology and water quality that would apply to the project include:

- SCA-HYDRO-1: Erosion and Sedimentation Control Plan for Construction
- SCA-HYDRO-2: State Construction General Permit
- SCA-HYDRO-3: NPDES C.3 Stormwater Requirements for Regulated Projects

⁹ As a project located within a planned Priority Development Area, the project is eligible for a 25% credit, the density of the project is equal to or exceeds a FAR of 2.0 earning a 10% credit, and an additional 10% credit is available as the project's surface parking area occupies less than 10% of the total post-project impervious surface area.

9. Land Use, Plans, and Policies

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Project			
		Relationship to WOSP EIR Findings			Level of Significance
		Equal or Less Severity	Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	
Division of an Existing Community	LTS	☒	☐	–	LTS
Conflict with Land Uses / Land Use Plans	LTS	☒	☐	–	LTS

Prior Program EIR Findings

Land Use and Transportation Element EIR

The 1998 LUTE EIR found impacts related to land use, plans, and policies would be less than significant, and no mitigation measures were warranted.

West Oakland Specific Plan EIR

The WOSP EIR found that the Specific Plan would not disrupt or divide the physical arrangement of the West Oakland community or any surrounding community, but rather would improve certain existing conditions that currently divide the community, and would result in a gradual improvement in compatibility between residential and other types of land uses. It also concluded that the Specific Plan would not fundamentally conflict with any applicable land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and that there was no Habitat Conservation Plan, Natural Community Conservation Plan or other adopted habitat conservation plan applicable to the Planning Area such that the Specific Plan would not conflict with such plans.

Project Analysis

Division of an Existing Community

The project site is within an urbanized portion of West Oakland and on a site located on an existing City block within a public street grid. Redevelopment of the site would not introduce features that would impair mobility within the community or between the community and outlying areas. The project does not include the construction or removal of a roadway. Existing sidewalks and roadway access adjacent to the site would remain. The project would not result in land use impacts that would physically divide an established community.

Conflict with Land Uses / Land Use Plans

The project site is zoned Business Enhancement (CIX-1A) and Low Intensity Business (CIX-1B) with a Health and Safety Protection Overlay (S-19). The CIX zoning categories identify strategically distinct preferences for employment uses and building types, reflecting differences in business functions, business ages and sizes, and expected property amenity levels. The project's proposed light industrial

land uses and work/live uses are consistent with these preferred employment uses and building types and include the expected level of site amenities (i.e., the courtyard and exterior landscaping). The project will replace a vacant and blighted property with a new, modern building that incorporates the older brickwork into its building façade, thereby increasing the compatibility and consistency with other older industrial and commercial buildings in the area (see also Section VII of this document regarding the project's consistency with the General Plan, the West Oakland Specific Plan and zoning).

The General Plan restricts residential development in the Business Mix land use designation but, per City Planning Code Section 17.73.040, work/live units (such as the project) are allowed in the CIX zone under special conditions, as met by the project.

Habitat Conservation Plans

The project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan, as there are no such plans in the project vicinity.

Conclusions – Land Use

Based on an examination of the analysis, findings, and conclusions of the prior Program EIRs, implementation of the project would not substantially increase the severity of any significant land use impacts identified in the Program EIRs, nor would it result in new significant impacts related to land uses, plans, or policies that were not identified in those prior Program EIRs. The Program EIRs did not identify any mitigation measures for significant impacts related to land uses, plans, or policies, and none would be necessary for the project. No SCAs pertaining to this topic are required for the project.

10. Noise

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Project			
		Relationship to LUTE/WOSP EIR Findings		Applicable SCAs or Mitigation Measures	Level of Significance
		Equal or Less Severity	Substantial Increase in Severity		
Construction Noise and Vibration	LTS w/ SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-NOS-1: Construction Days/Hours) SCA-NOS-2: Construction Noise) SCA-NOS-3: Extreme Construction Noise SCA-NOS-4: Construction Noise Complaints	LTS w/ SCAs
Operational Noise and Vibration	LTS w/ SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-NOS-5: Operational Noise	LTS w/ SCAs
Noise Exposure / Compatibility	LTS w/ SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-NOS-6: Exposure to Community Noise	LTS w/SCAs

Prior Program EIR Findings

Land Use and Transportation Element EIR

The 1998 LUTE EIR identified mitigation measures to address potential noise conflicts between different land uses, none of which would apply to the project. These measures included requirements for the City to establish design requirements for large-scale commercial development to provide a buffer from residential uses and to rezone mixed residential and non-residential neighborhoods, as well as other strategies and policies to reduce noise conflicts. The LUTE EIR identified construction noise and vibration impacts in Downtown as being significant and unavoidable, even after incorporation of all reasonable and feasible mitigation measures.

West Oakland Specific Plan EIR

The WOSP EIR concluded that construction activities related to the Specific Plan would temporarily increase noise levels in the vicinity of individual project sites and may generate operational ground-borne vibration at levels that would be perceptible beyond the property boundaries of construction site, and found that SCAs applicable to construction noise would reduce these impacts to less than significant levels. It also concluded that on-going operational noise generated by stationary sources could generate noise in violation of the City of Oakland Noise Ordinance, but that SCAs and Oakland Planning and Municipal Code requirements would limit operational noise to less than significant levels.

Although not legally required to be analyzed or mitigated under CEQA, the WOSP analyzed potential effects of the environment (i.e. siting new receptors near existing noise sources) on the project in order to provide information to the public and decision-makers, concluding that occupants of new residential

and other noise-sensitive development facilitated by the Specific Plan could be exposed to community noise in conflict with the Land Use Compatibility Guidelines of the Oakland General Plan, and to interior noise exceeding California Noise Insulation Standards.

The WOSP concluded that West Oakland is more than two miles outside of the Oakland International Airport's 65- A-weighted decibels (dBA) L_{dn} /community noise equivalent level noise contour and airport noise impacts would be less than significant. It also concluded that new development pursuant to the Specific Plan would not generate traffic noise resulting in a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the Plan.

Project Analysis

Construction Noise and Vibration

Project construction would generate noise from activities such as site grading, foundation work, and framing. Typical construction equipment can produce maximum noise levels of 66 to 99 dBA measured at 50 feet. These construction activities could generate noise levels that conflict with the City of Oakland Noise Ordinance on a short-term and temporary basis. Because there are residential and commercial/industrial land uses adjacent to the project site, construction noise levels could exceed the maximum level specified in City Planning Code Section 17.120.050 without any noise reduction measures applied.

There is nothing unique or peculiar about the project's construction activities that would substantially increase the level of significance of construction noise impacts over those identified in the WOSP EIR, or result in new significant construction noise impacts not previously identified. Construction noise would not violate the City of Oakland Noise Ordinance or the City of Oakland nuisance standards regarding persistent construction-related noise, and the following SCAs will be implemented as required by the City of Oakland in conjunction with its issuance of building and other applicable permits: **SCA-NOS-1: Construction Days/Hours, SCA-NOS-2: Construction Noise, SCA-NOS-3: Extreme Construction Noise, and SCA-NOS-4: Construction Noise Complaints**. These SCAs are comprehensive in their content and for practical purposes represent all feasible measures available to reduce construction noise. With implementation of the City's SCAs, the construction-period noise effects of the project would be less than significant, consistent with the conclusions of the prior Program EIRs.

Operational Noise and Vibration

Future tenants of the project's work/live units and light industrial/commercial space are not yet known. However, these future tenants could include business activities with stationary sources of operational noise. Operation of the project would also generate noise from new sources such as heating, ventilation, and air conditioning equipment, and from live/work uses. However, there is nothing unique or peculiar about the project's operational activities that would substantially increase the level of significance of operational noise impacts over those identified in the WOSP EIR, or result in new significant operational noise impacts not previously identified. All future uses will be required to adhere to City of Oakland Planning Code regulations. Implementation of **SCA-NOS-5: Operational Noise** will be required by the City of Oakland in conjunction with its issuance of building and other applicable permits. The project would not generate operational noise in violation of the City of Oakland Noise Ordinance, based upon required compliance with City of Oakland operational noise standards including for noise generated by the rooftop mechanical equipment (e.g., heating, ventilating, air conditioning, and refrigeration equipment), and required incorporation of noise reduction measures.

Traffic Noise

The project would be consistent with the project site's CIX zoning as was analyzed in the WOSP. Therefore, the project's contribution to existing and future traffic noise was included in the traffic noise analysis of this prior Program EIR. As indicated in the WOSP, implementation of the entirety of the Specific Plan (including the project as an infill development) was not projected to increase cumulative traffic noise above threshold levels. The traffic noise effects of the project would be individually less than significant and not more severe than what was analyzed in the prior Program EIR.

Noise Exposure / Compatibility

An environmental noise study was completed for the project (CSDA Design Group, **Appendix D**). The noise study concluded that development of the project would expose new work/live tenants to existing noise sources that could exceed acceptable noise level standard for residential land uses. Per the City's General Plan Noise Element, existing environmental noise levels at the site range from an L_{dn} of 66 to 71 dBA, which could exceed interior noise level requirements.¹⁰

The project would be required to comply with **SCA-NOS-6: Exposure to Community Noise**, which requires a Noise Reduction Plan, and compliance with building design requirements of Title 24 to reduce the interior noise to acceptable levels. Based on assumed unit sizes and 40 percent window area, the project may require windows to provide up to a Standard Transmission Class (STC) 38 to comply with existing California Building Code requirement and maximum interior noise levels of L_{dn} of 45 dBA in the dwelling units.¹¹ Where such sound-rated windows and/or doors are required at residences, fresh air ventilation must be provided. These STC ratings would need to be refined during the building permit process to reflect the actual unit sizes and glazing areas, and it is likely the STC rating requirements may decrease. With implementation of the recommendations of the environmental noise study, as required by SCA-NOS-6, the project would not expose persons to interior noise levels from exterior sources exceeding 45 dBA L_{dn} .

In addition, the project would be subject to City Planning Code Section 17.73.040, Special Regulations for Work/Live Units in the CIX, IG, and IO Industrial Zones. These special regulations require a disclosure to all future project tenants of the potential exposure to noise and vibration. For the work/live units, a statement of disclosure shall be provided to prospective owners or tenants before a unit or property is rented, leased or sold, and recorded with the County of Alameda. This statement of disclosure shall contain the following acknowledgments:

1. The unit is in a non-residential facility that allows commercial and/or industrial activities that may generate odors, truck traffic, vibrations, noise, and other impacts at levels and during hours that residents may find disturbing.
2. Each unit shall contain at least one tenant that operates a business within that unit. This tenant must possess an active City of Oakland Business Tax Certificate for the operation out of the unit.

Therefore, the effect of the project would be less than significant and not more significant than what has already been analyzed.

¹⁰ A 24-hour average L_{eq} with a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn} .

¹¹ Standard Transmission Class rating (a way to measure how much sound is stopped by something).

Conclusions – Noise

Based on an examination of the analysis, findings, and conclusions of the prior Program EIRs, implementation of the project would not substantially increase the severity of significant noise impacts as identified in the prior Program EIRs, nor would it result in new significant impacts related to noise that were not identified in those prior Program EIRs. Adherence to existing regulatory requirements and City SCAs is required for the project. SCAs identified in Attachment A to this CEQA Checklist related to noise that would apply to the project include:

- SCA-NOS-1: Construction Days/Hours
- SCA-NOS-2: Construction Noise
- SCA-NOS-3: Extreme Construction Noise
- SCA-NOS-4: Construction Noise Complaints
- SCA-NOS-5: Operational Noise
- SCA-NOS-6: Exposure to Community Noise

11. Population and Housing

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Project			
		Relationship to LUTE/WOSP EIR Findings			Level of Significance
		Equal or Less Severity	Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	
Population Growth	LTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	–	LTS
Displacement of Housing and People	LTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	–	LTS

Prior Program EIR Findings

Land Use and Transportation Element EIR

The 1998 LUTE EIR found less than significant impacts related to population, housing, and potentially significant impacts related to employment. The LUTE EIR identified mitigation requiring the City to develop a database of vacant and underutilized parcels to address unanticipated employment growth (compared to regional ABAG projections); no other mitigation was warranted.

West Oakland Specific Plan EIR

Development under the WOSP would add up to 7,312 housing units and 37,493 residents to the WOSP area between 2005 and 2035, representing approximately 2 percent of the total projected population growth for the City of Oakland during the same period. The WOSP EIR concluded that Specific Plan build-out projections are consistent with ABAG projections for household and employment growth.

Population and employment growth facilitated or induced by the Specific Plan would not represent growth for which adequate planning has not occurred, and the growth inducement impacts of the Specific Plan were found to be less than significant. The WOSP EIR also concluded that overall, the loss of certain housing units and associated direct displacement of people as a result of development facilitated by the Specific Plan would be offset by the number of new units proposed by the Specific Plan, by new units identified under the Housing Element and by existing housing in Oakland.

Project Analysis

Population Growth

The project would create 106 new work/live units resulting in an estimated population increase of approximately 212 residents (at 2 residents per unit).¹² This number of new residents represents less than one-half of 1 percent of the expected population increase as indicated in the WOSP EIR.¹³ The

¹² The population estimate is based on an average number of people who may live in the units. The City requires each unit to contain at least one tenant who operates a business within the unit. Additionally, only up to one-third of the floor area in the unit may be used for residential purposes.

¹³ Calculation: 222 project residents divided by 37,493 total residents = 1.99 percent.

population increase associated with the project represents a very small component of planned population growth in West Oakland, and would be individually less than significant. The project site is surrounded by urban development and the project's residents would utilize existing infrastructure for public services and utilities.

Displacement

The existing site is a vacant former industrial/commercial building that does not provide housing or existing employment. No displacement of existing residents, employees, or business would result from implementation of the project.

Conclusions – Population and Housing

Based on an examination of the analysis, findings, and conclusions of the prior Program EIRs, implementation of the project would not substantially increase the severity of any significant population growth impacts as identified in the Program EIRs, nor would it result in new significant impacts related to population and housing that were not previously identified in these Program EIRs. No mitigation measures or SCAs related to population or employment growth would apply to the project.

12. Public Services, Parks, and Recreation Facilities

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Relationship to WOSP EIR Findings		Project	
		Equal or Less Severity	Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of Significance
Public Services	LTS w/ SCA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-PS-1: Capital Improvements Impact Fee	LTS w/ SCA
Parks and Recreation	LTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	–	LTS

Prior Program EIR Findings

Land Use and Transportation Element EIR

The 1998 LUTE EIR identified a significant and unavoidable impact for fire safety, with mitigation measures pertaining to construction of a fire station the North Oakland Hills area; the LUTE EIR identified additional significant impacts related to public services, and identified mitigation measures that are functionally equivalent to the SCAs to reduce potential effects to less than significant. Mitigation for potentially significant impacts related to police and fire protection, schools, and libraries are specific policies or strategies for the City to implement—such as considering the availability of police and fire protection services, park and recreation services, schools, and library services during review of major land use or policy decisions—and specific to Oakland Unified School District (OUSD)—such as reassigning students among district schools to account for changing population and new development.

West Oakland Specific Plan EIR

The WOSP EIR found less than significant impacts related to police protection, schools, and other public services. Potentially significant impacts on police and fire facilities and services were reduced to a level of less than significant with implementation of SCAs requiring all projects to implement ensure site design and fire safety features adequately address potential fire hazards. The Specific Plan may reduce crime by incorporating crime prevention through environmental design principles and up-to-date security features and technology in new development. The OUSD collects school impact fees from residential and non-residential development and, pursuant to California Government Code Sections 65995, 65996(a) and 65996(b), payment of these fees is deemed to be full and complete mitigation. The Specific Plan would not be expected to increase the use of existing parks and recreational facilities such that substantial physical deterioration of such facilities may occur or be accelerated.

Project Analysis

Public Services

The project would represent approximately 0.5 percent of the WOSP's expected population increase. This incremental increase would not result in a significant increase in demand for additional public services throughout West Oakland.

The project by itself would not significantly increase demand for police, fire or other public services, but would be subject to the City's policies, regulations, standards (including appropriate standards for emergency access roads, emergency water supply, and fire preparedness, capacity and response). With implementation of the City's normal development review and permitting procedures and building and fire code requirements, the project's impacts related to fire protection would be less than significant. Implementation of **SCA-PS-1: Capital Improvements Impact Fee** would require the applicant to comply with the City's Capital Improvements Impact Fee Ordinance (Chapter 15.74 of the Oakland Municipal Code).

The project would not create a significant increase in student population in the project area. As authorized by California Government Code Sections 65995, 65996(a), and 65996(b), OUSD collects school impact fees when building permits are issued. The project would be required to contribute a fair-share amount of school impact fees, which would ensure impacts on school services would be less than significant. The effects of the project on public services would be less than significant, consistent with the conclusions of the prior Program EIRs.

Parks and Recreation

The project would add an estimated 212 new residents to the WOSP area. City Planning Code Section 17.73.020 requires work/live sites to provide 75 square feet of on-site open space per dwelling unit. Consistent with these requirements, the project includes nearly 11,000 square feet of open space in the ground floor courtyard and approximately 2,044 square feet of roof deck open space, for a total of more than 13,000 square feet of usable private open space and exceeding the Planning Code requirement of 8,175 square feet. All residents and visitors would have access to the on-site courtyard and roof deck.

Although the project would incrementally increase demand for public open space and recreation facilities in the WOSP area, it would not result in a demand that would require construction of new facilities, nor would it deteriorate existing facilities in a way that would significantly impact the environment.

Conclusions – Public Services and Recreation

Based on an examination of the analysis, findings, and conclusions of the prior Program EIRs, implementation of the project would not substantially increase the severity of any significant public services impacts identified in the prior Program EIRs, nor would it result in new significant impacts related to public services or park and recreational facilities that were not identified in those Program EIRs. Adherence to existing regulatory requirements and City SCAs is required for the project. SCAs identified in Attachment A at the end of the CEQA checklist that apply to the project include:

- SCA-PS-1: Capital Improvements Impact Fee

13. Transportation and Circulation

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Relationship to WOSP EIR Findings		Project	
		Equal or Less Severity	Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of Significance
Conflict with Circulation Plans	LTS w/ SCAs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SCA-TRANS-1: Transportation and Parking Demand Management SCA-TRANS-2: Construction Activity in the Public Right-of-Way SCA-TRANS-3: Bicycle Parking SCA-TRANS-4: Traffic Impact Fee SCA-TRANS-5: Plug-in Electric Vehicle Charging Infrastructure	LTS w/ SCAs
Substantial Additional VMT ^a	LTS-SU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	–	LTS
Induce Traffic	LTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	–	NI

^a The City of Oakland has replaced Level of Service impact analysis with VMT-based analysis. WOSP EIR findings were for potential Level of Service impacts.

Prior Program EIR Findings

Land Use and Transportation Element EIR

The 1998 LUTE EIR identified significant and unavoidable traffic impacts at intersections and/or roadway segments throughout the City.

West Oakland Specific Plan EIR

Under existing plus (WOSP) Project and year 2035 cumulative scenarios, the WOSP found numerous intersections and roadway segments that would exceed peak hour level of service (LOS) thresholds throughout West Oakland and the surrounding community. Mitigation measures that provided increased vehicle capacity or operating efficiencies were identified where feasible, but numerous intersections and roadway segments remained as significant and unavoidable LOS impacts. The LOS thresholds analyzed in the WOSP EIR are no longer applicable, now replaced by thresholds pertaining to vehicle miles travelled (VMT; see further discussion, below).

The WOSP found that implementation of the Specific Plan (including new development consistent with the Plan) would not result in significant transportation impacts related to the following:

- Travel times for AC Transit buses along West Grand Avenue would increase, but the travel time increase would be offset by support of the transit systems and safety and convenience of pedestrian, bicycle and transit users.
- The Specific Plan would not directly or indirectly cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent and substantial transportation hazard due to a new or existing physical design feature or incompatible uses.
- The Specific Plan would not directly or indirectly result in a permanent substantial decrease in pedestrian safety.
- The proposed Project would not directly or indirectly result in a permanent substantial decrease in bus rider safety.

Project Analysis

A Transportation Assessment of the project has been prepared for this CEQA document (Fehr & Peers, **Appendix E**). A summary of the report findings is included below.

Trip Generation

The Transportation Assessment found that the project would generate about 93 new AM peak hour automobile trips and 96 new PM peak hour automobile trips on a typical weekday. The daily trip generation for the project is estimated at 980 vehicle trips.

Because the project would generate more than 50 vehicle trips during a single peak hour, a Transportation Demand Management (TDM) Plan is required pursuant to **SCA-TRANS-1: Transportation and Parking Demand Management**. The TDM Plan (see Appendix E) includes on-going operational strategies, as well as infrastructure improvements that encourage the use of non-automobile travel modes. The infrastructure improvements included in the TDM Plan not only benefit the project residents and workers, but also residents, workers, and visitors in the areas surrounding the project site. These improvements are also consistent with the City's adopted plans, ordinances, and policies relating to safety and performance of the circulation system because they improve the pedestrian and bicycle environment in the project vicinity.

Conflict with a Plan, Ordinance or Policy

Construction activities associated with the project could potentially temporarily disrupt transportation, bicycle, and pedestrian movement, as well as reduce parking availability in the project area. Compliance with **SCA-TRANS-2: Construction Activity in the Public Right-of-Way** would ensure these impacts would be less than significant.

The Project would encourage the use of non-automobile transportation modes by providing residential and employment (work/live) uses in a dense, walkable urban environment that is well-served by both local and regional transit. No changes to the bus routes operating in the project vicinity are proposed, and the project would not modify access between the project site and transit facilities. The project is consistent with the City's 2017 Pedestrian Master Plan and 2007 Bicycle Master Plan, as it would not make major modifications to existing pedestrian or bicycle facilities in the surrounding areas and would not adversely affect installation of future facilities. The project will be required to implement **SCA-TRANS-3: Bicycle Parking**, consistent with Chapter 17.117 of the Oakland Planning Code.

The project is consistent with the land use assumptions used in the WOSP EIR for the Mandela/West Grand Opportunity Area. Since the project, combined with other developments currently proposed or under construction in the Plan Area, would generate fewer automobile trips than assumed in the WOSP

EIR, the project would not result in additional impacts on traffic operations at the intersections analyzed in the WOSP EIR. The project would not increase physical roadway capacity in congested areas or add new roadways to the network. The Project does not result in any individual transportation system improvement (i.e., SCAs for transportation improvements is not required), but will be responsible for payment of Traffic Impact Fees consistent with the City of Oakland Transportation Impact Fee Ordinance (Chapter 15.74 of the Oakland Municipal Code) pursuant to **SCA-TRANS-4: Traffic Impact Fee**.

Certain parking spaces at the project must be equipped with full electrical circuits designated for future plug-in electrical vehicle charging, based on Chapter 15.04 of the Oakland Municipal Code and pursuant to the requirements of **SCA-TRANS-5: Plug-in Electric Vehicle Charging Infrastructure**.

The project would be consistent with applicable plans, ordinances and policies related to transportation issues, and would not cause a significant impact by conflicting with such plans for safety or the performance of the circulation system including transit, roadways, bicycle lanes, and pedestrian paths. With SCA compliance, the project would have a less than significant effect regarding transportation plans and policy conflicts, consistent with the conclusions of the prior Program EIRs.

Vehicle Miles Traveled

A VMT screening analysis was prepared for the project. The City of Oakland's Transportation Impact Review Guidelines include the following thresholds of significance related to substantial additional VMT (Oakland 2017c):

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

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

1. Small Projects: The project generates fewer than 100 vehicle trips per day
2. Low-VMT Areas: The project meets map-based screening criteria by being located in an area that exhibits below threshold VMT, or 15 percent or more below the regional average
3. Near Transit Stations: The project is located in a Transit Priority Area or within a one-half mile of a Major Transit Corridor or Stop and satisfies the following:
 - Has a FAR of more than 0.75; and
 - Includes less parking for use by residents, customers, or employees of the project than other typical nearby uses, or less than required by the City (if parking minimums pertain to the site) or allowed without a conditional use permit (if minimums and/or maximums pertain to the site); and
 - Is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Transportation Commission)

Criteria #1 - Small Projects: The project would generate more than 100 vehicle trips per day, and therefore does not meet Criterion #1.

Criteria #2 - Low-VMT Area: Although the work/live units would include both employment and “live” functions, the residential VMT per capita threshold is applicable because these workspaces would be used by sole proprietors who work and live in these joint-use quarters. The following **Table 7** shows the 2020 and 2040 VMT per capita for Transportation Analysis Zone (TAZ) 989 (the TAZ that the project site is located within), as well as applicable VMT thresholds of 15 percent below the regional average.¹⁴ As shown in the Table 7, the 2020 and 2040 average daily VMT per capita in TAZ 989 is more than 15 percent below the regional averages. Therefore, the project would satisfy Criterion #2.

Table 7: Daily Vehicle Miles Traveled Summary						
Land Use	Bay Area				West Oakland (TAZ 989)	
	2020		2040		2020	2040
	Regional Average	Regional Average minus 15%	Regional Average	Regional Average minus 15%		
Residential (VMT per Capita) ¹	15.0	12.8	13.8	11.7	7.5	6.2

Source: Fehr & Peers 2018; Attachment E

¹Metropolitan Transportation Commission model results accessed in January 2018 at: analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerCapita.

According to the City’s Transportation Impact Review Guidelines, commercial (industrial) spaces less than 80,000 square feet are considered local serving and are not expected to contribute to an increase in VMT. Therefore, the project would not result in substantial additional VMT from the light industrial/commercial uses. Additional project impacts with respect to industrial/commercial-related VMT would be less than significant.

Criterion #3: Near Transit Stations: The project site is about 1.5 miles from the West Oakland, 19th Street, and MacArthur BART stations. However, it is within 0.5 mile of intersecting frequent bus routes along Market Street (Route 88 with 15-minute peak headways) and San Pablo Avenue (Routes 72, 72M, and 72R with 10- to 12-minute peak headways). The project would not satisfy Criterion #3 because it would not meet one of the following three conditions for this criterion:

- The project would have an FAR of 2.0, which is greater than 0.75.
- The project would provide 138 parking spaces, with 109 spaces reserved for project tenants, 22 spaces for visitors and 7 spaces for parking to serve the light industrial space. The City of Oakland Planning Code Section 17.73.040 requires one space per work-live unit and one space for each 3,500 square feet of light industrial use. Thus, the Planning Code would require the project to provide 112 parking spaces. Since the proposed parking supply would exceed the parking minimum required by the Planning Code, the project would not satisfy Criterion #3.
- The project site is located in the West Oakland Priority Development Area as defined by Plan Bay Area and is therefore consistent with the region’s Sustainable Communities Strategy.

The project would satisfy the Low-VMT Area (#2) criterion and therefore, the VMT impacts of the project would be less than significant. This threshold was not considered in the prior Program EIRs.

¹⁴ TAZ 989 corresponds to West Oakland in the California Statewide Travel Demand Model.

Non-CEQA Transportation Issues

A non-CEQA Transportation Assessment was prepared for the project (see Appendix E) and provides recommendations for improving multimodal access, circulation, and safety. A summary of the findings is included below.

Automobile Access and Circulation

The project would provide automobile access through a mid-block driveway on Magnolia Street with all movements allowed. The driveway would have adequate sight distance between motorists exiting the driveway and pedestrians on the adjacent sidewalk.

Off-street project parking areas would provide adequate circulation for passenger vehicles. Vehicles would have adequate space to wait and maneuver into and out of spaces with minimal conflict.

The project site is adjacent to two side-street stop-controlled intersections: the Adeline Street/28th Street intersection at the northeast corner of the site and the Magnolia Street/28th Street intersection on the northwest corner. The Adeline Street/28th Street intersection is controlled by stop signs on the 28th Street approaches of the intersection and the Magnolia Street/28th Street intersection is controlled by stop signs on the Magnolia Street approaches. The stop-controlled 28th Street approaches at the Adeline Street/28th Street intersection may not provide adequate sight distance to the north because of parked cars along Adeline Street.

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

- Designate 20 feet of curb immediately north and south of the project driveway on Magnolia Street as red no parking zones to ensure adequate sight distance between motorists and bicyclists traveling on the street and motorists exiting the driveway.
- Designate 50 feet of curb on both sides of Adeline Street, north of 28th Street, as red no parking zones to ensure adequate sight distance between vehicles on the 28th Street approaches of the intersection and through vehicles on Adeline Street.

Bicycle Access and Parking

The bicycle facilities nearest the project site are buffered bike lanes on Market Street about 0.3 mile east of the site, and a neighborhood bike route on 32nd Street about 0.25 mile north of the project site. The nearest BayWheels bikeshare stations are located about 0.3 mile north of the project site on 32nd Street west of Adeline Street, and about 0.5 mile southeast of the project site on 24th Street just west of Market Street.

The project is required by the Oakland Municipal Code Section 17.117 to provide 1 long-term space for every 4 units (27 total long-term spaces) and 1 short-term parking space for every 20 units (6 total short-term spaces). The Code also requires a minimum of two long-term spaces and zero short-term spaces for the light industrial use.

The project would provide long-term bicycle parking for 140 bicycles in a bicycle room located above the parking area and adjacent to mechanical and janitorial spaces. This location would require cyclists to use either the elevator or stairs to access the bicycle room. The project would provide short-term bicycle parking via six bicycle racks in the project breezeway just south of the pedestrian entrance on 28th Street, thus meeting both the long-term and short-term bicycle parking required by the Code.

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

- Explore the feasibility of relocating all or some of the long-term bicycle parking to a more convenient location on the ground level of the project. **This measure shall be implemented if determined feasible by City staff.**

Pedestrian Access and Circulation

The project site provides public entrances for pedestrian access on both Adeline Street and 28th Street. Pedestrian access to the work/live units would be provided through internal pedestrian breezeways which could be accessed from Adeline, 28th, or Magnolia streets, connecting to internal stairways and an elevator near the northwest corner of the building.

There are existing sidewalks along Adeline Street (9.5 feet wide), 28th Street (13 feet wide), and Magnolia Street (10.5 feet wide). Pedestrian facilities include two stop-controlled intersections adjacent to the project site. The Adeline Street/28th Street intersection is stop-controlled on the 28th Street approaches and provides diagonal curb ramps with truncated domes on all four corners. The intersection provides a marked yellow school crossing crosswalk and signage across the north approach of Adeline Street; the other three approaches do not provide marked crosswalks. The Magnolia Street/28th Street intersection is stop-controlled on the Magnolia Street approaches and provides diagonal curb ramps without truncated domes on all four corners. The intersection does not provide any marked crosswalks.

Recommendation TRANS-3: While not required to address a CEQA impact, the following should be considered as part of the final design for the project:

- Explore the feasibility of installing directional curb ramps with truncated domes on all corners and high-visibility continental crosswalks across all four approaches of the Magnolia Street/28th Street intersection. **This measure shall be implemented if determined feasible by City staff.**
- Explore the feasibility of installing directional curb ramps with truncated domes on all corners of the Adeline Street/28th Street intersections. Ensure that the improvements would not conflict with the recommended protected bike lanes on Adeline Street. **This measure shall be implemented if determined feasible by City staff.**
- Explore the feasibility of installing a marked yellow school crosswalk on the south approach of the Adeline Street/28th Street intersection with school crossing signage and advanced yield lines and signage on Adeline Street north and south of the intersection. **This measure shall be implemented if determined feasible by City staff.**

Parking

Per Oakland Planning Code Section 17.73.040, the project is required to provide a minimum of 1 off-street parking space per work/live unit. Section 17.116.090 establishes a minimum requirement of 1 off-street space for each 3,500 square feet of industrial floor area. The project would provide 138 parking spaces, with 109 spaces reserved for project tenants, 22 spaces for visitors and 7 spaces for parking to serve the light industrial space. This is achieved by using mechanized “puzzle” parking lifts that can stack vehicles 4-high for 120 of these parking spaces; the remaining spaces would be on-grade spaces, including 5 ADA-designated parking spaces.

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

- Subject to review and approval by City of Oakland Department of Transportation and AC Transit to ensure best practices and avoid potential for non-compliance, designate 30 feet of

curb on southbound Adeline Street just south of the existing bus stop as yellow loading zones for deliveries and passenger pick-up/drop offs.¹⁵

Loading Requirements

The City of Oakland Municipal Code Section 17. 73.040 requires two off-street loading berths for work/live uses between 70,000 and 130,000 square feet. The site plan shows one off-street loading space within the project parking facility; this does not meet the minimum loading berths required by City Code.

Recommendation TRANS-5: While not required to address a CEQA impact, the following should be considered as part of the final design for the project:

- Consider eliminating some of the on-site parking spaces to provide a second off-street loading space.

Conclusions – Transportation/Traffic

Based on an examination of the analysis, findings, and conclusions of the prior Program EIRs, implementation of the project would not substantially increase the severity of any significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to transportation and traffic that were not identified in these Program EIRs. Although VMT was not analyzed in the prior Program EIRs, the project's VMT impacts are less than significant, and not a new significant effect. SCAs identified in Attachment A at the end of the CEQA checklist related to transportation and traffic that would apply to the project include:

- SCA-TRANS-1: Transportation and Parking Demand Management
- SCA-TRANS-2 Construction Activity in the Public Right-of-Way
- SCA-TRANS-3: Bicycle Parking
- SCA-TRANS-4: Traffic Impact Fee
- SCA-TRANS-5: Plug-in Electric Vehicle Charging Infrastructure

¹⁵ According to Oakland Municipal Code Section 10.40.020, yellow curb restricts stopping or parking on non-Sundays between 7:00 AM and 6:00 PM for any purpose except for the loading or unloading of passengers for 3 or fewer minutes, or the loading or unloading of materials for 30 or fewer minutes.

14. Utilities and Service Systems

Impact Topics	WOSP EIR Findings with Implementation of SCA or Mitigation Measures (if required)	Project			
		Relationship to WOSP EIR Findings			Level of Significance
		Equal or Less Severity	Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	
Wastewater and Stormwater Facilities	LTS	☒	☐	–	LTS
Water Supplies	LTS	☒	☐	–	LTS
Solid Waste Services	LTS	☒	☐	–	LTS
Energy	LTS	☒	☐	–	LTS

Prior Program EIR Findings

Land Use and Transportation Element EIR

The 1998 LUTE EIR identified potentially significant effects related to water, wastewater, stormwater facilities, solid waste and energy, and identified mitigation measures that reduced these effects to less than significant. These mitigation measures are now incorporated into applicable City SCAs pertaining to the assessment of projected water, wastewater, and storm drainage loads as compared to available water, sewer, and storm drain capacity, and requiring new development to provide a combination of on-site and off-site improvements.

West Oakland Specific Plan EIR

The WOSP EIR concluded that future development in accordance with the Specific Plan would consist of redevelopment of previously developed properties, so there would be limited change in impervious surface area and stormwater runoff. Development facilitated by the Specific Plan would not result in an increase in stormwater runoff with implementation of applicable SCAs.

The Water Supply Assessment prepared by EBMUD for the WOSP EIR concluded that EBMUD has sufficient water supplies to meet current water demand and future water demand through 2035, including the increased water demand associated with the Specific Plan, during normal, single dry, and multiple dry years. Construction of needed water system improvements would typically occur within existing public rights-of-way and construction period traffic, noise, air quality, water quality and other potential impacts would be mitigated through the City's standard construction mitigation practices.

The WOSP EIR concluded that with construction of needed sewer system improvements pursuant to City SCAs (including payment of improvements and hook-up fees), the wastewater collection and treatment system would have adequate capacity to serve future development in accordance with the Specific Plan.

The WOSP concluded that the Altamont Landfill and Vasco Road Landfill have sufficient permitted capacity to accommodate the solid waste disposal needs of future development under the Specific Plan,

and that with required implementation of SCAs related to waste reduction and recycling, the Specific Plan would not violate applicable federal, state, and local statutes and regulations related to solid waste.

Finally, the WOSP concluded that Pacific Gas & Electric Company (PG&E) has capacity to handle projected energy demands with its current system, and that with SCAs, development under the Specific Plan would not cause a violation of regulations relating to energy standards nor result in a determination by PG&E that it does not have adequate capacity to serve.

Project Analysis

As indicated in the individual discussions below, the project would comply with General Plan and WOSP policies, all applicable regulations and applicable City of Oakland SCAs pertaining to public utilities, and the project's impacts for increased demands on the capacity of these utility systems would not be greater than what was previously analyzed in the WOSP EIR.

Stormwater Facilities

The project would include construction of new on-site storm drains connected to the SWMP's bio-filtration system. After appropriate water quality treatment, the on-site stormdrain system would connect to an existing 48-inch stormdrain line in 28th Street right-of-way near Magnolia Street, which already serves the project site. Pursuant to **SCA-UTIL-1: Storm Drain System**, the new on-site stormwater infrastructure would be required to accommodate stormwater runoff from project and comply with all WOSP policies for future development to reduce stormwater runoff and increased demand in the WOSP area.

Wastewater

The project would include construction of a new on-site sanitary sewer system with service laterals from the building. The on-site sewer system would connect to an existing 12-inch sanitary sewer line in the Magnolia Street right-of-way and to an existing 8-inch sanitary sewer line in the 28th Street right-of-way, which already serves the project site. Pursuant to **SCA-UTIL-2: Sanitary Sewer System**, the new on-site sewer infrastructure would be required to accommodate flows from project and comply with all City standards.

The City requires individual projects to pay development and connection fees to account for future wastewater demand projections, as well as fair-share fees to fund needed sewer system facilities.

Water Service

The project would include construction of a new on-site potable water system to serve the building. The on-site water system would connect to an existing water main in the Magnolia Street right-of-way, with separately sized connections and meters for irrigation water, domestic water, and fire service water. An existing fire hydrant at the corner of Magnolia Street and 28th Street would remain, and a new fire hydrant would be installed at the site's boundary along Adeline Street, connected to an existing water main. Pursuant to **SCA-UTIL-3: Green Building Requirements** and **SCA-UTIL-4: Water Efficient Landscape Ordinance**, water demands of the project would be reduced.

The project's demand for water services was included in assumed water demands of the WOSP and no increased water demands would be required by the project beyond what was analyzed in the WOSP EIR. The existing water distribution system is sized to accommodate West Oakland's historically heavy industrial and manufacturing uses and has capacity to accommodate planned mixed-use development. As part of EBMUD's water services agreement, the project applicant would pay applicable City

development and connection fees, pay its fair-share development fees for improvements and future maintenance, and submit water design plans for approval by the City's Public Works Department. The City also includes project-specific engineering recommendations to address concerns regarding new water mains, pipe corrosion, and water transmission capacity.

Energy

The project identifies an assumed connection point of proposed underground primary electrical conduits to a proposed joint underground telephone and electrical utility trench, with an assumed connection point for the proposed underground secondary electrical conduits to a transformer. Pursuant to **SCA-UTIL-5: Underground Utilities**, the project also anticipates the relocation and undergrounding of a joint a utility pole to be coordinated with all associated utility providers. The project will be required to comply with all standards of Title 24 of the California Code of Regulations and CALGreen, as applicable, incorporation of energy-conserving design and construction. This project is anticipated to have similar energy requirements as other similar modern developments in the vicinity and pursuant to SCA-UTIL-3: Green Building Requirements, the overall energy demands of the project would be reduced.

Solid Waste

The project would be required to implement **SCA-UTIL-6: Construction and Demolition Waste Reduction and Recycling** during the construction process to minimize waste-to-landfill requirements, consistent with City requirements. Additionally, the project includes a covered trash and recycling facility central to the site and near the loading dock, consistent with **SCA-UTIL-7: Recycling Collection and Storage Space**. The City would continue to provide waste collection and recycling services and would be expected to continue to meet its target diversion rates. The project would be served by a landfill with sufficient permitted capacity to accommodate solid waste disposal needs and would not violate applicable federal, state, and local statutes and regulations related to solid waste.

Conclusions – Utilities and Service Systems

Based on an examination of the analysis, findings, and conclusions of the prior Program EIRs, implementation of the project would not substantially increase the severity of any significant impacts to utilities services as identified in the prior Program EIRs, nor would it result in new significant impacts related to utilities services that were not identified in those Program EIRs. Adherence to existing regulatory requirements and City SCAs is required for the project. SCAs identified in Attachment A at the end of the CEQA checklist that apply to the project include:

- SCA-UTIL-1: Storm Drain System
- SCA-UTIL-2: Sanitary Sewer System
- SCA-UTIL-3: Green Building Requirements
- SCA-UTIL-4: Water Efficient Landscape Ordinance
- SCA-UTIL-5: Underground Utilities
- SCA-UTIL-6: Construction and Demolition Waste Reduction and Recycling
- SCA-UTIL-7: Recycling Collection and Storage Space

ACRONYMS AND TERMS

ABAG	Association of Bay Area Governments
AC Transit	Alameda-Contra Costa Transit District
ACDEH	Alameda County Department of Environmental Health
APN	Assessor's Parcel Number
BAAQMD	Bay Area Quality Management District
BART	Bay Area Rapid Transit
BMP	best management practice
CAP	Corrective Action Plan
CAIP	Corrective Action Implementation Plan
CEQA	California Environmental Quality Act
City	City of Oakland
CUPA	Certified Unified Program Agency
dBA	A-weighted decibel
EBMUD	East Bay Municipal Utility District
EIR	Environmental Impact Report
ESL	environmental screening levels
FAR	floor area ratio
GHG	greenhouse gas
LID	low-impact development
LTS	less than significant
LUTE	Land use and Transportation Element
MM	mitigation measure
MTCO ₂ e	metric tons carbon dioxide equivalent
NO _x	nitrous oxide
NPDES	National Pollutant Discharge Elimination System
NWIC	Northwest Information Center
OUSD	Oakland Unified School District
PCB	polychlorinated biphenyl
PM _{2.5}	fine particulate matter
PM ₁₀	coarse particulate matter
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
SCA	Standard Condition of Approval
STC	Standard Transmission Class
SU	significant and unavoidable

SWMP	stormwater management plan
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAZ	traffic analysis zone
TDM	transportation demand management
UST	underground storage tank
VMEC	Vapor Mitigation Engineering Controls
VMT	vehicle miles traveled
WOSP	West Oakland Specific Plan

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ATTACHMENT A: CITY OF OAKLAND – STANDARD CONDITIONS OF APPROVAL

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

These SCAs are incorporated into projects as conditions of approval, regardless of the determination of a project’s environmental impacts. As applicable, the SCAs are adopted as requirements of an individual project when it is approved by the City, and are designed to, and will, avoid or substantially reduce a project’s environmental effects.

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

All SCAs identified in the CEQA Analysis—which are consistent with the measures and conditions presented in the General Plan—are included herein. To the extent that any SCA identified in the CEQA Analysis was inadvertently omitted, it is automatically incorporated herein by reference.

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

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

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

Note that the SCAs included in this document are referred to using an abbreviation for the environmental topic area and are numbered sequentially for each topic area—e.g., **SCA-AIR-1**, **SCA AIR-2**. The SCA title and the SCA number that corresponds to the City’s master SCA list are also provided in the Appendix listing—e.g., **SCA-AIR-1: Dust Controls – Construction Related; #21**).

Table A-1. City of Oakland Standard SCAs Required for the Project

Standard Conditions of Approval	When Required	Initial Approval	Monitoring/ Inspection
General			
SCA-GEN-1: Regulatory Permits and Authorizations from Other Agencies. (#15) The project applicant shall obtain all necessary regulatory permits and authorizations from applicable resource/regulatory agencies including, but not limited to, the Regional Water Quality Control Board, Bay Area Air Quality Management District, Bay Conservation and Development Commission, California Department of Fish and Wildlife, U. S. Fish and Wildlife Service, and Army Corps of Engineers and shall comply with all requirements and conditions of the permits/authorizations. The project applicant shall submit evidence of the approved permits/authorizations to the City, along with evidence demonstrating compliance with any regulatory permit/authorization conditions of approval.	Prior to activity requiring permit / authorization from regulatory agency	Approval by applicable regulatory agency with jurisdiction; evidence of approval submitted to Bureau of Planning	Applicable regulatory agency with jurisdiction
Aesthetics, Shadow, and Wind			
SCA-AES-1: Trash and Blight Removal (#16) The project applicant and his/her successors shall maintain the property free of blight, as defined in chapter 8.24 of the Oakland Municipal Code. For nonresidential and multi-family residential projects, the project applicant shall install and maintain trash receptacles near public entryways as needed to provide sufficient capacity for building users.	Ongoing	N/A	Bureau of Building
SCA-AES-2: Graffiti Control (#17) a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation: <ul style="list-style-type: none"> i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces. ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces. iii. Use of paint with anti-graffiti coating. iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED). v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement. 	Ongoing	N/A	Bureau of Building

<p>b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include:</p> <ul style="list-style-type: none"> i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system. ii. Covering with new paint to match the color of the surrounding surface. iii. Replacing with new surfacing (with City permits if required). 			
<p>SCA-AES-3: Public Art for Private Development (#20)</p> <p>The project is subject to the City's Public Art Requirements for Private Development, adopted by Ordinance No. 13275 C.M.S. ("Ordinance"). The public art contribution requirements are equivalent to one-half percent (0.5%) for the "residential" building development costs, and one percent (1.0%) for the "non-residential" building development costs.</p> <p>The contribution requirement can be met through: 1) the installation of freely accessible art at the site; 2) the installation of freely accessible art within one-quarter mile of the site; or 3) satisfaction of alternative compliance methods described in the Ordinance, including, but not limited to, payment of an in-lieu fee contribution. The applicant shall provide proof of full payment of the in-lieu contribution and/or provide plans, for review and approval by the Planning Director, showing the installation or improvements required by the Ordinance prior to issuance of a building permit.</p> <p>Proof of installation of artwork, or other alternative requirement, is required prior to the City's issuance of a final certificate of occupancy for each phase of a project unless a separate, legal binding instrument is executed ensuring compliance within a timely manner subject to City approval.</p>	<p><i>Payment of in-lieu fees and/or plans showing fulfillment of public art requirement: Prior to Issuance of Building permit.</i></p> <p><i>Installation of art/cultural space: Prior to Issuance of a Certificate of Occupancy</i></p>	Bureau of Planning	Bureau of Building
<p>SCA-AES-4: Lighting (#19)</p> <p>Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties.</p>	Prior to building permit final	N/A	Bureau of Building
Air Quality			
<p>SCA-AIR-1: Dust Controls – Construction Related (#21)</p> <p>The project applicant shall implement all of the following applicable air pollution control measures during construction of the project:</p> <ul style="list-style-type: none"> a. Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible. b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). 	During construction	N/A	Bureau of Building

<ul style="list-style-type: none"> 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. e. All demolition activities (if any) shall be suspended when average wind speeds exceed 20 mph. f. All trucks and equipment, including tires, shall be washed off prior to leaving the site. g. 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. 			
<p>SCA-AIR-2: Criteria Air Pollutant Controls – Construction Related (#22)</p> <p>The project applicant shall implement all of the following applicable basic control measures for criteria air pollutants during construction of the project as applicable:</p> <ul style="list-style-type: none"> a. Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points. b. Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations (“California Air Resources Board Off-Road Diesel Regulations”). c. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. Equipment check documentation should be kept at the construction site and be available for review by the City and the Bay Area Air Quality District as needed. d. Portable equipment shall be powered by grid electricity if available. If electricity is not available, propane or natural gas generators shall be used if feasible. Diesel engines shall only be used if grid electricity is not available and propane or natural gas generators cannot meet the electrical demand. e. Low VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings. f. All equipment to be used on the construction site shall comply with the requirements of Title 13, Section 2449, of the California Code of Regulations (“California Air Resources Board Off-Road Diesel Regulations”) and upon request by the City (and the Air District if specifically requested), the project applicant shall provide written documentation that fleet requirements have been met. 	During construction	N/A	Bureau of Building
<p>SCA-AIR-3: Diesel Particulate Matter Controls – Construction Related (#23)</p> <p><i>a. Diesel Particulate Matter Reduction Measures</i></p> <p>The project applicant shall implement appropriate measures during construction to reduce potential</p>	Prior to Issuance of Construction-Related Permit (i)	Bureau of Planning	Bureau of Building

<p>health risks to sensitive receptors due to exposure to diesel particulate matter (DPM) from construction emissions. The project applicant shall choose one of the following methods:</p> <p>i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with current guidance from the California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment to determine the health risk to sensitive receptors exposed to DPM from project construction emissions. The HRA shall be submitted to the City (and the Air District if specifically requested) for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then DPM reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, DPM reduction measures shall be identified to reduce the health risk to acceptable levels as set forth under subsection b below. Identified DPM reduction measures shall be submitted to the City for review and approval prior to the issuance of building permits and the approved DPM reduction measures shall be implemented during construction.</p> <p>-or-</p> <p>ii. All off-road diesel equipment shall be equipped with the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by CARB. The equipment shall be properly maintained and tuned in accordance with manufacturer specifications. This shall be verified through an equipment inventory submittal and Certification Statement that the Contractor agrees to compliance and acknowledges that a significant violation of this requirement shall constitute a material breach of contract.</p>	During Construction (ii)		
<p><i>b. Construction Emissions Minimization Plan (if required by a above)</i></p> <p>The project applicant shall prepare a Construction Emissions Minimization Plan (Emissions Plan) for all identified DPM reduction measures (if any). The Emissions Plan shall be submitted to the City (and the Bay Area Air Quality District if specifically requested) for review and approval prior to the issuance of building permits. The Emissions Plan shall include the following:</p> <p>i. An equipment inventory summarizing the type of off-road equipment required for each phase of construction, including the equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. For all VDECS, the equipment inventory shall also include the technology type, serial number, make, model, manufacturer, CARB verification number level, and installation date.</p> <p>ii. A Certification Statement that the Contractor agrees to comply fully with the Emissions Plan and acknowledges that a significant violation of the Emissions Plan shall constitute a material breach of contract.</p>	Prior to Issuance of Construction-Related Permit	Bureau of Planning	Bureau of Building
<p>SCA-AIR-4: Asbestos in Structures (#27)</p> <p>The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety</p>	Prior to Approval of Construction-Related Permit	Bureau of Building	Bureau of Building

Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request.			
<p>SCA-AIR-5: Stationary Sources of Air Pollution (Toxic Air Contaminants) (#25)</p> <p>The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to on-site stationary sources of toxic air contaminants. The project applicant shall choose one of the following methods:</p> <ul style="list-style-type: none"> a. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk associated with proposed stationary sources of pollution in the project. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. - or - b. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: <ul style="list-style-type: none"> i. Installation of non-diesel fueled generators, if feasible, or; ii. Installation of diesel generators with an EPA-certified Tier 4 engine or engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy, if feasible. 	Prior to Approval of Construction-Related Permit	Bureau of Planning	Bureau of Building
<p>SCA-AIR-6: Exposure to Air Pollution (Toxic Air Contaminants) (#24)</p> <p><i>a. Health Risk Reduction Measures</i></p> <p>The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. The project applicant shall choose one of the following methods:</p> <ul style="list-style-type: none"> i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and 	Prior to Approval of Construction-Related Permit	Bureau of Planning	Bureau of Building

<p>approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City.</p> <p>– or –</p> <p>ii. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City:</p> <ul style="list-style-type: none"> • Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required. • Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph). • Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible. • The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods. • Sensitive receptors shall be located on the upper floors of buildings, if feasible. • Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (<i>Pinus nigra</i> var. <i>maritima</i>), Cypress (x <i>Cupressocyparis leylandii</i>), Hybrid popular (<i>Populus deltoids</i> x <i>trichocarpa</i>), and Redwood (<i>Sequoia sempervirens</i>). • Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible. • Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible. • Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible: <ul style="list-style-type: none"> • Installing electrical hook-ups for diesel trucks at loading docks. • Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards. • Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels. 			
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<ul style="list-style-type: none"> Prohibiting trucks from idling for more than two minutes. Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented. 			
<p><i>b. Maintenance of Health Risk Reduction Measures</i></p> <p>The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.</p>	Ongoing	N/A	Bureau of Building
Biological Resources			
<p>SCA-BIO-1: Tree Removal During Bird Breeding Season (#30)</p> <p>To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.</p>	Prior to removal of trees	Bureau of Building	Bureau of Building
Cultural Resources			
<p>SCA-CUL-1: Archaeological and Paleontological Resources – Discovery During Construction (#33)</p> <p>Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If</p>	During construction	N/A	Bureau of Building

<p>avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented.</p> <p>In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense.</p> <p>In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.</p>			
<p>SCA-CUL-2: Human Remains – Discovery during Construction (#35)</p> <p>Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.</p>	During Construction	N/A	Bureau of Building
Geology and Soils			
<p>SCA-GEO-1: Construction-Related Permit(s) (#37)</p> <p>The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related</p>	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building

codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.			
SCA-GEO-2: Seismic Hazards Zone (Landslide/Liquefaction) (#40) The project applicant shall submit a site-specific geotechnical report, consistent with California Geological Survey Special Publication 117 (as amended), prepared by a registered geotechnical engineer for City review and approval containing at a minimum a description of the geological and geotechnical conditions at the site, an evaluation of site-specific seismic hazards based on geological and geotechnical conditions, and recommended measures to reduce potential impacts related to liquefaction and/or slope stability hazards. The project applicant shall implement the recommendations contained in the approved report during project design and construction.	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building
Hazards and Hazardous Materials			
SCA-HAZ-1: Hazardous Materials Related to Construction (#43) The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following: <ol style="list-style-type: none"> Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction; Avoid overtopping construction equipment fuel gas tanks; During routine maintenance of construction equipment, properly contain and remove grease and oils; Properly dispose of discarded containers of fuels and other chemicals; Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate. 	During construction	N/A	Bureau of Building

<p>SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44)</p> <p><i>a. Erosion and Sedimentation Control Plan Required</i></p> <p>The project applicant shall submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACMs), lead-based paint, polychlorinated biphenyls (PCBs), and any other building materials or stored materials classified as hazardous materials by State or federal law. If lead-based paint, ACMs, PCBs, or any other building materials or stored materials classified as hazardous materials are present, the project applicant shall submit specifications prepared and signed by a qualified environmental professional, for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.</p>	<p>Prior to approval of demolition, grading, or building permits</p>	<p>Bureau of Building</p>	<p>Bureau of Building</p>
<p><i>b. Environmental Site Assessment Required</i></p> <p>The project applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.</p>	<p>Prior to approval of construction-related permit</p>	<p>Applicable regulatory agency with jurisdiction</p>	<p>Applicable regulatory agency with jurisdiction</p>
<p><i>c. Health and Safety Plan Required</i></p> <p>The project applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan.</p>	<p>Prior to approval of construction-related permit</p>	<p>Bureau of Building</p>	<p>Bureau of Building</p>
<p><i>d. Best Management Practices (BMPs) Required for Contaminated Sites</i></p> <p>The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following:</p> <ul style="list-style-type: none"> i. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements. ii. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable 	<p>During construction</p>	<p>N/A</p>	<p>Bureau of Building</p>

barriers to prohibit groundwater and vapor intrusion into the building.			
<p>SCA-HAZ-3: Hazardous Materials Business Plan (#45)</p> <p>The project applicant shall submit a Hazardous Materials Business Plan for review and approval by the City, and shall implement the approved Plan. The approved Plan shall be kept on file with the City and the project applicant shall update the Plan as applicable. The purpose of the Hazardous Materials Business Plan is to ensure that employees are adequately trained to handle hazardous materials and provides information to the Fire Department should emergency response be required. Hazardous materials shall be handled in accordance with all applicable local, state, and federal requirements. The Hazardous Materials Business Plan shall include the following:</p> <ul style="list-style-type: none"> a. The types of hazardous materials or chemicals stored and/or used on-site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids. b. The location of such hazardous materials. c. An emergency response plan including employee training information. d. A plan that describes the manner in which these materials are handled, transported, and disposed. 	Prior to building permit final	Oakland Fire Department	Oakland Fire Department
Hydrology and Water Quality			
<p>SCA-HYDRO-1: Erosion and Sedimentation Control Plan for Construction (#49)</p> <p><i>a. Erosion and Sedimentation Control Plan Required</i></p> <p>The project applicant shall submit an Erosion and Sedimentation Control Plan to the City for review and approval. The Erosion and Sedimentation Control Plan shall include all necessary measures to be taken to prevent excessive stormwater runoff or carrying by stormwater runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading and/or construction operations. The Plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and stormwater retention basins. Off-site work by the project applicant may be necessary. The project applicant shall obtain permission or easements necessary for off-site work. There shall be a clear notation that the plan is subject to changes as changing conditions occur. Calculations of anticipated stormwater runoff and sediment volumes shall be included, if required by the City. The Plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment.</p>	Prior to approval of construction-related permit	Bureau of Building	N/A
<p><i>b. Erosion and Sedimentation Control During Construction</i></p> <p>The project applicant shall implement the approved Erosion and Sedimentation Control Plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Bureau of Building.</p>	During construction	N/A	Bureau of Building

<p>SCA-HYDRO-2: State Construction General Permit. (#46)</p> <p>The project applicant shall comply with the requirements of the Construction General Permit issued by the State Water Resources Control Board (SWRCB). The project applicant shall submit a Notice of Intent (NOI), Stormwater Pollution Prevention Plan (SWPPP), and other required Permit Registration Documents to SWRCB. The project applicant shall submit evidence of compliance with Permit requirements to the City.</p>	<p>Prior to approval of construction-related permit</p>	<p>State Water Resources Control Board; evidence of compliance submitted to Bureau of Building</p>	<p>State Water Resources Control Board</p>
<p>SCA-HYDRO-3: NPDES C.3 Stormwater Requirements for Regulated Projects (#54)</p> <p><i>a. Post-Construction Stormwater Management Plan Required</i></p> <p>The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following:</p> <ul style="list-style-type: none"> i. Location and size of new and replaced impervious surface; ii. Directional surface flow of stormwater runoff; iii. Location of proposed on-site storm drain lines; iv. Site design measures to reduce the amount of impervious surface area; v. Source control measures to limit stormwater pollution; vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff. 	<p>Prior to approval of construction-related permit</p>	<p>Bureau of Planning; Bureau of Building</p>	<p>Bureau of Building</p>
<p><i>b. Maintenance Agreement Required</i></p> <p>The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following:</p> <ul style="list-style-type: none"> i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site 	<p>Prior to building permit final</p>	<p>Bureau of Building</p>	<p>Bureau of Building</p>

stormwater treatment measures and to take corrective action if necessary. The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.			
Noise			
SCA-NOS-1: Construction Days/Hours (#63) The project applicant shall comply with the following restrictions concerning construction days and hours: <ul style="list-style-type: none"> a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday. c. No construction is allowed on Sunday or federal holidays. Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.	During Construction	N/A	Bureau of Building
SCA-NOS-2: Construction Noise (#64) The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following: <ul style="list-style-type: none"> a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler 	During Construction	N/A	Bureau of Building

<p>can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.</p> <p>c. Applicant shall use temporary power poles instead of generators where feasible.</p> <p>d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.</p> <p>e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.</p>			
<p>SCA-NOS-3: Extreme Construction Noise (#65)</p> <p><i>a. Construction Noise Management Plan Required</i></p> <p>Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following:</p> <p>i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;</p> <p>ii. Implement “quiet” pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;</p> <p>iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;</p> <p>iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and</p> <p>v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.</p>	Prior to Approval	Bureau of Building	Bureau of Building
<p><i>b. Public Notification Required</i></p> <p>The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities</p>			

and describe noise attenuation measures to be implemented.			
SCA-NOS-4: Construction Noise Complaints (#67) The project applicant shall submit to the City for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include: <ul style="list-style-type: none"> a. Designation of an on-site construction complaint and enforcement manager for the project; b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit; c. Protocols for receiving, responding to, and tracking received complaints; and d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request. 	Prior to Approval of Construction-Related Permit	Bureau of Building	Bureau of Building
SCA-NOS-5: Operational Noise (#69) Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City.	Ongoing	N/A	Bureau of Building
SCA-NOS-6: Exposure to Community Noise (#67) The project applicant shall submit a Noise Reduction Plan prepared by a qualified acoustical engineer for City review and approval that contains noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the land use compatibility guidelines of the Noise Element of the Oakland General Plan. The applicant shall implement the approved Plan during construction. To the maximum extent practicable, interior noise levels shall not exceed the following: <ul style="list-style-type: none"> a. 45 dBA: Residential activities, civic activities, hotels b. 50 dBA: Administrative offices; group assembly activities c. 55 dBA: Commercial activities d. 65 dBA: Industrial activities 	Prior to Approval of Construction-Related Permit	Bureau of Planning	Bureau of Building
Public Services			
SCA-PS-1: Capital Improvements Impact Fee (#74) The project applicant shall comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).	Prior to issuance of building permit	Bureau of Building	N/A

Transportation and Traffic				
SCA-TRANS-1: Transportation and Parking Demand Management. (#79) <i>a. Transportation and Parking Demand Management (TDM) Plan Required</i> The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City. <ul style="list-style-type: none"> i. The goals of the TDM Plan shall be the following: <ul style="list-style-type: none"> • Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable. • Achieve the following project vehicle trip reductions (VTR): <ul style="list-style-type: none"> o Projects generating 50-99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR o Projects generating 100 or more net new a.m. or p.m. peak hour vehicle trips: 20 percent VTR • Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate. • Enhance the City's transportation system, consistent with City policies and programs. ii. The TDM Plan should include the following: <ul style="list-style-type: none"> • Baseline existing conditions of parking and curbside regulations within the surrounding neighborhood that could affect the effectiveness of TDM strategies, including inventory of parking spaces and occupancy if applicable. • Proposed TDM strategies to achieve VTR goals (see below). iii. For employers with 100 or more employees at the subject site, the TDM Plan shall also comply with the requirements of Oakland Municipal Code Chapter 10.68 Employer-Based Trip Reduction Program. iv. The following TDM strategies must be incorporated into a TDM Plan based on a project location or other characteristics. When required, these mandatory strategies should be identified as a credit toward a project's VTR. 		Prior to approval of planning application	Bureau of Planning	
Improvement	Required by code or when...			
Bus boarding bulbs or islands	<ul style="list-style-type: none"> • A bus boarding bulb or island does not already exist and a bus stop is located along the project frontage; and/or • A bus stop along the project frontage serves a route with 15 minutes or better peak hour service and has a shared bus- 			

	bike lane curb			
Bus shelter	<ul style="list-style-type: none"> • A stop with no shelter is located within the project frontage, or • The project is located within 0.10 miles of a flag stop with 25 or more boardings per day 			
Concrete bus pad	<ul style="list-style-type: none"> • A bus stop is located along the project frontage and a concrete bus pad does not already exist 			
Curb extensions or bulb-outs	<ul style="list-style-type: none"> • Identified as an improvement within site analysis 			
Implementation of a corridor-level bikeway improvement	<ul style="list-style-type: none"> • A buffered Class II or Class IV bikeway facility is in a local or county adopted plan within 0.10 miles of the project location; and • The project would generate 500 or more daily bicycle trips 			
Implementation of a corridor-level transit capital improvement	<ul style="list-style-type: none"> • A high-quality transit facility is in a local or county adopted plan within 0.25 miles of the project location; and • The project would generate 400 or more peak period transit trips 			
Installation of amenities such as lighting; pedestrian-oriented green infrastructure, trees, or other greening landscape; and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan.	<ul style="list-style-type: none"> • Always required 			
Installation of safety improvements identified in the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.)	<ul style="list-style-type: none"> • When improvements are identified in the Pedestrian Master Plan along project frontage or at an adjacent intersection 			
In-street bicycle corral	<ul style="list-style-type: none"> • A project includes more than 10,000 square feet of ground floor retail, is located along a Tier 1 bikeway, and on-street vehicle parking is provided along 			

	the project frontages.			
Intersection improvements¹⁶	<ul style="list-style-type: none"> Identified as an improvement within site analysis 			
New sidewalk, curb ramps, curb and gutter meeting current City and ADA standards	<ul style="list-style-type: none"> Always required 			
No monthly permits and establish minimum price floor for public parking¹⁷	<ul style="list-style-type: none"> If proposed parking ratio exceeds 1:1000 sf. (commercial) 			
Parking garage is designed with retrofit capability	<ul style="list-style-type: none"> Optional if proposed parking ratio exceeds 1:1.25 (residential) or 1:1000 sf. (commercial) 			
Parking space reserved for car share	<ul style="list-style-type: none"> If a project is providing parking and a project is located within downtown. One car share space reserved for buildings between 50 – 200 units, then one car share space per 200 units. 			
Paving, lane striping or restriping (vehicle and bicycle), and signs to midpoint of street section	<ul style="list-style-type: none"> Typically required 			
Pedestrian crossing improvements	<ul style="list-style-type: none"> Identified as an improvement within site analysis 			
Pedestrian-supportive signal changes¹⁸	<ul style="list-style-type: none"> Identified as an improvement within operations analysis 			
Real-time transit information system	<ul style="list-style-type: none"> A project frontage block includes a bus stop or BART station and is along a Tier 1 transit route with 2 or more routes or peak period frequency of 15 minutes or better 			

¹⁶ Including but not limited to visibility improvements, shortening corner radii, pedestrian safety islands, accounting for pedestrian desire lines.

¹⁷ May also provide a cash incentive or transit pass alternative to a free parking space in commercial properties.

¹⁸ Including but not limited to reducing signal cycle lengths to less than 90 seconds to avoid pedestrian crossings against the signal, providing a leading pedestrian interval, provide a “scramble” signal phase where appropriate.

Relocating bus stops to far side	<ul style="list-style-type: none"> • A project is located within 0.10 mile of any active bus stop that is currently near-side 			
Signal upgrades¹⁹	<ul style="list-style-type: none"> • Project size exceeds 100 residential units, 80,000 sf. of retail, or 100,000 sf. of commercial; and • Project frontage abuts an intersection with signal infrastructure older than 15 years 			
Transit queue jumps	<ul style="list-style-type: none"> • Identified as a needed improvement within operations analysis of a project with frontage along a Tier 1 transit route with 2 or more routes or peak period frequency of 15 minutes or better 			
Trenching and placement of conduit for providing traffic signal interconnect	<ul style="list-style-type: none"> • Project size exceeds 100 units, 80,000 sf. of retail, or 100,000 sf. of commercial; and • Project frontage block is identified for signal interconnect improvements as part of a planned ITS improvement; and • A major transit improvement is identified within operations analysis requiring traffic signal interconnect 			
Unbundled parking	<ul style="list-style-type: none"> • If proposed parking ratio exceeds 1:1.25 (residential) 			
v. Other TDM strategies to consider include, but are not limited to, the following: <ul style="list-style-type: none"> • Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement. • Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority 				

¹⁹ Including typical traffic lights, pedestrian signals, bike actuated signals, transit-only signals

<p>bikeways, on-site signage and bike lane striping.</p> <ul style="list-style-type: none"> • Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project. • Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan, the Master Street Tree List and Tree Planting Guidelines (which can be viewed at http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak042662.pdf and http://www2.oaklandnet.com/oakca1/groups/pwa/documents/form/oak025595.pdf, respectively) and any applicable streetscape plan. • Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements. • Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency). • Provision of a transit subsidy to employees or residents, determined by the project applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes. • Provision of an ongoing contribution to transit service to the area between the project and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle service; and 3) Establishment of new shuttle service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario 3). • Guaranteed ride home program for employees, either through 511.org or through separate program. • Pre-tax commuter benefits (commuter checks) for employees. • Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants. • On-site carpooling and/or vanpool program that includes preferential (discounted or free) parking for carpools and vanpools. • Distribution of information concerning alternative transportation options. • Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive or transit pass alternative to a free parking space in commercial properties. • Parking management strategies including attendant/valet parking and shared parking spaces. • Requiring tenants to provide opportunities and the ability to work off-site. • Allow employees or residents to adjust their work schedule in order to complete the basic work 			
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<p>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).</p> <ul style="list-style-type: none"> • 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. <p>The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report.</p>			
<p><i>b. TDM Implementation — Physical Improvements</i></p> <p>For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project.</p>	Prior to Building Permit Final	Bureau of Building	Bureau of Building
<p><i>c. TDM Implementation — Operational Strategies</i></p> <p>For projects that generate 100 or more net new a.m. or p.m. peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved.</p>	Ongoing	Bureau of Planning	Bureau of Planning
<p>SCA-TRANS-2: Construction Activity in the Public Right-of-Way. (#76)</p> <p><i>a. Obstruction Permit Required</i></p> <p>The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets, sidewalks, bicycle facilities, and bus stops.</p>	Prior to Approval of Construction Related Permit	Bureau of Building	Bureau of Building
<p><i>b. Traffic Control Plan Required</i></p> <p>In the event of obstructions to vehicle or bicycle travel lanes, bus stops, or sidewalks, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of</p>	Prior to Approval of Construction Related Permit	Public Works Department, Transportation Services Division	Bureau of Building

comprehensive traffic control measures for auto, transit, bicycle, and pedestrian accommodations (or detours, if accommodations are not feasible), including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The Traffic Control Plan shall be in conformance with the City's Supplemental Design Guidance for Accommodating Pedestrians, Bicyclists, and Bus Facilities in Construction Zones. The project applicant shall implement the approved Plan during construction.			
<p><i>c. Repair City Streets</i></p> <p>The project applicant shall repair any damage to the public right-of way, including streets and sidewalks, caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.</p>	Prior to Building Permit Final	N/A	Bureau of Building
<p>SCA-TRANS-3: Bicycle Parking. (#77)</p> <p>The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.</p>	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building
<p>SCA-TRANS-4: Transportation Impact Fee (#80)</p> <p>The project applicant shall comply with the requirements of the City of Oakland Transportation Impact Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).</p>	Prior to Issuance of Building Permit	Bureau of Building	N/A
<p>SCA-TRANS-5: Plug-In Electric Vehicle (PEV) Charging Infrastructure (#83)</p> <p><i>a. PEV-Ready Parking Spaces</i></p> <p>The applicant shall submit, for review and approval of the Building Official and the Zoning Manager, plans that show the location of parking spaces equipped with full electrical circuits designated for future PEV charging (i.e. "PEV-Ready") per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-Ready parking spaces.</p>	Prior to Issuance of Building Permit	Bureau of Building	Bureau of Building
<p><i>b. PEV-Capable Parking Spaces</i></p> <p>The applicant shall submit, for review and approval of the Building Official, plans that show the location of inaccessible conduit to supply PEV-capable parking spaces per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-capable parking spaces.</p>	Prior to Issuance of Building Permit	Bureau of Building	Bureau of Building
<p><i>c. ADA-Accessible Spaces</i></p> <p>The applicant shall submit, for review and approval of the Building Official, plans that show the location of future accessible EV parking spaces as required under Title 24 Chapter 11B Table 11B-228.3.2.1, and</p>	Prior to Issuance of Building Permit	Bureau of Building	Bureau of Building

specify plans to construct all future accessible EV parking spaces with appropriate grade, vertical clearance, and accessible path of travel to allow installation of accessible EV charging station(s).			
Recommendation TRANS-1 While not required to address a CEQA impact, the following should be considered as part of the final design for the project: <ul style="list-style-type: none"> Designate 20 feet of curb immediately north and south of the project driveway on Magnolia Street as red no parking zones to ensure adequate sight distance between motorists and bicyclists traveling on the street and motorists exiting the driveway. Designate 50 feet of curb on both sides of Adeline Street, north of 28th Street, as red no parking zones to ensure adequate sight distance between vehicles on the 28th Street approaches of the intersection and through vehicles on Adeline Street. 	Prior to Building Permit Final	Bureau of Building	Bureau of Building
Recommendation TRANS-2 While not required to address a CEQA impact, the following should be considered as part of the final design for the project: <ul style="list-style-type: none"> Explore the feasibility of relocating all or some of the long-term bicycle parking to a more convenient location on the ground level of the project. This measure shall be implemented if determined feasible by City staff. 	Prior to Building Permit Final	Bureau of Building	Bureau of Building
Recommendation TRANS-3 While not required to address a CEQA impact, the following should be considered as part of the final design for the project: <ul style="list-style-type: none"> Explore the feasibility of installing directional curb ramps with truncated domes on all corners and high-visibility continental crosswalks across all four approaches of the Magnolia Street/28th Street intersection. This measure shall be implemented if determined feasible by City staff. Explore the feasibility of installing directional curb ramps with truncated domes on all corners of the Adeline Street/28th Street intersections. Ensure that the improvements would not conflict with the recommended protected bike lanes on Adeline Street. This measure shall be implemented if determined feasible by City staff. Explore the feasibility of installing a marked yellow school crosswalk on the south approach of the Adeline Street/28th Street intersection with school crossing signage and advanced yield lines and signage on Adeline Street north and south of the intersection. This measure shall be implemented if determined feasible by City staff. 	Prior to Building Permit Final	Bureau of Building	Bureau of Building
Recommendation TRANS-4 While not required to address a CEQA impact, the following should be considered as part of the final design for the project: <ul style="list-style-type: none"> Subject to review and approval by City of Oakland Department of Transportation and AC Transit 	Prior to Building Permit Final	Bureau of Building	Bureau of Building

to ensure best practices and avoid potential for non-compliance, designate 30 feet of curb on southbound Adeline Street just south of the existing bus stop as yellow loading zones for deliveries and passenger pick-up/drop offs.			
Recommendation TRANS-5 While not required to address a CEQA impact, the following should be considered as part of the final design for the project: <ul style="list-style-type: none"> Consider eliminating some of the on-site parking spaces to provide a second off-street loading space. 	Prior to Building Permit Final	Bureau of Building	Bureau of Building
Utilities and Service Systems			
SCA-UTIL-1: Storm Drain System (#91) The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.	Prior to Approval of Construction-Related Permit	Bureau of Building	Bureau of Building
SCA-UTIL-2: Sanitary Sewer System (#90) The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system.	Prior to Approval of Construction-Related Permit	Public Works Department, Department of Engineering and Construction	N/A
SCA-UTIL-3: Green Building Requirements (#88) a. <i>Compliance with Green Building Requirements During Plan-Check</i> The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code). i. The following information shall be submitted to the City for review and approval with the application for a building permit: <ul style="list-style-type: none"> Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards. Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit. Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit. 	Prior to approval of construction-related permit	Bureau of Building	N/A

<ul style="list-style-type: none"> • Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below. • Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance. • Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. • Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. <p>ii. The set of plans in subsection (i) shall demonstrate compliance with the following:</p> <ul style="list-style-type: none"> • CALGreen mandatory measures. • [INSERT: Green building point level/certification requirement: (See Green Building Summary Table; for New Construction of Residential or Non-residential projects that remove a Historic Resource (as defined by the Green Building Ordinance) the point level certification requirement is 53 points for residential and LEED Gold for non-residential)] per the appropriate checklist approved during the Planning entitlement process. • All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted. • The required green building point minimums in the appropriate credit categories. 			
<p><i>b. Compliance with Green Building Requirements During Construction</i></p> <p>The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project.</p> <p>The following information shall be submitted to the City for review and approval:</p> <ol style="list-style-type: none"> Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. 	During construction	N/A	Bureau of Building
<p><i>C. Compliance with Green Building Requirements After Construction</i></p> <p>Prior to the finaling the Building Permit, the Green Building Certifier shall submit the appropriate documentation to City staff and attain the minimum required point level.</p>	Prior to Final Approval	Bureau of Planning	Bureau of Building

<p>SCA-UTIL-4: Water Efficient Landscape Ordinance (#93)</p> <p>The project applicant shall comply with California’s Water Efficient Landscape Ordinance (WELO) in order to reduce landscape water usage. For any landscape project with an aggregate (total noncontiguous) landscape area equal to 2,500 sq. ft. or less. The project applicant may implement either the Prescriptive Measures or the Performance Measures, of, and in accordance with the California’s Model Water Efficient Landscape Ordinance. For any landscape project with an aggregate (total noncontiguous) landscape area over 2,500 sq. ft., the project applicant shall implement the Performance Measures in accordance with the WELO.</p> <p><i>Prescriptive Measures:</i> Prior to construction, the project applicant shall submit documentation showing compliance with Appendix D of California’s Model Water Efficient Landscape Ordinance (see website below starting on page 23):</p> <p>http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%20-%20Official%20CCR%20pages.pdf</p> <p><i>Performance Measures:</i> Prior to construction, the project applicant shall prepare and submit a Landscape Documentation Package for review and approval, which includes the following:</p> <ul style="list-style-type: none"> a. Project Information: <ul style="list-style-type: none"> i. Date, ii. Applicant and property owner name, iii. Project address, iv. Total landscape area, v. Project type (new, rehabilitated, cemetery, or home owner installed), vi. Water supply type and water purveyor, vii. Checklist of documents in the package, and viii. Applicant signature and date with the statement: “I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package.” b. Water Efficient Landscape Worksheet <ul style="list-style-type: none"> i. Hydrozone Information Table ii. Water Budget Calculations with Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use c. Soil Management Report d. Landscape Design Plan e. Irrigation Design Plan, and f. Grading Plan <p>Upon installation of the landscaping and irrigation systems, the Project applicant shall submit a Certificate</p>	<p>Prior to Approval of Construction-Related Permit</p>	<p>Bureau of Planning</p>	<p>Bureau of Building</p>
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<p>of Completion and landscape and irrigation maintenance schedule for review and approval by the City. The Certificate of Compliance shall also be submitted to the local water purveyor and property owner or his or her designee.</p> <p>For the specific requirements within the Water Efficient Landscape Worksheet, Soil Management Report, Landscape Design Plan, Irrigation Design Plan and Grading Plan, see the link below.</p> <p>http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%20-%20Official%20CCR%20pages.pdf</p>			
<p>SCA-UTIL-5: Underground Utilities (#86)</p> <p>The project applicant shall place underground all new utilities serving the project and under the control of the project applicant and the City, including all new gas, electric, cable, and telephone facilities, fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities. The new facilities shall be placed underground along the project's street frontage and from the project structures to the point of service. Utilities under the control of other agencies, such as PG&E, shall be placed underground if feasible. All utilities shall be installed in accordance with standard specifications of the serving utilities.</p>	During Construction	N/A	Bureau of Building
<p>SCA-UTIL-6: Construction and Demolition Waste Reduction and Recycling (#85)</p> <p>The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of \$50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.</p>	Prior to Approval of Construction-Related Permit	Public Works Department, Environmental Services Division	Public Works Department, Environmental Services Division
<p>SCA-UTIL-7: Recycling Collection and Storage Space (#87)</p> <p>The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 sf of building floor area is required, with a minimum of ten cubic feet.</p>	Prior to Approval of Construction-Related Permit	Bureau of Planning	Bureau of Building

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

Table B-1 demonstrates how the proposed Project meets the eligibility requirements to qualify as an infill project under CEQA Guidelines Section 15183.3(b) and CEQA Guidelines Appendix M.

Table B-1. Eligibility for Streamlining – Infill Project

CEQA Eligibility Criteria	Eligibility of Project
To be eligible for the streamlining procedures prescribed in this section, an infill project must:	
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 public right-of-way.	The project is eligible. The project site is in an urban area in Oakland, it has been previously developed, and it adjoins existing urban uses on 75 percent of its perimeter or is only separated from such uses by an improved public right-of-way.
2) Satisfy the performance standards provided in Appendix M.	The project is eligible. See responses to individual standards below.
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.	The project is eligible. The project site is within the West Oakland Priority Development Area as identified in the region's Sustainable Communities Strategy (Plan Bay Area) and as identified in the City of Oakland's Energy and Climate Action Plan. The project site is in West Oakland, a community of concern as defined by Plan Bay Area. The General Plan land use designation for the site is Business Mix, which is intended to "create, preserve, and enhance the industrial areas of West Oakland that are appropriate for a wide variety of commercial and industrial establishments," and to "accommodate existing industries and provide flexibility to anticipate new technologies." The project site is zoned as Commercial Industrial Mix (CIX-1A and CIX-1B). The CIX-1 zone is intended to preserve the industrial areas of West Oakland for a wide range of commercial and industrial establishments, accommodating existing older industries, and providing flexibility for new technologies. The project site is specifically zoned both Business Enhancement and Low Intensity Business. The building height limit is 85 feet. Work/live units would be compatible with allowed land uses in the CIX-1A and CIX-1B zones and would require a Conditional Use Permit. The project would be required to comply with all restrictions and requirements of the S-19 overlay zone, including limitations on hazardous materials use. The project FAR would be 2.0, which is consistent with the maximum for

CEQA Eligibility Criteria	Eligibility of Project
	the CIX-1A and -1B is 2.0 zones. Each of these factors demonstrates the project's overall consistency with the applicable policies of the region's Sustainable Communities Strategy, as well as the City of Oakland's Energy and Climate Action Plan.
Satisfaction of Appendix M Performance Standards¹	
<p>Renewable Energy. All non-residential projects shall include on-site renewable power generation, such as solar photovoltaic, solar thermal and wind power generation, or clean backup power supplies, where feasible. Residential projects are also encouraged to include such on-site renewable power generation.</p>	<p>The project is eligible.</p> <p>The predominant use for the mixed-use project is light industrial/commercial. On-site non-renewable power generation would consist of roof-mounted solar panels.</p>
<p>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.</p>	<p>The project is eligible.</p> <p>Prior use of the site resulted in contamination of soil, soil vapor, and groundwater beneath the site from petroleum hydrocarbon and volatile organic compounds. Environmental investigation and remediation activities at the project site are being overseen by ACDEH. The applicant has entered into a Voluntary Cleanup Agreement to remediate the project site during construction. The Project will be required to implement the recommendations of the Corrective Action Plan to remediate the site, as well as to continue monitoring of the site and reporting to ACDEH and the Regional Water Quality Control Board.</p>
<p>Residential Units Near High-Volume Roadways and Stationary Sources. If a project includes residential units located within 500 feet, or other distance determined to be appropriate by the local agency or air district based on local conditions, of a high volume roadway or other significant sources of air pollution, the project shall comply with any policies and standards identified in the local general plan, specific plan, zoning code or community risk reduction plan for the protection of public health from such sources of air pollution. If the local government has not adopted such plans or policies, the project shall include measures, such as enhanced air filtration and project design, that the lead agency finds, based on substantial evidence, will promote the protection of public health from sources of air pollution. Those measures may include, among others, the recommendations of the California Air Resources Board, air districts, and the California Air Pollution Control Officers Association.</p>	<p>The project is eligible.</p> <p>The project includes residential units (work/live) and is not within 500 feet of a high-volume roadway.</p>
<p>Residential. To be eligible for streamlining pursuant to Section 15183.3, a Residential project must satisfy one of the following:</p> <p>Projects achieving below average regional per capita vehicle miles traveled (VMT).</p> <p>A residential project is eligible if it is located in a "low</p>	<p>The project is eligible.</p> <p>The project is within a low vehicle travel area and within ½ mile of intersecting frequent bus routes along Market Street (Route 88 with 15-minute peak headways) and San Pablo Avenue (Routes 72, 72M, and 72R with 10- to 12-minute peak headways).</p>

CEQA Eligibility Criteria	Eligibility of Project
<p>vehicle travel area" within the region.</p> <p>Projects located within ½ mile of an Existing Major Transit Stop or High Quality Transit Corridor.</p> <p>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.</p> <p>Low-Income Housing.</p> <p>A residential or mixed-use project consisting of 300 or fewer residential units all of which are affordable to low income households is eligible if the developer of the development project provides sufficient legal commitments to the lead agency to ensure the continued availability and use of the housing units for lower income households, as defined in Section 50079.5 of the Health and Safety Code, for a period of at least 30 years, at monthly housing costs, as determined pursuant to Section 50053 of the Health and Safety Code.</p>	
<p>Commercial/Retail. To be eligible for streamlining pursuant to Section 15183.3, a Commercial/Retail project must satisfy one of the following:</p> <p>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."¹</p> <p>Proximity to Households. A project with no single-building floor-plate greater than 50,000 square feet located within one-half mile of 1800 households is eligible.</p>	<p>The project is eligible.</p> <p>The predominant use for the mixed-use project is light industrial/commercial and does not include a building floor-plate greater than 50,000 square feet. The project is within a low vehicle travel area and within 0.5 mile of 1800 households.</p>
<p>To be eligible for streamlining pursuant to Section 15183.3, an Office Building project must satisfy one of the following:</p> <p>Regional Location. Office buildings, both commercial and public, are eligible if they locate in a low vehicle travel area.</p> <p>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.</p>	<p>Not applicable. The project is not an office building.</p>
<p>Transit. Transit stations, as defined in Section 15183.3(e)(1), are eligible.</p>	<p>Not applicable. The project is not a transit project.</p>
<p>Schools. Elementary schools within one mile of fifty percent of the projected student population are eligible. Middle schools and high schools within two miles of fifty 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, in order to be eligible, all schools shall provide parking and storage for bicycles and scooters and shall comply with the requirements in Sections 17213, 17213.1 and 17213.2 of the California Education Code.</p>	<p>Not applicable. The project is not a school project.</p>

CEQA Eligibility Criteria	Eligibility of Project
Small Walkable Community Projects. Small walkable community projects, as defined in Section 15183.3, subdivision (e)(6), that implement the project features described in Section III above are eligible.	Not applicable. The project is not a small walkable community project.
Mixed Use Projects. 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.	The project is a mixed-use project, with commercial/industrial use (work) as the predominant use.

¹ A traffic analysis zone that exhibits a below average existing level of travel as determined using a regional travel demand model. For residential projects, travel refers to either home-based or household vehicle miles traveled per capita. For commercial and retail projects, travel refers to non-work attraction trip length; however, where such data are not available, commercial projects reference either home-based or household vehicle miles traveled per capita. For office projects, travel refers to commute attraction vehicle miles traveled per employee; however, where such data are not available, office projects reference either home-based or household vehicle miles traveled per capita.

APPENDIX A: CULTURAL RESOURCES BACKGROUND MATERIALS

State of California & The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary#

HRI#

Trinomial _____

NRHP Status Code: _____

Other Listings

Review Code _____

Reviewer _____

Date _____

Page 1 of 33

*Resource Name or #: 2715 ADELINE STREET, OAKLAND

P1. Other Identifier: Holly Meat Packing Company; John Morrell & Co.; Coast Sausage Co.

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County Alameda

*b. USGS 7.5' Quad Oakland West Date 1993 T ; R ; of of Sec ; B.M.

c. Address 2715 Adeline Street City Oakland Zip 94607

c. UTM: Zone 10S, 563131 mE/ 4186093 mN

e. Other Locational Data: APN: 5-446-1-2; Parcel Number: 005 0446 001 02

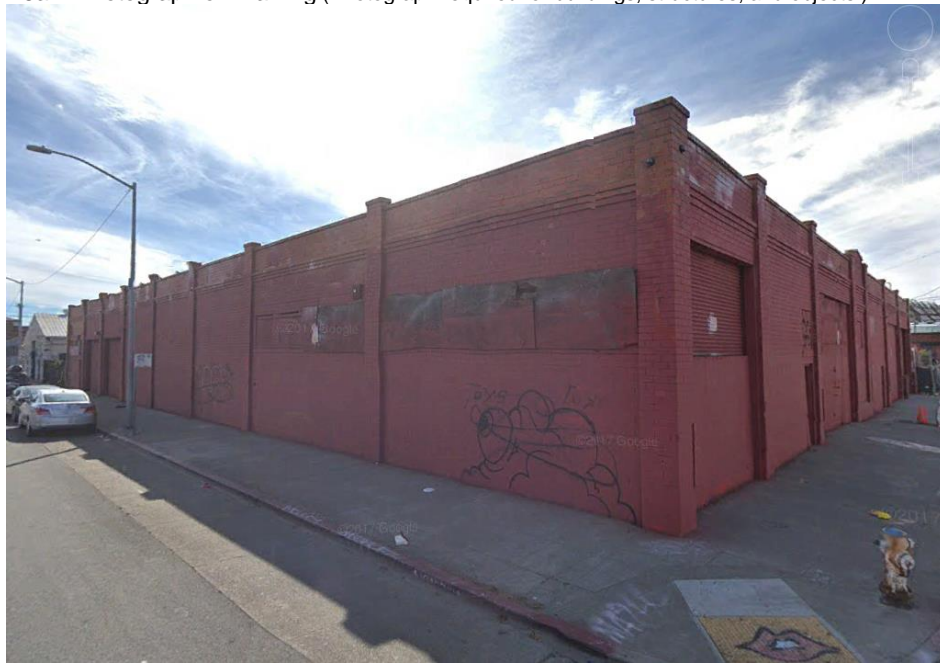
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

2715 Adeline Street is located on the southwest corner of 28th and Adeline streets in Oakland, California. A one-story, brick, warehouse building occupies the lot. The building was designed by Oakland engineer A John Novelli and was constructed circa 1950 as an addition for the Holly Meat Packing Company, which occupied an adjacent 1925 brick building that burned in 1993... see continuation sheets.

P3b. Resource Attributes: HP8. Industrial Building

*P4. Resources Present: ☒ Building

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo:

Photo 1: Ca. 1950 former industrial building, showing southeast (side) and northeast (front) facades, facing southwest. Source: Google Streetview.

P6. Date Constructed/Age and Source:

☒ Historic

Meat packing plant: ca. 1950

*P7. Owner and Address:

Seth F Jacobson
655 3rd ST #66
Oakland, CA 94607
(510) 645-1119

*P8. Recorded by:

Timothy G. Zinn & Katherine J. Molnar
Michael Baker International
100 Airside Drive, Airside Business Park
Moon Township, PA 15108

*P9. Date Recorded: January 15, 2018

*P10. Survey Type: Intensive

*P11. Report Citation: None

*Attachments: ☒ Building, Structure, and Object Record ☒ Location Map ☒ Continuation Sheets

BUILDING, STRUCTURE, AND OBJECT RECORD

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*Resource Name or #: 2715 ADELINE STREET, OAKLAND

*NRHP Status Code _____

B1. Historic Name: Holly Meat Packing Company; John Morrell & Co.; Coast Sausage Co.
B2. Common Name: Coast Sausage Co.
B3. Original Use: Industrial meat processing B4. Present Use: Vacant
*B5. Architectural Style: Mid-twentieth century utilitarian
*B6. Construction History: (Construction date, alterations, and date of alterations)

This building was constructed ca. 1950, as per a May 8, 1950 building permit application (B31686). The building is first noted as completed ("recent addition") in a 1951 newspaper (26 January 1951, *Oakland Tribune*, page 25), and is first visible in a 1958 aerial photograph (see continuation sheets) ... *see continuation sheets for remainder of Construction History.*

*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date: N/A Original Location: N/A

*B8. Related Features: None

B9a. Architect: A. John Novelli (engineer) b. Builder: George T. Robinson Construction Co.
*B10. Significance: Theme: Industry Area: Food Processing
Period of Significance 1940s-1970s Property Type Industrial Applicable Criteria A

State and National Significance

The former Coast Sausage Company building at 2715 Adeline Street is recommended **not eligible** for inclusion in the National Register or California Register. The property no longer meets National Register Criterion A/California Register Criterion 1 as an intact example of an industrial food processing plant because of loss of integrity due to the demolition of the original buildings associated with this business (over half of the building was demolished in 2013). Though the John Morrell & Co. was a large meat distribution company in the 1950s and 1960s, it is not evident that this location played a significant role in the success of that company. Likewise, it is not readily apparent that meat packing was a significant industry in Oakland in the mid-twentieth century (a more detailed discussion of integrity is provided below) *see continuation sheets for remainder of Significance narrative.*

B11. Additional Resource Attributes: N/A

*B12. References:

See continuation sheets.

B13. Remarks: N/A

*B14. Evaluator: Katherine Molnar
Architectural Historian
Michael Baker International

*Date of Evaluation: January 2018

(Sketch Map with north arrow required.)

*See continuation sheets for a site plan,
mapping, and other figures.*

(This space reserved for official comments.)

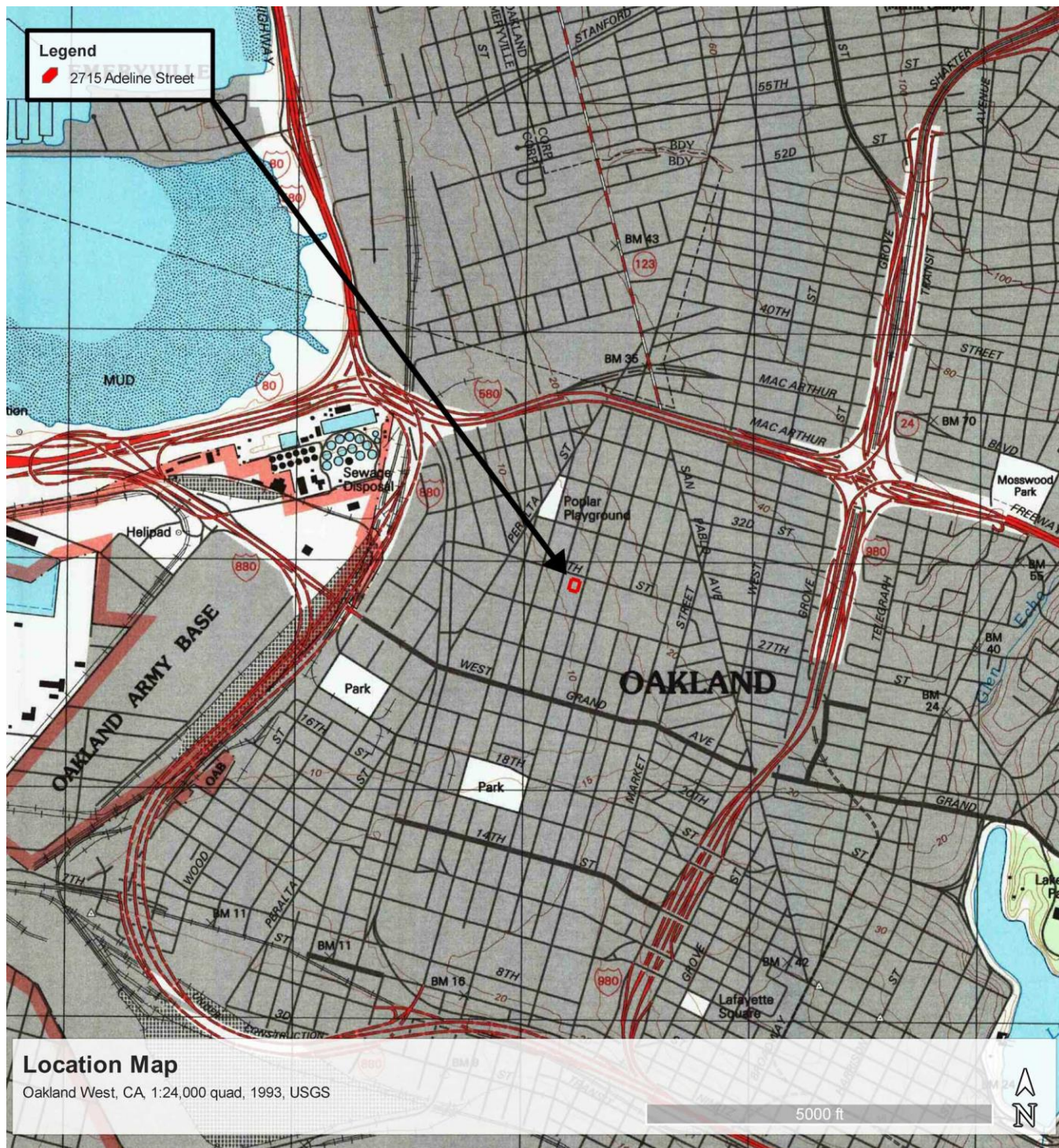
LOCATION MAP

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*Resource Name or #: 2715 ADELINE STREET, OAKLAND

*NRHP Status Code _____

*Map Name: Oakland West, CA *Scale: 1:24,000 *Date of map: 1993



SKETCH MAP

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*Resource Name or #: 2715 ADELINE STREET, OAKLAND

*NRHP Status Code

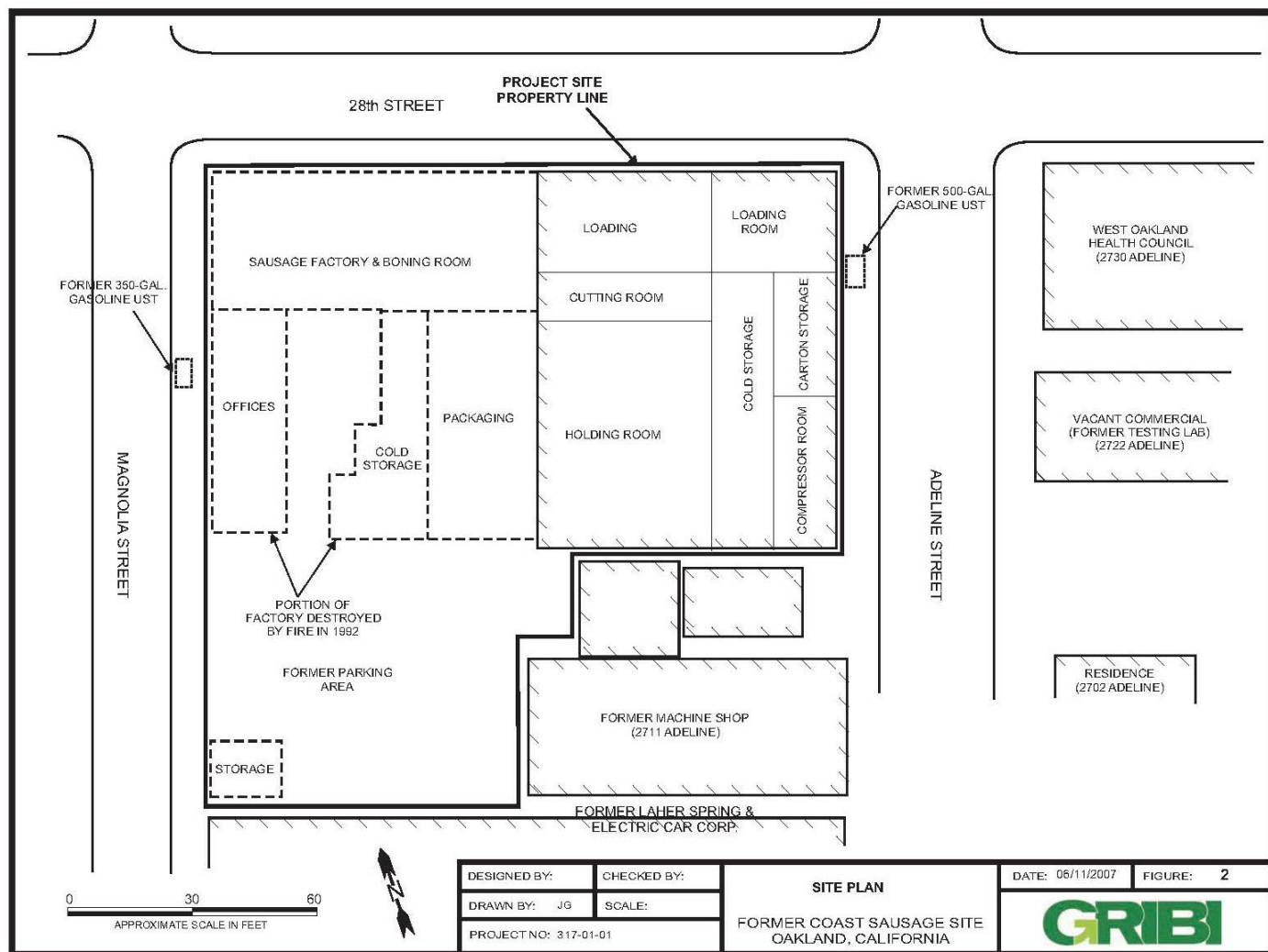


SKETCH MAP

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*Resource Name or #: 2715 ADELINE STREET, OAKLAND

*NRHP Status Code _____



2007 Site Plan

CONTINUATION SHEET

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*Resource Name or #: 2715 ADELINE STREET, OAKLAND
*NRHP Status Code _____

***P3a. Description (continued):**

The 28th Street façade is seven bays wide and measures approximately 128 feet. The Adeline Street façade is 8 bays wide and measures approximately 158 feet. The building rises from a poured concrete foundation and its walls are steel-reinforced brick masonry. The exterior walls are clad in red brick laid in a running bond pattern. The bays of the facades are defined by projecting square brick pilasters. The roofline is delineated by a dropped cornice of corbelled brickwork consisting of three stepped rows of running bond brick. A brick parapet rises above the cornice line and is capped by a row of brick laid in a rowlock pattern. Its roof is supported by steel trusses and consists of three, parallel, low hipped roofs concealed behind the brick parapet. Three wire glass skylights pierce the front portion of the roof. The roof is clad in built-up asphalt roofing.

Beginning from left to right, the first bay of the seven-bay 28th Street (northeast) façade contains a garage-door opening with a soldier brick lintel, which is fitted with a metal retractable garage door. The second bay contains a pedestrian doorway and transom, which is offset on the right side of the bay. The doorway is fitted with a metal slab door and the transom has been infilled with glass block. The third bay consists of a garage door opening, which is fitted with plywood infill and plywood doors. The narrow center or fourth bay contains a square window opening underscored with a soldier brick lug sill. The window opening is infilled with glass block. A secondary dropped cornice of corbelled brick is centered between the window opening and the primary cornice. A brick pediment extends the height of the parapet in this bay. The remaining bays, bays five through seven, all originally contained single garage door openings. The garage door opening in the fifth bay has been infilled with concrete masonry units and contains a single pedestrian door. The sixth bay opening has been infilled with plywood, and the opening in the seventh bay is fitted with a metal retractable garage door.

Beginning from left to right, the first bay of the eight-bay Adeline Street (southeast) façade contains a pedestrian doorway offset on the right side of the bay, which is fitted with a metal slab door. A band of three window openings spans the width of the bay; each is fitted with glass block infill. The second and third bays contain single garage door openings that are fitted with metal retractable garage doors. The fourth, fifth, and sixth bays are solid brick walls that contain no fenestration. The seventh and eighth bays contain a band of window openings spanning the width of each bay. The window openings have been covered with plywood and are underscored by continuous band of row lock bricks.

The southwest façade contains no fenestration, and the northwest façade contains a doorway opening that once connected the building addition to the original main building of the Holly Meat Packing Company that burned in 1993 and was subsequently demolished.

***B6. Construction History (continued):**

In 1957, the Holly Meat Packing Company applied for a permit to build another addition to its building at 2736 Magnolia Street (1957 June 24). Other modifications included proposed work valued at \$6500 to alter and remove the existing men's rest room and locker room. The area was to be converted into a new meat smokehouse. The also included construction of a new steel frame to carry the existing second floor, repair cement plaster at the walls, and installation of a new concrete floor. Another undated application provided for the alteration of the existing storage room into the new men's rest room and locker room, and to place tar and gravel on the roof, valued at \$3500.

A May 1962 fire resulted in \$25,000 worth of repairs and replacement of fire damaged materials (14 June 1962 building permit application). In April 1970, the John Morrell & Company applied for a building permit to construct an enclosed loading dock and driveway at the south end of the existing building (proposed at a cost of \$18,000). In July 1977, then-owner George Gonsalves made repairs to the meat plant valued at \$6,000, including: replacement of toilets, repair of existing meat track, repair of ceiling and walls to meet USDA code, repair cement plaster around walls, install USDA plastic ceiling panel, and repair cooler ceilings (City of Oakland building permit application). In 1993, the western half of the building burned under suspicious circumstances. The remaining portion of the building (2715 Adeline Street) fell into disrepair and was cited multiple times for blight, including graffiti, dumping, and overgrown weeds.

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*Resource Name or #: 2715 ADELINE STREET, OAKLAND
*NRHP Status Code _____

*B10. Significance (continued):

The building is not eligible for listing on the State or National registers under National Register Criterion B/California Register Criterion 2 because it is not associated with important individuals. The building was designed by a known Oakland engineer A. John Novelli, though this connection does not appear to be significant. While Novelli is connected to other meat processing buildings, it does not appear as though Novelli's engineering inroads were particularly noteworthy or significant. Novelli also appears to have been a superintendent at the Bank of Italy. Lastly, the property does not meet National Register Criterion C/California Register Criterion 3 for architectural significance because the ca. 1950 building is a typical example of its style and period and does not appear to be distinctive.

Local Significance

The City of Oakland adopted the *Historic Preservation Element* as part of its General Plan in 1994. The Preservation Element advocates a formal method of identifying and rating historic-age buildings that could be worthy of preservation by scoring them in multiple criteria. The resultant A-B-C-D-E rating system prioritizes properties in the citywide historical and architectural inventory (via reconnaissance and intensive-level survey) and effectively predetermines buildings with potential for local Landmark and Heritage Property status. Properties that receive an existing or contingency rating of "A", "B", or "C" can be eligible as Heritage Properties, while only "A" and "B" properties can be eligible as local Landmarks.

The Coast Sausage Company building complex was evaluated in 1992 under the address 1773 28th Street / 2736 Magnolia Street using the criteria set forth for the Heritage Survey. According to Oakland Planner Betty Marvin, the industrial site was evaluated in its entirety, including all of the buildings associated with the complex (located on three distinct parcels). The extant building at 2715 Adeline Street was not included in the "unreinforced masonry survey" (initiated after the 1989 earthquake, and including all buildings constructed prior to 1948), but was evaluated with the remainder of the Coast Sausage Company in the 1994 evaluation. At that time, the complex received a preliminary score of 15, including 10 points for Visual and 5 points for History. The complex lost three points for an integrity deduction, resulting in an adjusted total of 12 points. As per the evaluation methodology, properties with a score of 11-17 are rated "D," and are considered of "minor importance" or "representative example." Further, the D rating was supplemented with numeral "3," indicating "not in a district." The asterisk in the rating indicates that a portion of the property was not yet 45 years old (or was modernized). In 1994 (after half of the complex was destroyed by fire), the preliminary rating of *D3 was formalized after peer examination, and approved by four reviewers.

The subject property at 2715 Adeline Street is currently listed as a D3 (no asterisk due to increased age), and is therefore **not eligible** for listing as an Oakland Landmark or as a Heritage Property. It is not located within a local historic district and is not located in an area identified as having potential for historic designation, nor is it in an area of secondary importance.

Building History

In 1940, the Holly Meat Packing Company purchased the former Grayson, Owen, & Company, a wholesale slaughtering business that had been in operation for 72 years. George W. Grayson, Wilson J. Owen, and John W. Phillips first entered into partnership in 1884, but had conducted business in Oakland since 1862 (30 December 1884, "Partners," *Oakland Tribune*, Page 3). The location of business for Grayson, Owen & Company is not clear, though apparently the meat processing did not occur at the subject property (along 28th Street between Adeline and Magnolia streets). Instead, the Holly Meat Packing Company purchased a building constructed by Ambassador Laundry in 1925. At that time, the facility was considered a "model plant," equipped with the "most modern machinery entering in the operation of the up-to-date laundry" (26 April 1925, "New Ambassador Laundry Opens Here," *Oakland Tribune*, Page 33). A "deep water well" on the property supplied the water for the laundry, by raising it 175-feet using an Argo water pump. When first constructed, the [now non-extant] building occupied 10,000 square feet, though contractors designed the site with property additions in mind (26 April 1925, "New Ambassador Laundry Here is Model Plant," *Oakland Tribune*, Page 33). Over the course of its 15-year operation (1925-1940), Ambassador Laundry added

CONTINUATION SHEET

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*Resource Name or #: 2715 ADELIN STREET, OAKLAND
*NRHP Status Code _____

approximately 10,000 square feet. A building permit from 1927 alludes to this growth, with the application for the construction of a boiler room at the southwest corner of 28th and Magnolia streets.

When Holly Meat Packing Company purchased the former Ambassador Laundry building in 1940, it converted the entire first floor of the [then] 21,000 square-foot building to an industrial food space. Modifications to the building included incorporation of refrigeration rooms, curing rooms, smoke chambers, cooking rooms, and sausage kitchens. The company was known for curing meats with an "old-time flavor" using sawdust imported from Utah. Benefiting from Grayson, Owen, & Company's long tenure and market presence, Holly Meat Packing Company utilized its central location along Magnolia Street to ship meats throughout the bay area. A fleet of trucks departed the warehouse each day to deliver "fresh meat and packaged products for butchers and delicatessens of Northern California." Products included Holly-brand sausages, lunch meats, hams, bacons, beef, lamb, pork, and smoked meats (40 April 1940, "Holly Packing Co. Takes Over Old Meat Firm," *Oakland Tribune*, Page 14). On May 30, 1945, the Holly Meat Packing Company applied for a permit to construct a second-floor addition on its building at 2736 Magnolia Street.

In 1946, the Holly Meat Packing Company announced plans to construct a new \$75,000 addition to the existing building, to be used as the new cooling department. Oakland architect Edward D. Cerruti designed the addition to be 158-feet long by 70-feet wide (which is the length of the existing building and approximately half its width) (26 March 1946, "Plant Addition," *Oakland Tribune*, Page 5). The 1946 addition likely preceded the current structure, or potentially was incorporated into the current building. A May 8, 1950 City of Oakland *Application to Erect a New Building* stipulated a \$129,000 building measuring 158-feet long by 128-feet wide, the size of the subject building (2715 Adeline Street). The permit application listed A. John Novelli as the engineer and George T. Robinson Construction Co. (San Francisco) as the contractor. It is possible that the Holly Meat Packing Company opted to maximize square footage by constructing the larger building, which included an office, loading docks, a cutting room, cold storage, carton storage, and a shop. The new addition building is first referenced in a 1951 newspaper (26 January 1951, *Oakland Tribune*, page 25), and is first visible in a 1958 aerial photograph (see continuation sheets).

In 1957, John Morrell & Company acquired the properties of the Holly Meat Packing Company and the Holly Cold Storage Company. At the same time, Morrell president W.W. McCallum announced acquisition of the Bob Ostrow Co. meat packing operation. This merger may explain the registration of the company name *Morrell Holly Co.*, through the State of California on January 18, 1957; the larger umbrella group retained the "Holly" name for this specific branch of the business. The John Morrell & Company operated 12 plants throughout the United States, amounting to sales of \$340,765,513 in 1950 (2 February 1957, "Morrell Acquires West Coast Meat Packing Firms," *Los Angeles Times*, Page 9). The large company appointed B.E. Lawrence as the West Coast Division Manager in May 1957. The new division included existing plants in Los Angeles and Oakland, in addition to the newly acquired Holly Meat Packing Plant in Oakland and the Bob Ostrow Plant in San Francisco (1 May 1957, "John Morrell Names West Coast Manager," *Oakland Tribune*, Page 52). That same year, the Holly Meat Packing Company applied for a permit to build another addition to its building at 2736 Magnolia Street (1957 June 24). Other modifications, as evidenced by an undated building permit application, included proposed work valued at \$6500 to alter and remove the existing men's rest room and locker room. The area was to be converted into a new meat smokehouse. The application also proposed construction of a new steel frame to carry the existing second floor, the repair of cement plaster at the walls, and the installation of a new concrete floor. Another undated application provided for the alteration of the existing storage room into the new men's rest room and locker room, and to place tar and gravel on the roof, valued at \$3500.

Expansion continued in 1959 with the acquisition of the Saratoga Meat Products Company in Chicago. Morrell also leased space and purchased equipment from the Key Brands Dog Food Company in Los Angeles, which was intended to produce dog food for the west coast (17 March 1959, "John Morrell & Co. Purchases Meat Firm," *Oakland Tribune*, Page 22). 1959 proved to be an exciting year, with the aversion of a possible meat-packing industry strike. The United Packinghouse Workers of America and the Amalgamated Meat Cutters and Butcher Workmen Unions reached agreements in Chicago with three large meat firms, including John Morrell & Co., Hygrade Food Products Corp., and Cudahy Packing Co. (3 September 1959, "Meat Strike Fear Eased," *Press*

CONTINUATION SHEET

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*NRHP Status Code _____

Democrat, Page 18). Trouble continued into the 1960s, however, as John Morrell Company (Holly Division) was picketed in a clerical strike organized by the Teamsters' Freight Checkers, Clerical Employees and Helpers Local 856. The union was seeking "wage parity with slaughterhouse office employees in the area," with the average difference amounting to \$4 a month plus additional holiday and vacation hours (30 January 1962, "John Morrell & Co. Purchases Meat Firm," *Oakland Tribune*, Page 22).

An apparent fire prompted the inspection of the roof at 2736 Magnolia Street in May 1962. The fire damage was later ameliorated with \$25,000 worth of repairs and replacement of fire damaged materials (14 June 1962 building permit application).

By 1964, the John Morrell & Co. ranked fourth in the world for "major meat packing," and thirteenth among top food processors in the United States in dollar sales. In Oakland, the Holly Division of the Morrell Company processed sausage and "fabricated and warehoused beef." It retained 159 employees. Its other Oakland facility (acquired in 1935) was used for smoking meats, slicing bacon, and warehousing pork products (8 March 1964, "Morrell Family of Trademarks Spans Nation," *Sioux Falls Angus Leader Sun*).

It is unclear when the John Morrell & Co. relinquished ownership of the building located at 2715 Adeline Street in Oakland. A newspaper article from 1967, however, indicates the AMK Corporation's intention to acquire John Morrell & Co. The sale did not transpire at this time (20 September 1967, *The San Bernardino County Sun*, page 26). In April 1970, the John Morrell & Company applied for a building permit to construct an enclosed loading dock and driveway at the south end of the existing building (proposed at a cost of \$18,000). According to a general company search of domestic stocks, the *Morrell Holly Company's* last public stock statement was on April 20, 1973, and the company thereafter dissolved.

George Gonsalves, owner of Coast Sausage, likely purchased the buildings after *Morrell Holly Company* dissolved in 1973, though this is not clear. In July 1977, George Gonsalves (owner of 1173 28th Street, and residing at 301 Clay Street), filed an application for proposed alterations and repairs to the meat plant, valued at \$6,000. The proposed work included replacement of toilets, repair of existing meat track, repair of ceiling and walls to meet USDA code, repair cement plaster around walls, install USDA plastic ceiling panel, and repair cooler ceilings (City of Oakland building inspection form).

In 1993, drama returned to the building when federal agents closed the factory and "seized more than 100,000 pounds of sausage" purportedly made from diseased cattle "unfit for human consumption." The USDA recalled the products of the Coast Sausage Company, most of which was sold to military bases. The inquiry began in March 1993, as investigators focused on an "alleged criminal conspiracy" in which the Coast Sausage Company had been selling tainted meat products since 1989. Previous citations against the company occurred in 1987, 1989, and 1992, for putting "sour, putrid, adulterated meat" into sausages, and for violation of the Federal Meat Inspection Act (11 April 1993, "Feds seize tons of sausage," *The Press Democrat*, page 15). Interestingly, the building mysteriously caught on fire under suspicious circumstances several days after the federal raid, resulting in a five-alarm blaze that burned through the roof and walls of the building (13 April 1993, "Sausage plant burns," *The Press Democrat*, page 11). The USDA raid and the subsequent fire effectively shuttered the business permanently. Finally, in November, George Gonsalves was shot and killed by robbers, though the murder had "no apparent connection to the troubles at Coast Sausage Co.," according to police (9 November 1993, "Meat plant owner killed," *The Press Democrat*, page 13). In 1996, George's sons pleaded guilty to "conspiring to violate federal meat-inspection laws" (7 September 1996, "Guilty plea in beef case," *The Press Democrat*, page 15).

In 2002, Francis Rush and Seth Jacobson bought the abandoned factory and associated vacant lots. Rush later sold his portion of the property to Jacobson. In 2015, as the building fell into disrepair, the City sued Jacobson for failing to abate 26 building violations. Settlement of the lawsuit included requirements to "fix holes in the fence, secure the building, and move forward with a new commercial property on the site" (Morris, Scott, "Owners of Abandoned Sausage Factory Agree To Clean Up Site," *Hoodline.com*, 27 July 2017).

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Integrity Discussion

Location. The building at 2715 Adeline Street retains its integrity of location as it has not been moved. However, the building was constructed as an addition to a complex of buildings that occupied the remainder of the lot to the west of the present building. The buildings on the western half of the lot burned in 1993 and were subsequently demolished.

Design. The building retains a moderate to low level of integrity of design. The building was built as an addition to the main complex of buildings comprising the Holly Meat Packing Company, which were demolished in 1993. The design of the building has been altered by fenestration changes including the removal of garage doors and the infilling of garage bays with concrete masonry units and plywood.

Setting. The property's integrity of setting has changed substantially since the construction of the building. The setting outside of the property's boundary has been compromised by demolitions and new construction in the last quarter of the twentieth century. Within the property, the setting has changed with the loss of the main, original portion of the Holly Meat Packing Company building resulting from a 1993 fire and its subsequent demolition.

Materials. The property's integrity of materials has been diminished by the removal of fenestration units including pedestrian doorways, garage doors, and windows. Some of the garage door openings have been enclosed concrete masonry units, while others have been covered with plywood. Some of the building's window openings are fitted with glass block, while some are open and covered with plywood.

Workmanship. The property retains a modest level of integrity of workmanship, which is largely expressed in the building's modest decorative brick treatments, although the exterior brickwork has been repeatedly painted to cover a recurring graffiti problem. The integrity of workmanship has been diminished by the changes to the building materials as noted above.

Feeling. The property retains a low level of integrity of feeling to express a historic sense of a particular period of time as an example of a mid-twentieth century meat packing plant. The loss of integrity of feeling results from the absence of the main meat packing buildings that were damaged by a 1993 fire and subsequently demolished. The abandonment of the remaining building and changes made to secure it, including infilling or covering of garage bays and the covering of window openings have further lowered the integrity.

Association. The property's integrity of association has been diminished largely due to the curtailment of meat packing activities in the building. The building is associated with the meat processing and packing industry in Oakland from the 1940s to the 1990s, but it no longer possesses sufficient integrity to convey this historical association due to the loss of integrity as noted above and due to the loss of the main portion of the Holly Meat Packing Company complex.

The property is recommended not eligible for inclusion in the National Register or California Register.

*B12. References (continued):

Historicaerials.com

- 1931 Historic aerial photograph. Nationwide Environmental Title Research, LLC. Electronic resource.
- 1946 Historic aerial photograph. Nationwide Environmental Title Research, LLC. Electronic resource.
- 1958 Historic aerial photograph. Nationwide Environmental Title Research, LLC. Electronic resource.
- 1959 Historic aerial photograph. Nationwide Environmental Title Research, LLC. Electronic resource.
- 1968 Historic aerial photograph. Nationwide Environmental Title Research, LLC. Electronic resource.
- 1980 Historic aerial photograph. Nationwide Environmental Title Research, LLC. Electronic resource.

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2000 Historic aerial photograph. Nationwide Environmental Title Research, LLC. Electronic resource.

Los Angeles Times

1957 "Morrell Acquires West Coast Meat Packing Firms." 2 February: 9. Los Angeles, California.

Morris, Scott

2017 "Owners of Abandoned Sausage Factory Agree to Clean Up Site." *Hoodline.com*, 27 July. Electronic resource.

Oakland Tribune

- 1884 "Partners." 30 December:3. Oakland, California.
- 1925 "New Ambassador Laundry Opens Here." 26 April: 33. Oakland, California.
- 1925 "New Ambassador Laundry Here is Model Plant." 26 April: 33. Oakland, California.
- 1940 "Holly Packing Co. Takes Over Old Meat Firm." 40 April: 14. Oakland, California.
- 1946 "Plant Addition." 26 March: 5. Oakland, California.
- 1951 26 January: 25. Oakland, California.
- 1957 "John Morrell Names West Coast Manager." 1 May:52. Oakland, California.
- 1959 "John Morrell & Co. Purchases Meat Firm." 17 March:22. Oakland, California.
- 1962 "2 Meat Firms Picketed in Clerk Strike." 30 January:22. Oakland, California.

The Press Democrat

- 1959 "Meat Strike Fear Eased." 3 September: 18. Santa Rosa, California.
- 1993 "Feds seize tons of sausage." 11 April:15. Santa Rosa, California.
- 1993 "Sausage plant burns." 13 April:11. Santa Rosa, California.
- 1993 "Meat plant owner killed." 9 November: 13. Santa Rosa, California.
- 1996 "Guilty plea in beef case." 7 September: 15. Santa Rosa, California.

The San Bernardino County Sun

1967 20 September:26. San Bernardino, California.

Sanborn Fire Insurance Mapping Company

- 1941 Map of Oakland.
- 1951 Map of Oakland (updated)

Sioux Falls Angus Leader Sun

1964 "Morrell Family of Trademarks Spans Nation." 8 March. Sioux Falls, South Dakota.

United States Geological Survey

- 1899 San Francisco, CA, 1:62,500 quad, 1899, USGS
- 1915 San Francisco, CA, 1:62,500 quad, 1915, USGS
- 1949 Oakland West, CA, 1:24,000 quad, 1949, USGS
- 1959 Oakland West, CA, 1:24,000 quad, 1959, USGS (photorevised 1968)
- 1959 Oakland West, CA, 1:24,000 quad, 1959, USGS (photorevised 1980)
- 1993 Oakland West, CA, 1:24,000 quad, 1993, USGS

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*Resource Name or #: 2715 ADELIN STREET, OAKLAND

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P5a. Photographs (continued):



Photo 2: Southwest (rear) and southeast (side) façades, facing northwest.



Photo 3: Southeast (side) and northeast (front) façades, facing southwest.

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*Resource Name or #: 2715 ADELINE STREET, OAKLAND

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Photo 4: Northeast (front) façade, facing southwest.

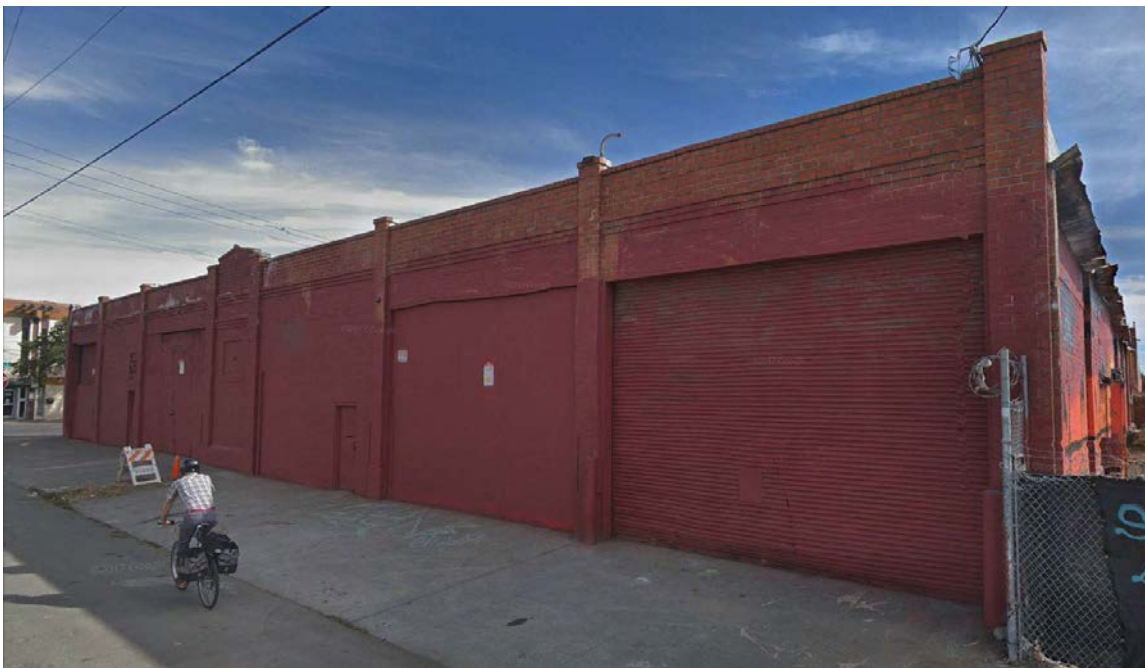


Photo 5: Northeast (front) façade, facing southeast.

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Photo 6: Northeast (front) and northwest (side) façades, facing southeast.



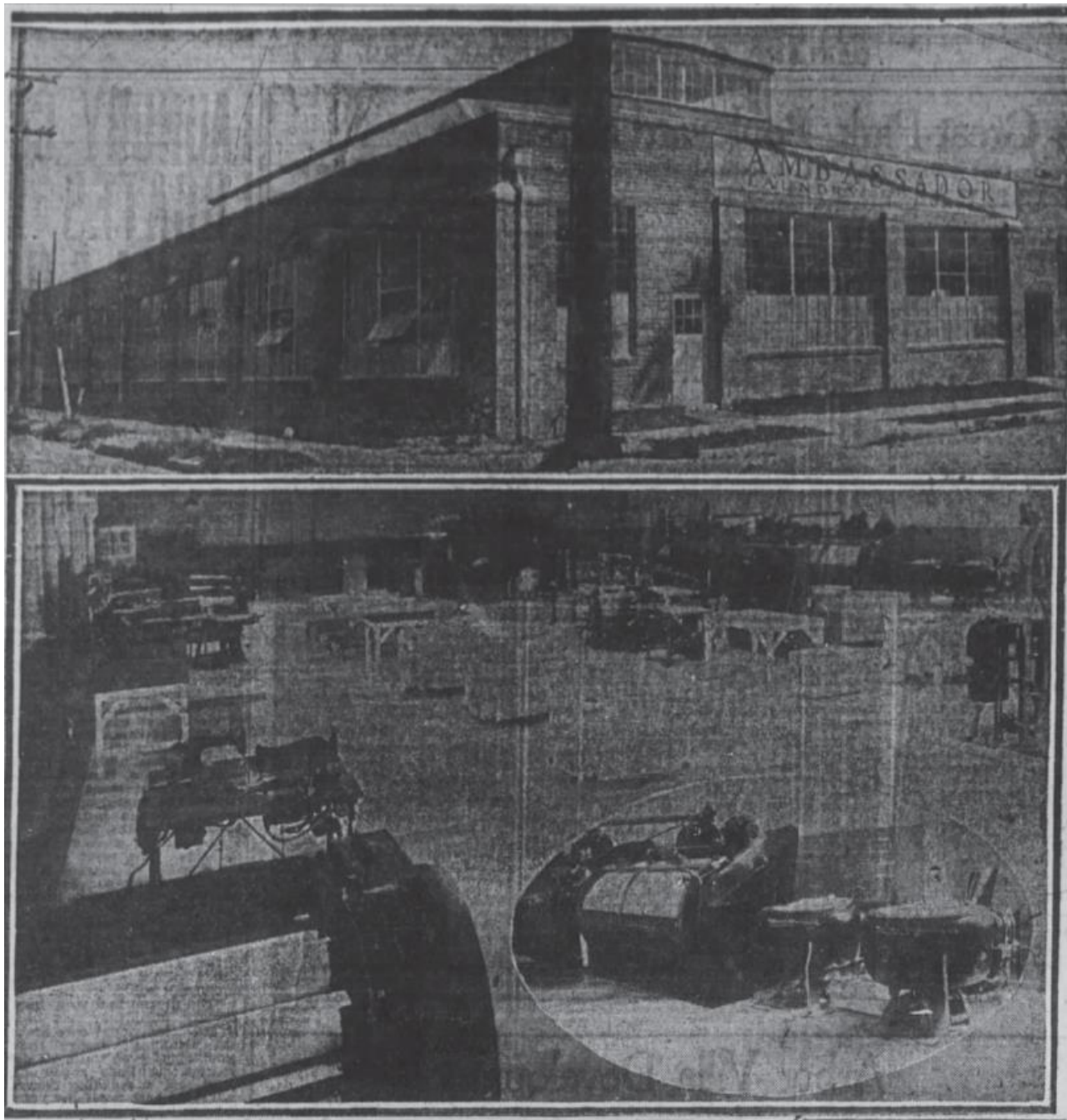
Photo 7: Detail of bays 3, 4, and 5 on the northeast (front) façade, showing pedimented narrow center bay (bay 4), facing southwest.

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Historical Images:



1925: "Views of the model plant of the Ambassador Laundry, which has now started operations in the Eastbay. Above: Exterior of the plant. Below: Interior, showing equipment and (insert) corner of the washroom" (26 April 1925, "New Ambassador Laundry Opens Here," *Oakland Tribune*, Page 33).

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Here is a scene in the sausage department of the Holly Meat Packing Company. The men are manufacturing pork sausages.



Partners in the Holly Meat Packing Company are (rear row, left to right), Walter Connolly and Fred Steff, and (front row, left to right), Everett Wyatt and Ed Gabrielson.

1940: Interior view of the Holly Meat Packing Company (40 April 1940, "Holly Packing Co. Takes Over Old Meat Firm," *Oakland Tribune*, Page 14).

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★ NOW IN OUR NEW HOME

HOLLY MEAT CO.



This new plant of the Holly Meat Packing Company embodies every modern facility and improvement for making the highest quality products.

Established in our complete new plant, we are in a position to handle the jobbing of meats and the manufacture of Holly Brand Sausages and Luncheon meats. Holly Brand Hams and Bacons, formerly marketed by the Grayson-Owen Packing Company, have also been taken over by the Holly Meat Packing Company.

This new property comprises 21,000 square feet. It is the result of much thought and careful planning by skilled architects and production engineers.

All departments, including beef, lamb, pork, smoked meats, sausage and luncheon meats, are on one floor.

A new daily delivery service to our retailers will insure fresh meats and meat products reaching the public. A new fleet of delivery trucks with the latest development in refrigeration will safeguard Holly Brand Products in transit.

The Holly Meat Packing Company is owned and managed by four partners who were born and brought up in Oakland. Each one is a specialist in his specific branch of the industry.

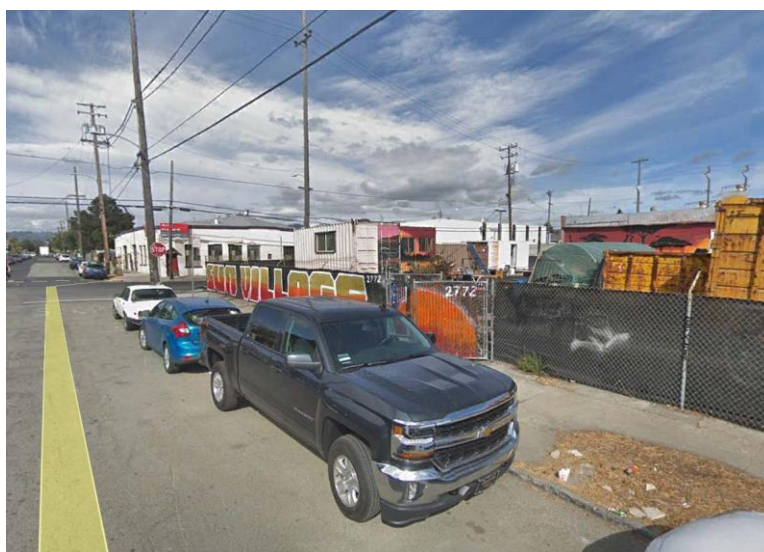
1940: Holly Meat Packing Company advertisement (40 April 1940, "Holly Packing Co. Takes Over Old Meat Firm," *Oakland Tribune*, Page 14). Ad shows the conversion of the former Ambassador Laundry Company building to the Holly Meat Packing Company.

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No Date: Top, photograph showing Holly Meat Packing Company from Magnolia Street, looking northeast (Source: Wisconsin Historical Society). Bottom, the same vantage depicted in a Google Street View image (note the building in the background remains in both views).

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*Resource Name or #: 2715 ADELIN STREET, OAKLAND

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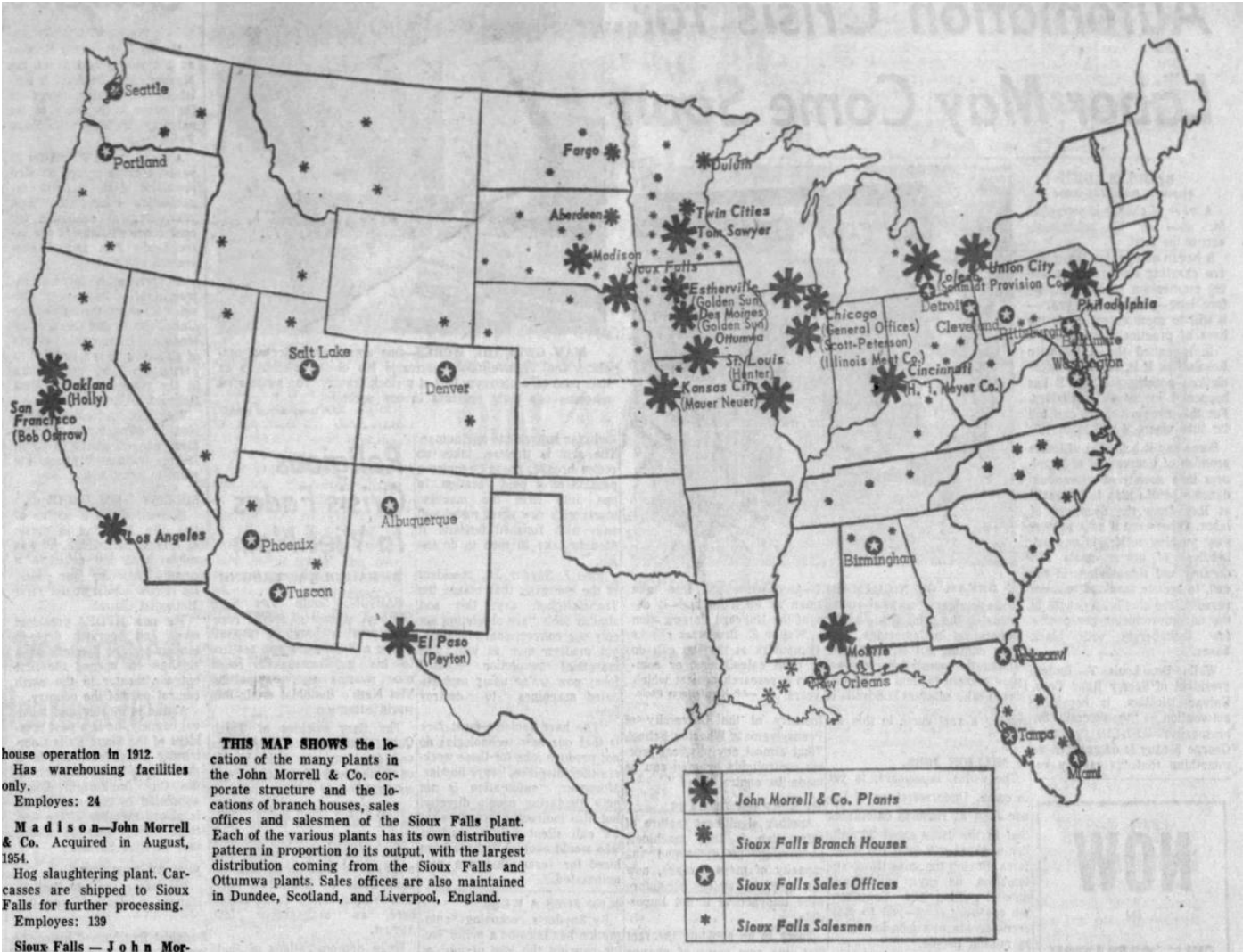


1959 21 September 1959, "New Appointments," *Oakland Tribune*, Page 28.

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1964: 8 March 1964, "Morrell Family of Trademarks Spans Nation," *Sioux Falls Angus Leader Sun*.

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No Date Photograph showing the front entrance of the Coast Sausage Company/Office on the building's northeast (front) façade near the central bay.



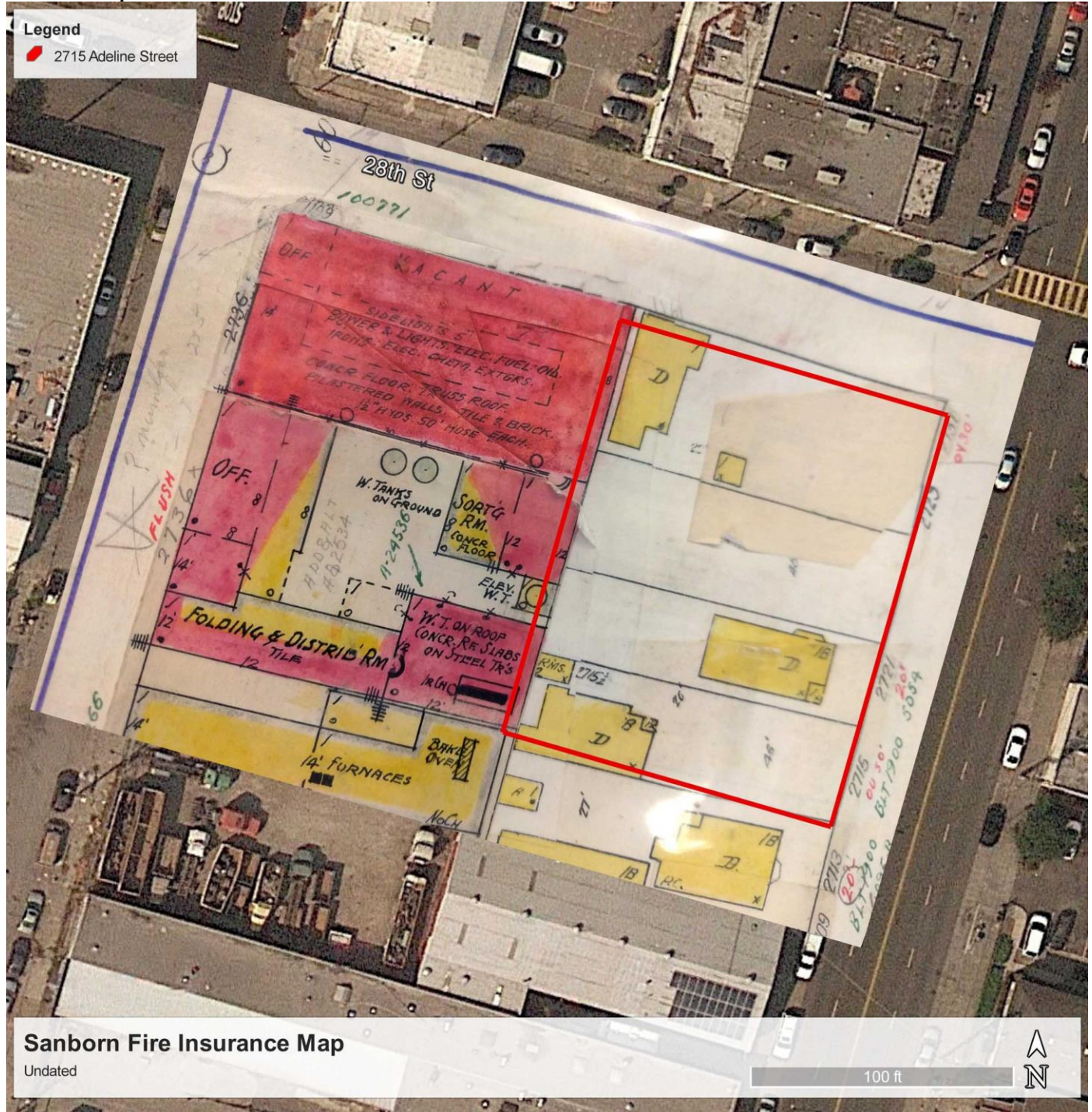
No Date Photograph showing the Coast Sausage Company after demolition of the adjacent, fire-destroyed building to its west. View showing the northeast (front) and northwest (party wall) façades of the building, facing southeast

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*Resource Name or #: 2715 ADELINE STREET, OAKLAND
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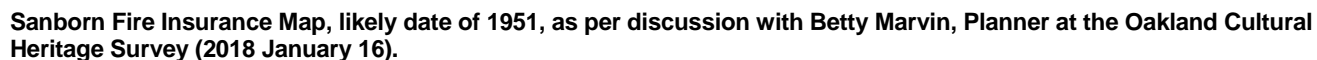
Historical Maps



Sanborn Fire Insurance Map, likely date of 1945, as per discussion with Betty Marvin, Planner at the Oakland Cultural Heritage Survey (2018 January 16).

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*Resource Name or #: 2715 ADELINE STREET, OAKLAND
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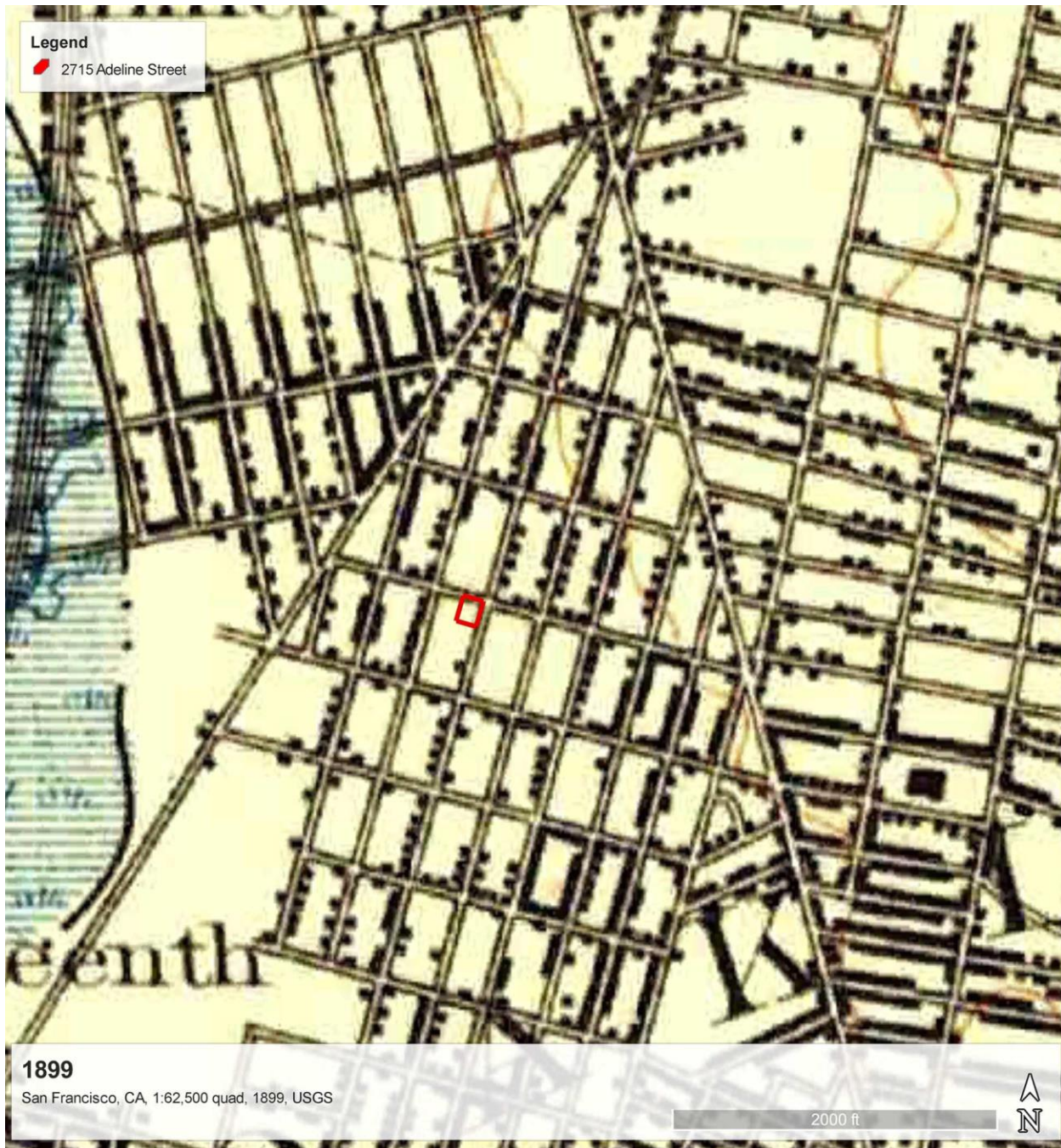


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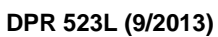
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*Resource Name or #: 2715 ADELIN STREET, OAKLAND
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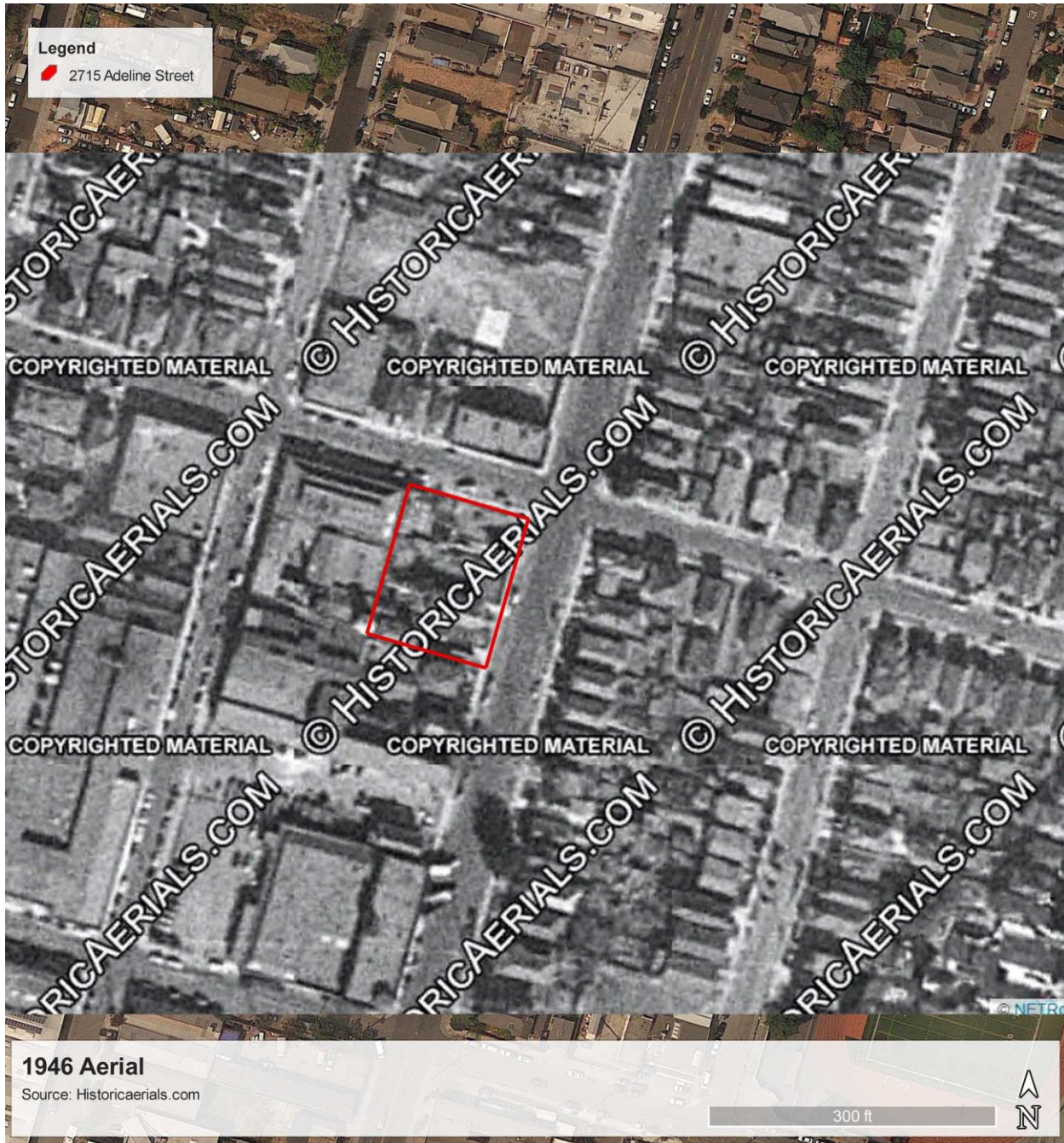


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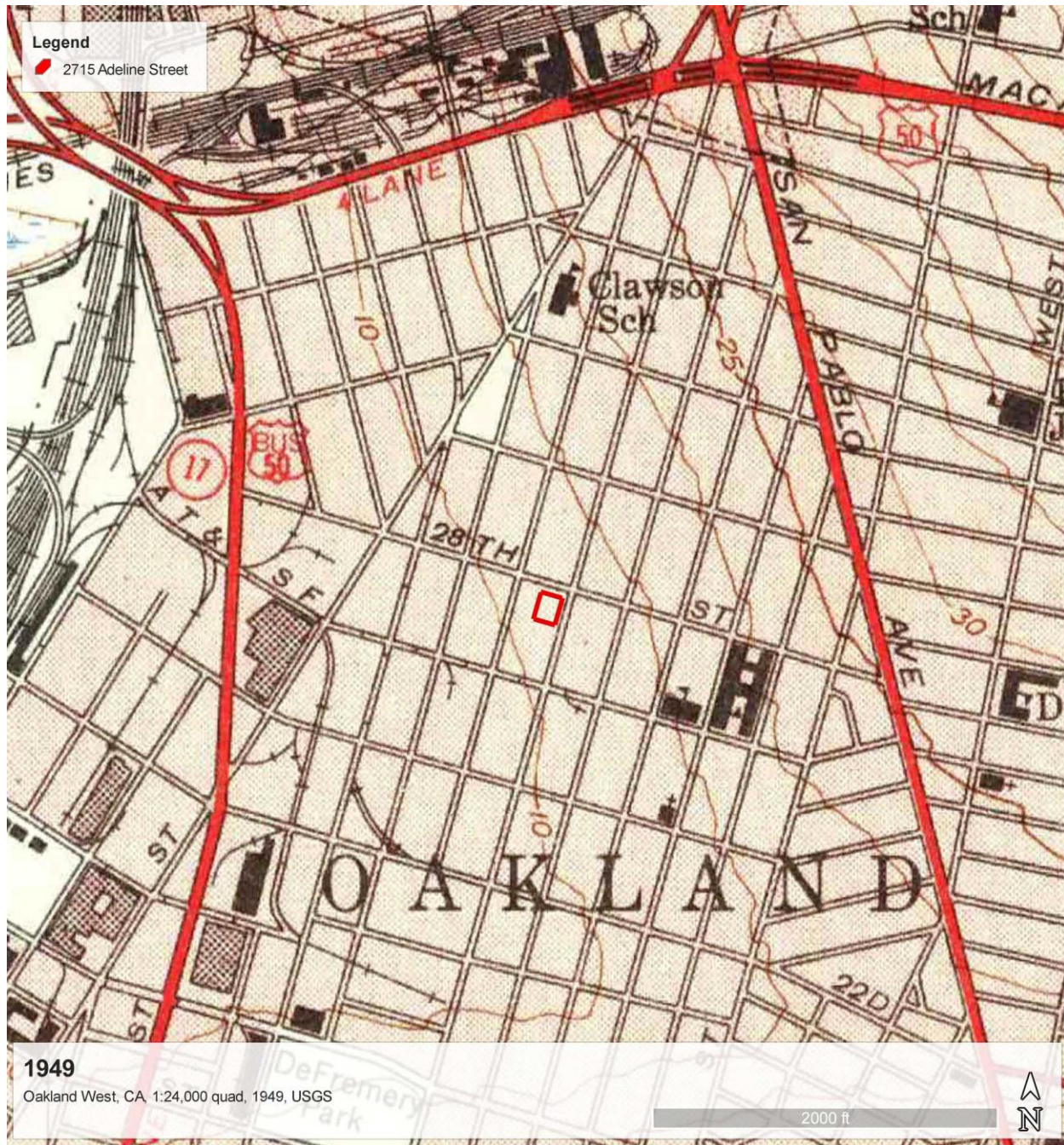


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*NRHP Status Code

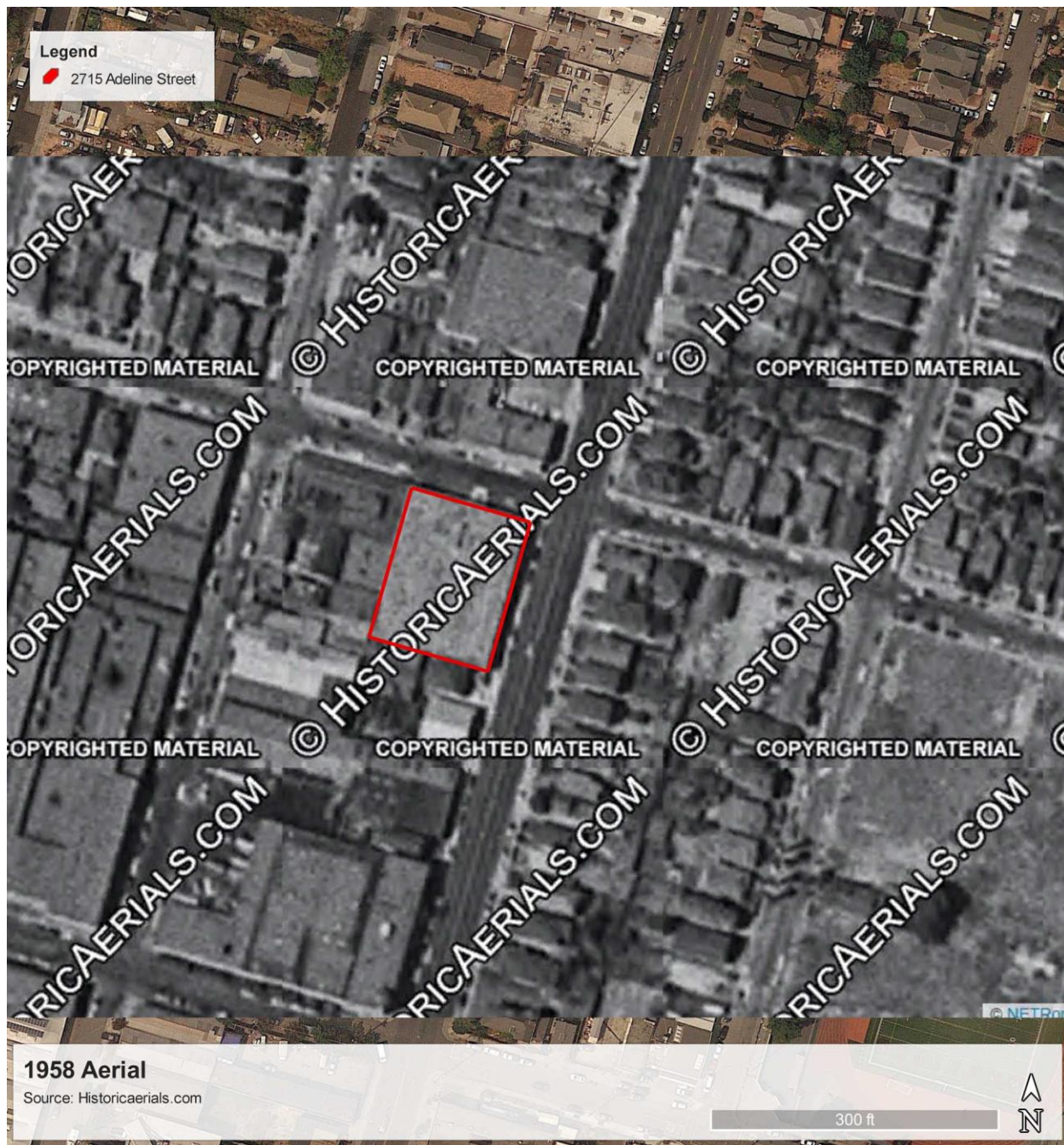


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*Resource Name or #: 2715 ADELIN STREET, OAKLAND

*NRHP Status Code

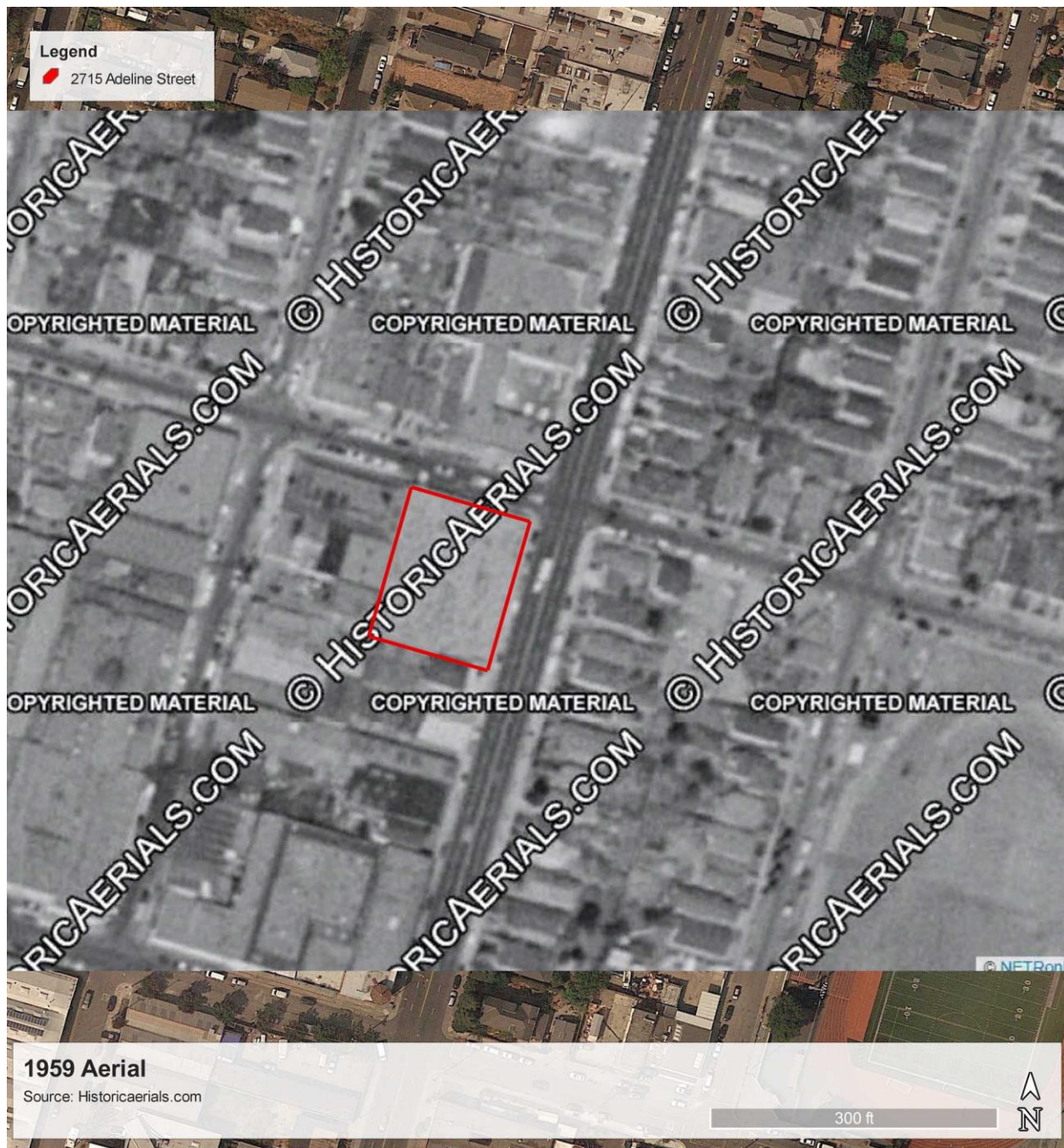


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*NRHP Status Code

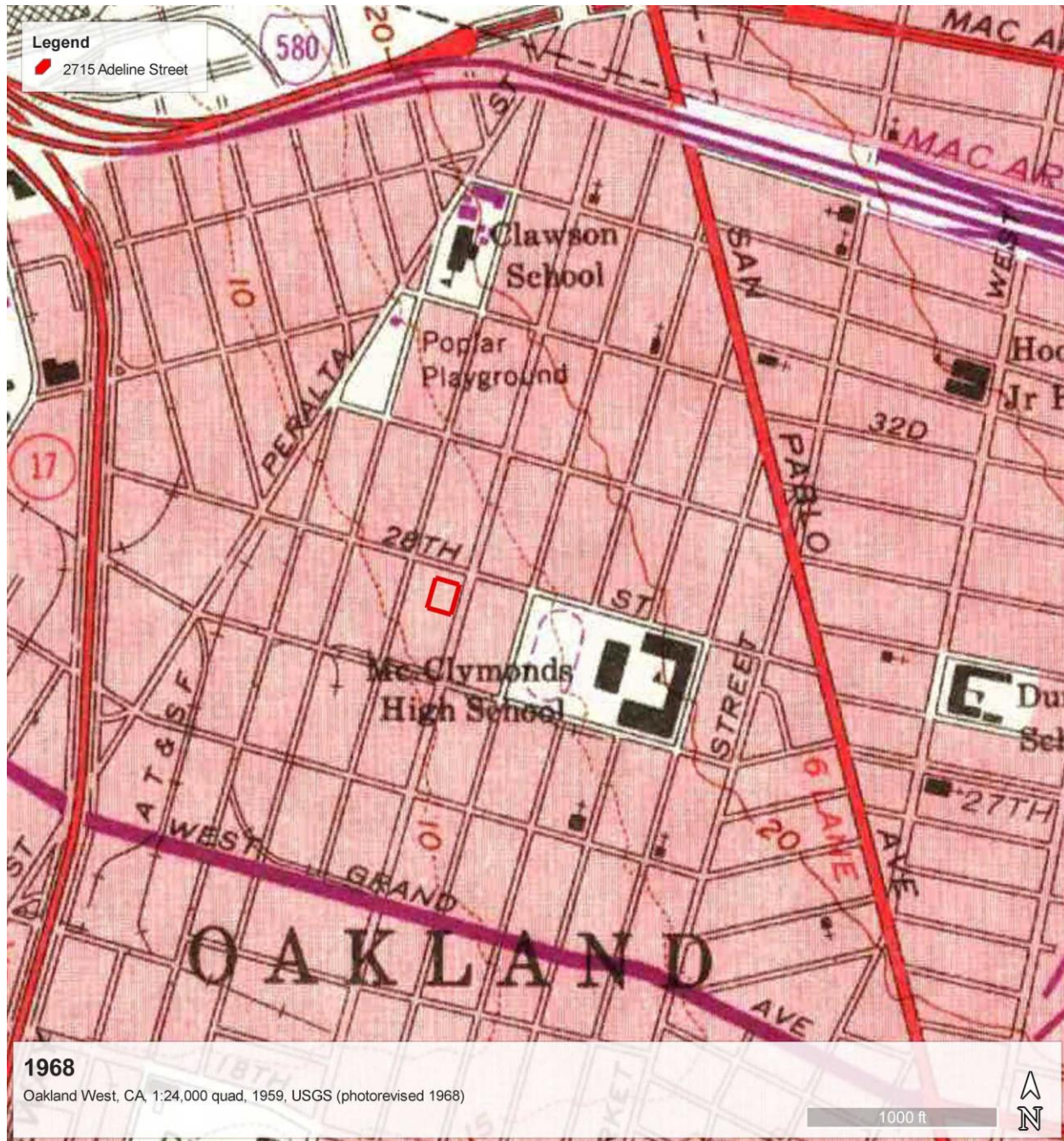


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*Resource Name or #: 2715 ADELINE STREET, OAKLAND

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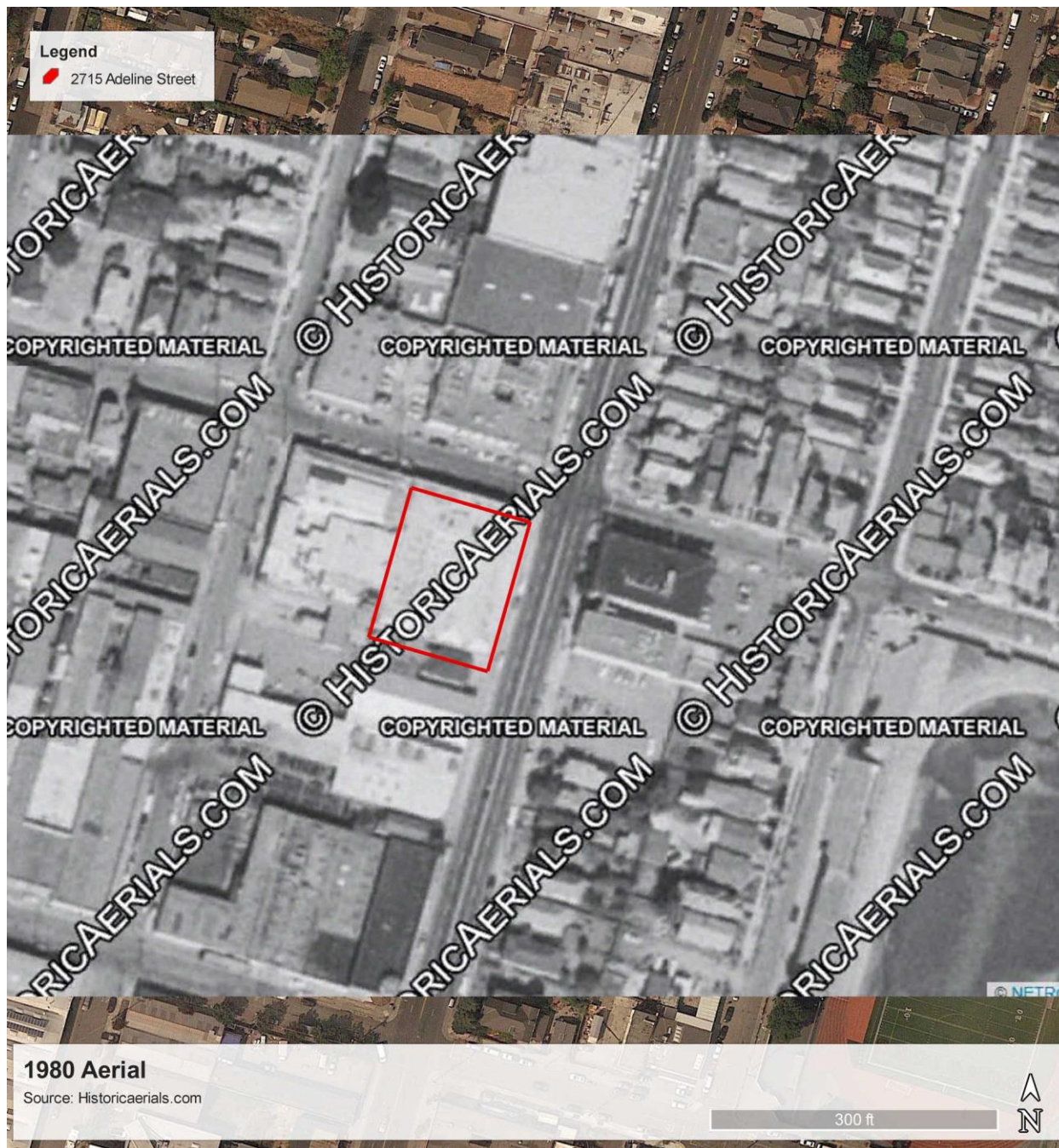


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APPENDIX B: CALSEMOD RESULTS

2715 Adeline Street - Alameda County, Annual

2715 Adeline Street
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	109.00	Dwelling Unit	0.53	109,000.00	312
General Office Building	64.80	1000sqft	0.53	64,800.00	0
General Light Industry	11.10	1000sqft	0.20	11,100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	5			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage of site split between uses.

Vehicle Trips - Reductions from TIA: Weekday trip rate for residential reduced per internalization, office reduced per non-auto reduction, general light

Demolition -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	2.87	0.53
tblLandUse	LotAcreage	1.49	0.53
tblLandUse	LotAcreage	0.25	0.20

tblVehicleTrips	WD_TR	6.65	4.31
tblVehicleTrips	WD_TR	11.03	6.33
tblVehicleTrips	WD_TR	6.97	9.00

2.0 Emissions Summary

2.1 Overall Construction Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0521	0.4575	0.3232	6.5000e-004	0.0360	0.0233	0.0592	0.0123	0.0220	0.0343	0.0000	57.5796	57.5796	0.0105	0.0000	57.8414
2020	1.3960	1.6866	1.5693	3.4600e-003	0.0910	0.0775	0.1685	0.0245	0.0747	0.0993	0.0000	299.4356	299.4356	0.0379	0.0000	300.3830
Maximum	1.3960	1.6866	1.5693	3.4600e-003	0.0910	0.0775	0.1685	0.0245	0.0747	0.0993	0.0000	299.4356	299.4356	0.0379	0.0000	300.3830

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0521	0.4575	0.3232	6.5000e-004	0.0360	0.0233	0.0592	0.0123	0.0220	0.0343	0.0000	57.5795	57.5795	0.0105	0.0000	57.8413
2020	1.3960	1.6866	1.5693	3.4600e-003	0.0910	0.0775	0.1685	0.0245	0.0747	0.0993	0.0000	299.4354	299.4354	0.0379	0.0000	300.3828
Maximum	1.3960	1.6866	1.5693	3.4600e-003	0.0910	0.0775	0.1685	0.0245	0.0747	0.0993	0.0000	299.4354	299.4354	0.0379	0.0000	300.3828

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	----------	-----------	-----	-----	------

Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-------------------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-1-2019	1-31-2020	0.7450	0.7450
2	2-1-2020	4-30-2020	0.6551	0.6551
3	5-1-2020	7-31-2020	0.6674	0.6674
4	8-1-2020	9-30-2020	0.7705	0.7705
		Highest	0.7705	0.7705

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1146	0.0152	1.1581	7.3000e-004		0.0540	0.0540		0.0540	0.0540	4.9693	3.3645	8.3338	9.2700e-003	3.3000e-004	8.6627
Energy	0.0134	0.1187	0.0816	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	525.8349	525.8349	0.0203	6.1100e-003	528.1630
Mobile	0.2716	1.7949	3.0115	0.0109	0.8269	0.0108	0.8378	0.2223	0.0102	0.2325	0.0000	1,006.6215	1,006.6215	0.0442	0.0000	1,007.7260
Waste						0.0000	0.0000		0.0000	0.0000	25.2034	0.0000	25.2034	1.4895	0.0000	62.4403
Water						0.0000	0.0000		0.0000	0.0000	6.7213	45.0950	51.8163	0.6924	0.0167	74.1090
Total	1.3995	1.9288	4.2511	0.0124	0.8269	0.0741	0.9010	0.2223	0.0734	0.2957	36.8939	1,580.9159	1,617.8099	2.2556	0.0232	1,681.1009

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	1.1146	0.0152	1.1581	7.3000e-004		0.0540	0.0540		0.0540	0.0540	4.9693	3.3645	8.3338	9.2700e-003	3.3000e-004	8.6627
Energy	0.0134	0.1187	0.0816	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	525.8349	525.8349	0.0203	6.1100e-003	528.1630
Mobile	0.2716	1.7949	3.0115	0.0109	0.8269	0.0108	0.8378	0.2223	0.0102	0.2325	0.0000	1,006.6215	1,006.6215	0.0442	0.0000	1,007.7260
Waste						0.0000	0.0000		0.0000	0.0000	25.2034	0.0000	25.2034	1.4895	0.0000	62.4403
Water						0.0000	0.0000		0.0000	0.0000	6.7213	45.0950	51.8163	0.6924	0.0167	74.1090
Total	1.3995	1.9288	4.2511	0.0124	0.8269	0.0741	0.9010	0.2223	0.0734	0.2957	36.8939	1,580.9159	1,617.8099	2.2556	0.0232	1,681.1009

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/1/2019	11/28/2019	5	20	
2	Site Preparation	Site Preparation	11/29/2019	12/2/2019	5	2	
3	Grading	Grading	12/3/2019	12/6/2019	5	4	
4	Building Construction	Building Construction	12/7/2019	9/11/2020	5	200	
5	Paving	Paving	9/12/2020	9/25/2020	5	10	
6	Architectural Coating	Architectural Coating	9/26/2020	10/9/2020	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 220,725; Residential Outdoor: 73,575; Non-Residential Indoor: 113,850; Non-Residential Outdoor: 37,950; Striped

OffRoad Equipment

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

Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	8.00	46	0.45

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	5	13.00	0.00	92.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	104.00	24.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0100	0.0000	0.0100	1.5100e-003	0.0000	1.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total	0.0230	0.2268	0.1489	2.4000e-004	0.0100	0.0129	0.0229	1.5100e-003	0.0120	0.0135	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.2000e-004	0.0143	2.4400e-003	4.0000e-005	7.8000e-004	5.0000e-005	8.3000e-004	2.1000e-004	5.0000e-005	2.6000e-004	0.0000	3.5596	3.5596	1.9000e-004	0.0000	3.5642
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	4.9000e-004	3.8000e-004	3.7900e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9429	0.9429	3.0000e-005	0.0000	0.9436
Total	9.1000e-004	0.0147	6.2300e-003	5.0000e-005	1.8100e-003	6.0000e-005	1.8700e-003	4.8000e-004	6.0000e-005	5.4000e-004	0.0000	4.5024	4.5024	2.2000e-004	0.0000	4.5077

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
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Category	tons/yr										MT/yr					
Fugitive Dust					0.0100	0.0000	0.0100	1.5100e-003	0.0000	1.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total	0.0230	0.2268	0.1489	2.4000e-004	0.0100	0.0129	0.0229	1.5100e-003	0.0120	0.0135	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.2000e-004	0.0143	2.4400e-003	4.0000e-005	7.8000e-004	5.0000e-005	8.3000e-004	2.1000e-004	5.0000e-005	2.6000e-004	0.0000	3.5596	3.5596	1.9000e-004	0.0000	3.5642
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	4.9000e-004	3.8000e-004	3.7900e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9429	0.9429	3.0000e-005	0.0000	0.9436
Total	9.1000e-004	0.0147	6.2300e-003	5.0000e-005	1.8100e-003	6.0000e-005	1.8700e-003	4.8000e-004	6.0000e-005	5.4000e-004	0.0000	4.5024	4.5024	2.2000e-004	0.0000	4.5077

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0195	7.8900e-003	2.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total	1.7100e-003	0.0195	7.8900e-003	2.0000e-005	5.8000e-003	8.8000e-004	6.6800e-003	2.9500e-003	8.1000e-004	3.7600e-003	0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0580	0.0580	0.0000	0.0000	0.0581
Total	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0580	0.0580	0.0000	0.0000	0.0581

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0195	7.8900e-003	2.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589
Total	1.7100e-003	0.0195	7.8900e-003	2.0000e-005	5.8000e-003	8.8000e-004	6.6800e-003	2.9500e-003	8.1000e-004	3.7600e-003	0.0000	1.5467	1.5467	4.9000e-004	0.0000	1.5589

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
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0580	0.0580	0.0000	0.0000	0.0581
Total	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0580	0.0580	0.0000	0.0000	0.0581

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8400e-003	0.0321	0.0132	3.0000e-005		1.4700e-003	1.4700e-003		1.3600e-003	1.3600e-003	0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total	2.8400e-003	0.0321	0.0132	3.0000e-005	9.8300e-003	1.4700e-003	0.0113	5.0500e-003	1.3600e-003	6.4100e-003	0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	5.0000e-005	4.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1161	0.1161	0.0000	0.0000	0.1161

Total	6.0000e-005	5.0000e-005	4.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1161	0.1161	0.0000	0.0000	0.1161
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8400e-003	0.0321	0.0132	3.0000e-005		1.4700e-003	1.4700e-003		1.3600e-003	1.3600e-003	0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536
Total	2.8400e-003	0.0321	0.0132	3.0000e-005	9.8300e-003	1.4700e-003	0.0113	5.0500e-003	1.3600e-003	6.4100e-003	0.0000	2.5336	2.5336	8.0000e-004	0.0000	2.5536

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	5.0000e-005	4.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1161	0.1161	0.0000	0.0000	0.1161
Total	6.0000e-005	5.0000e-005	4.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1161	0.1161	0.0000	0.0000	0.1161

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0193	0.1358	0.1146	1.9000e-004		7.7800e-003	7.7800e-003		7.5200e-003	7.5200e-003	0.0000	15.5611	15.5611	2.9900e-003	0.0000	15.6359
Total	0.0193	0.1358	0.1146	1.9000e-004		7.7800e-003	7.7800e-003		7.5200e-003	7.5200e-003	0.0000	15.5611	15.5611	2.9900e-003	0.0000	15.6359

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2000e-004	0.0261	5.7700e-003	6.0000e-005	1.3400e-003	1.7000e-004	1.5100e-003	3.9000e-004	1.6000e-004	5.5000e-004	0.0000	5.4341	5.4341	3.3000e-004	0.0000	5.4424
Worker	3.3500e-003	2.5500e-003	0.0258	7.0000e-005	6.9900e-003	5.0000e-005	7.0400e-003	1.8600e-003	5.0000e-005	1.9100e-003	0.0000	6.4116	6.4116	1.8000e-004	0.0000	6.4162
Total	4.2700e-003	0.0286	0.0316	1.3000e-004	8.3300e-003	2.2000e-004	8.5500e-003	2.2500e-003	2.1000e-004	2.4600e-003	0.0000	11.8456	11.8456	5.1000e-004	0.0000	11.8586

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0193	0.1358	0.1146	1.9000e-004		7.7800e-003	7.7800e-003		7.5200e-003	7.5200e-003	0.0000	15.5611	15.5611	2.9900e-003	0.0000	15.6359
Total	0.0193	0.1358	0.1146	1.9000e-004		7.7800e-003	7.7800e-003		7.5200e-003	7.5200e-003	0.0000	15.5611	15.5611	2.9900e-003	0.0000	15.6359

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2000e-004	0.0261	5.7700e-003	6.0000e-005	1.3400e-003	1.7000e-004	1.5100e-003	3.9000e-004	1.6000e-004	5.5000e-004	0.0000	5.4341	5.4341	3.3000e-004	0.0000	5.4424
Worker	3.3500e-003	2.5500e-003	0.0258	7.0000e-005	6.9900e-003	5.0000e-005	7.0400e-003	1.8600e-003	5.0000e-005	1.9100e-003	0.0000	6.4116	6.4116	1.8000e-004	0.0000	6.4162
Total	4.2700e-003	0.0286	0.0316	1.3000e-004	8.3300e-003	2.2000e-004	8.5500e-003	2.2500e-003	2.1000e-004	2.4600e-003	0.0000	11.8456	11.8456	5.1000e-004	0.0000	11.8586

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1858	1.3531	1.2067	2.0200e-003		0.0728	0.0728		0.0704	0.0704	0.0000	166.1111	166.1111	0.0308	0.0000	166.8820
Total	0.1858	1.3531	1.2067	2.0200e-003		0.0728	0.0728		0.0704	0.0704	0.0000	166.1111	166.1111	0.0308	0.0000	166.8820

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2500e-003	0.2581	0.0556	6.1000e-004	0.0144	1.2000e-003	0.0156	4.1700e-003	1.1500e-003	5.3200e-003	0.0000	58.0865	58.0865	3.3400e-003	0.0000	58.1700
Worker	0.0329	0.0243	0.2490	7.4000e-004	0.0752	5.2000e-004	0.0758	0.0200	4.8000e-004	0.0205	0.0000	66.8837	66.8837	1.7300e-003	0.0000	66.9269
Total	0.0412	0.2824	0.3046	1.3500e-003	0.0897	1.7200e-003	0.0914	0.0242	1.6300e-003	0.0258	0.0000	124.9702	124.9702	5.0700e-003	0.0000	125.0969

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1858	1.3531	1.2067	2.0200e-003		0.0728	0.0728		0.0704	0.0704	0.0000	166.1109	166.1109	0.0308	0.0000	166.8818
Total	0.1858	1.3531	1.2067	2.0200e-003		0.0728	0.0728		0.0704	0.0704	0.0000	166.1109	166.1109	0.0308	0.0000	166.8818

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2500e-003	0.2581	0.0556	6.1000e-004	0.0144	1.2000e-003	0.0156	4.1700e-003	1.1500e-003	5.3200e-003	0.0000	58.0865	58.0865	3.3400e-003	0.0000	58.1700

Worker	0.0329	0.0243	0.2490	7.4000e-004	0.0752	5.2000e-004	0.0758	0.0200	4.8000e-004	0.0205	0.0000	66.8837	66.8837	1.7300e-003	0.0000	66.9269
Total	0.0412	0.2824	0.3046	1.3500e-003	0.0897	1.7200e-003	0.0914	0.0242	1.6300e-003	0.0258	0.0000	124.9702	124.9702	5.0700e-003	0.0000	125.0969

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2000e-003	0.0423	0.0444	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.8829	5.8829	1.8600e-003	0.0000	5.9295
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.2000e-003	0.0423	0.0444	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.8829	5.8829	1.8600e-003	0.0000	5.9295

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.7000e-004	1.7000e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4569	0.4569	1.0000e-005	0.0000	0.4572
Total	2.2000e-004	1.7000e-004	1.7000e-003	1.0000e-005	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4569	0.4569	1.0000e-005	0.0000	0.4572

Mitigated Construction On-Site

Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791
Total	1.1643	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.7000e-004	2.7500e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.4000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7380	0.7380	2.0000e-005	0.0000	0.7385
Total	3.6000e-004	2.7000e-004	2.7500e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.4000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7380	0.7380	2.0000e-005	0.0000	0.7385

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1631					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791
Total	1.1643	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.7000e-004	2.7500e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.4000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7380	0.7380	2.0000e-005	0.0000	0.7385
Total	3.6000e-004	2.7000e-004	2.7500e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.4000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7380	0.7380	2.0000e-005	0.0000	0.7385

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2716	1.7949	3.0115	0.0109	0.8269	0.0108	0.8378	0.2223	0.0102	0.2325	0.0000	1,006.6215	1,006.6215	0.0442	0.0000	1,007.7260
Unmitigated	0.2716	1.7949	3.0115	0.0109	0.8269	0.0108	0.8378	0.2223	0.0102	0.2325	0.0000	1,006.6215	1,006.6215	0.0442	0.0000	1,007.7260

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	469.79	696.51	638.74	1,215,579	1,215,579
General Office Building	410.18	159.41	68.04	777,819	777,819

General Light Industry	99.90	14.65	7.55	217,587	217,587
Total	979.87	870.57	714.33	2,210,986	2,210,986

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.559358	0.040058	0.190549	0.109335	0.016678	0.005213	0.023344	0.044042	0.002152	0.002669	0.005545	0.000316	0.000739
General Office Building	0.559358	0.040058	0.190549	0.109335	0.016678	0.005213	0.023344	0.044042	0.002152	0.002669	0.005545	0.000316	0.000739
General Light Industry	0.559358	0.040058	0.190549	0.109335	0.016678	0.005213	0.023344	0.044042	0.002152	0.002669	0.005545	0.000316	0.000739

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	393.5500	393.5500	0.0178	3.6800e-003	395.0920
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	393.5500	393.5500	0.0178	3.6800e-003	395.0920
NaturalGas Mitigated	0.0134	0.1187	0.0816	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.2849	132.2849	2.5400e-003	2.4300e-003	133.0710
NaturalGas Unmitigated	0.0134	0.1187	0.0816	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.2849	132.2849	2.5400e-003	2.4300e-003	133.0710

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	951617	5.1300e-003	0.0439	0.0187	2.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	50.7819	50.7819	9.7000e-004	9.3000e-004	51.0837
General Light Industry	274725	1.4800e-003	0.0135	0.0113	8.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	14.6604	14.6604	2.8000e-004	2.7000e-004	14.7475
General Office Building	1.25258e+006	6.7500e-003	0.0614	0.0516	3.7000e-004		4.6700e-003	4.6700e-003		4.6700e-003	4.6700e-003	0.0000	66.8427	66.8427	1.2800e-003	1.2300e-003	67.2399
Total		0.0134	0.1187	0.0816	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.2849	132.2849	2.5300e-003	2.4300e-003	133.0710

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	951617	5.1300e-003	0.0439	0.0187	2.8000e-004		3.5500e-003	3.5500e-003		3.5500e-003	3.5500e-003	0.0000	50.7819	50.7819	9.7000e-004	9.3000e-004	51.0837
General Light Industry	274725	1.4800e-003	0.0135	0.0113	8.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	14.6604	14.6604	2.8000e-004	2.7000e-004	14.7475
General Office Building	1.25258e+006	6.7500e-003	0.0614	0.0516	3.7000e-004		4.6700e-003	4.6700e-003		4.6700e-003	4.6700e-003	0.0000	66.8427	66.8427	1.2800e-003	1.2300e-003	67.2399
Total		0.0134	0.1187	0.0816	7.3000e-004		9.2400e-003	9.2400e-003		9.2400e-003	9.2400e-003	0.0000	132.2849	132.2849	2.5300e-003	2.4300e-003	133.0710

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
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Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	460197	133.8766	6.0500e-003	1.2500e-003	134.4011
General Light Industry	83916	24.4121	1.1000e-003	2.3000e-004	24.5078
General Office Building	808704	235.2613	0.0106	2.2000e-003	236.1831
Total		393.5500	0.0178	3.6800e-003	395.0920

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	460197	133.8766	6.0500e-003	1.2500e-003	134.4011
General Light Industry	83916	24.4121	1.1000e-003	2.3000e-004	24.5078
General Office Building	808704	235.2613	0.0106	2.2000e-003	236.1831
Total		393.5500	0.0178	3.6800e-003	395.0920

6.0 Area Detail

6.1 Mitigation Measures Area

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

Mitigated	1.1146	0.0152	1.1581	7.3000e-004		0.0540	0.0540		0.0540	0.0540	4.9693	3.3645	8.3338	9.2700e-003	3.3000e-004	8.6627
Unmitigated	1.1146	0.0152	1.1581	7.3000e-004		0.0540	0.0540		0.0540	0.0540	4.9693	3.3645	8.3338	9.2700e-003	3.3000e-004	8.6627

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1163					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7221					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2515	5.7900e-003	0.3463	6.9000e-004		0.0495	0.0495		0.0495	0.0495	4.9693	2.0411	7.0104	7.9900e-003	3.3000e-004	7.3072
Landscaping	0.0246	9.3700e-003	0.8118	4.0000e-005		4.4700e-003	4.4700e-003		4.4700e-003	4.4700e-003	0.0000	1.3234	1.3234	1.2800e-003	0.0000	1.3555
Total	1.1146	0.0152	1.1581	7.3000e-004		0.0540	0.0540		0.0540	0.0540	4.9693	3.3645	8.3338	9.2700e-003	3.3000e-004	8.6627

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1163					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7221					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2515	5.7900e-003	0.3463	6.9000e-004		0.0495	0.0495		0.0495	0.0495	4.9693	2.0411	7.0104	7.9900e-003	3.3000e-004	7.3072
Landscaping	0.0246	9.3700e-003	0.8118	4.0000e-005		4.4700e-003	4.4700e-003		4.4700e-003	4.4700e-003	0.0000	1.3234	1.3234	1.2800e-003	0.0000	1.3555

Total	1.1146	0.0152	1.1581	7.3000e-004		0.0540	0.0540		0.0540	0.0540	4.9693	3.3645	8.3338	9.2700e-003	3.3000e-004	8.6627
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7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	51.8163	0.6924	0.0167	74.1090
Unmitigated	51.8163	0.6924	0.0167	74.1090

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	7.10179 / 4.47721	17.9908	0.2321	5.6100e-003	25.4661
General Light Industry	2.56688 / 0	4.8549	0.0838	2.0100e-003	7.5503
General Office Building	11.5171 / 7.0589	28.9706	0.3764	9.1000e-003	41.0926
Total		51.8163	0.6924	0.0167	74.1090

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	7.10179 / 4.47721	17.9908	0.2321	5.6100e-003	25.4661
General Light Industry	2.56688 / 0	4.8549	0.0838	2.0100e-003	7.5503
General Office Building	11.5171 / 7.0589	28.9706	0.3764	9.1000e-003	41.0926
Total		51.8163	0.6924	0.0167	74.1090

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	25.2034	1.4895	0.0000	62.4403
Unmitigated	25.2034	1.4895	0.0000	62.4403

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
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Land Use	tons	MT/yr			
Apartments Mid Rise	50.14	10.1780	0.6015	0.0000	25.2155
General Light Industry	13.76	2.7932	0.1651	0.0000	6.9199
General Office Building	60.26	12.2322	0.7229	0.0000	30.3049
Total		25.2034	1.4895	0.0000	62.4403

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	50.14	10.1780	0.6015	0.0000	25.2155
General Light Industry	13.76	2.7932	0.1651	0.0000	6.9199
General Office Building	60.26	12.2322	0.7229	0.0000	30.3049
Total		25.2034	1.4895	0.0000	62.4403

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

APPENDIX C: REGULATORY STATUS UPDATE



June 14, 2019

Danny Haber (*Sent via E-mail to: danny@owow.com*)
OWOW, LLC
Pier 54, Suite 202
San Francisco, CA 94158

Subject: Site Cleanup Program Case No. RO0003282 and GeoTracker Global ID T10000011160, OWOW Development located at 2715 Adeline Street, Oakland, CA 94607, Assessor's Parcel Numbers. 5-446-8-1, 5-446-1-1, and 5-446-1-2.

Dear Mr. Haber:

Alameda County Department of Environmental Health (ACDEH) has reviewed the case file for the subject site (the Site) in conjunction with the following documents prepared by Roux Associates, Inc. on your behalf including:

- *Site Conceptual Model* (the SCM), dated February 15, 2019
- *Data Gaps Work Plan* (the Work Plan), dated February 15, 2019
- *Site Redevelopment Schedule* (the Schedule), electronically received by ACDEH on June 6, 2019

Based on our review, ACDEH approves the *Work Plan*, the *SCM*, and *Redevelopment Schedule* for implementation on the condition the *Technical Comments* provided in Section II are addressed. With the provision that the information provided to this agency is accurate and representative of currently known Site conditions, at this juncture, ACDEH has no objection to you proceeding with the proposed site investigation activities provided OWOW submits the requisite documents listed below and implements all ACDEH approved corrective actions. Additionally, ACDEH is of the opinion that implementation of the proposed corrective action and mitigation measures outlined in *Section III - Deliverables* will minimize risk to on- and off-site receptors from exposure to residual subsurface contamination. Installation of potential vapor mitigation engineering controls (VMECs) and a vapor mitigation system including trench plugs, etc will also mitigate risk to occupants of the proposed new redevelopment building from potential TPH and volatile organic compound (VOCs) impacted soil gas.

SECTION I – SITE & REGULATORY STATUS

ACDEH understands the Site is located in a mixed residential and commercial area of Oakland and consists of three parcels identified by Alameda County Assessor Parcel Number (APN) 5-446-8-1 located at 2700 Magnolia Street, APN 5-446-1-1 located at 1173 28th Street, and APN 5-446-1-2 located at 2715 Adeline Street.

- APN 5-446-1-2 is currently developed as a vacant 20,332-square foot (SF) single story warehouse. Previous operations on this parcel included a residential dwelling (approximately 500-SF) with an associated aboveground petroleum storage tank (quantity unknown) from approximately

1902 until 1912. A former retail fueling and automotive service station (approximately 700-SF) operated on the northeast portion of the property and two additional residential dwellings (approximately 1,150 SF each) located on the south end of the property were present between approximately 1912 to 1943. The size and quantity of the underground storage tanks (USTs) associated with the former service station is currently unknown. A sausage factory operated on this property as well as the adjacent (west) property APN 5-446-1-1, approximately between 1943 to 1990's. Historical sausage operations conducted on this particular parcel included the holding, cutting, and loading rooms and cold storage. The vacant warehouse currently present on the property is associated with the historical sausage factory operations.

- APN 5-446-1-1 is currently a vacant lot with a concrete slab from a former building. Previous operations at this parcel included a commercial laundry service (approximately 19,200-SF) from approximately 1925 until 1935. A sausage factory operated on this property and the adjacent (east) property as mentioned-above from approximately 1943 to the 1990's. Historical sausage operations conducted on this particular parcel included the office, factory and boning rooms, additional cold storage, and packaging. In 1992 portions of the sausage factory on this property were destroyed in a building fire, including the offices and cold storage.
- APN 5-446-8-1 is currently a vacant lot with asphalt groundcover. Previous operations at this parcel included an aluminum and brass foundry (approximately 14,000-SF) from approximately 1935 until 1962. The parcel operated as a parking lot from the mid 1960's until the 1990's.

Petroleum hydrocarbons and fuel related constituents and chlorinated solvents have been detected in soil, soil vapor, and groundwater on all three parcels at concentrations above the 2019 San Francisco Regional Water Quality Control Boards (State Water Board) Environmental Screening Levels (ESLs). A former Leaking Underground Storage Tank (LUST) Cleanup Program Case (No. RO0002562) was opened and environmental site investigations relating to the release of petroleum hydrocarbons and related fuel constituents began in 2001 at the two northern properties. In November 2002, one 550-gallon UST was removed from APN 5-446-1-2 and one 350-gallon UST was removed from APN 5-446-1-1. Results from tank removal activities indicated groundwater concentrations of gasoline range petroleum hydrocarbons (TPH-g), benzene, and lead were reported above 2019 ESLs. Groundwater encountered during early investigations was encountered between 6.5 feet to 7 feet below ground surface (bgs), however, a review of all historical data indicates the groundwater can vary in depth across all three parcels and has been reported between 4.1 and 26.5 feet bgs. In 2006 additional subsurface investigations reported impacts above present day ESLs including diesel range petroleum hydrocarbons (TPH-d) in soil, and benzene and ethylbenzene in soil vapor. Case closed of the former LUST Case RO0002562 was granted in June 2010 with site management requirements under the then current land use of the property as a vacant lot.

Chlorinated solvents were detected in soil, soil vapor, and groundwater during environmental investigations conducted in 2006 through 2015. Due to non-UST chemicals of concern (COCs) detected in soil, soil vapor, and groundwater the current Site Cleanup Program (SCP) Case. (RO0003282) was opened and site investigation activities are being conducted to further delineate the vertical and lateral extent of the chlorinated solvent contamination in soil, groundwater, and soil gas.

Additional soil, groundwater, and soil vapor investigation activities including, those outlined in the *Work Plan*, are being conducted to further delineate the vertical and lateral extent of (1) petroleum related constituents due to the proposed change in land; and (2) chlorinated solvents in the subsurface to evaluate the associated risk to potential on- and off-site sensitive receptors under Case No RO0003282 and regulatory oversight with ACDEH.

ACDEH understands that OWOW purchased all three parcels and intends to redevelop the properties into a 14,312-SF mixed-use five story building that includes an automotive stacker (137 parking spaces) on the ground floor with 32 underground stacker pits at approximately 8 feet bgs each, and 106 work/live units on the 2nd through 5th floors. The building will also include 2 elevators with associated elevator pits at approximately 5 feet bgs. Proposed redevelopment plans have not been submitted to the City of Oakland Planning Department or City of Oakland Building Department, and ACDEH has requested to review the draft California Environmental Quality Act (CEQA) documents before submission to the Planning department. Based on previous conversations with OWOW, ACDEH understands that the City of Oakland Planning and Building departments have required the applicant to obtain environmental clearance from ACDEH for the proposed redevelopment.

A data gap analysis and SCM was conducted and summarized in the *Work Plan*. Results of the analysis indicated the following data gaps: (1) delineation of TPH impacts in soil and groundwater in the vicinity of the two former UST locations; (2) delineation of potential onsite source areas of TPH, chlorinated solvent, and metal contaminants on all three properties due to former operations including a service station, laundry facility, aluminum and brass foundry, sausage factory, and building fire; and (3) characterization of potential offsite sources of chlorinated solvents migrating towards the Site for evaluation of exposure including vapor intrusion under proposed residential use. As a result, Roux proposes to conduct additional on- and off-site investigations to address the data gaps mentioned above and further characterize soil, groundwater, and soil gas conditions at the Site. The scope of work presented in this *Work Plan* includes a total of 16 borings (RB-01 through RB-16) that will be advanced at the site during additional investigations including the advancement of 7 soil borings (RB-01, RB-05, RB-09, RB-10, and RB-13 through RB-15), six borings for grab groundwater locations (RB-04, RB-07, RB-08, and RB-13 through RB-15) and eight borings for temporary soil gas probes (RB-02, RB-03, RB-06, RB-09, RB-11 through RB-13, and RB-16).

SECTION II - TECHNICAL COMMENTS

Please address the comments below and incorporate them during implementation of the scope of work presented in the *Work Plan* and *Redevelopment Schedule*.

Work Plan

1. **Soil Vapor Sampling** – The *Work Plan* states that soil gas sampling will be performed in accordance with the *Advisory– Active Soil Gas Investigations* dated July 2015, prepared by the California Department of Toxic Substances Control (DTSC Advisory) and that a shroud with Helium tracer gas will be used to monitor for system leaks. The purpose of this leak check method is to provide a quantifiable means of evaluating the data quality effects of ambient air intrusion into the soil gas sample. In order to ensure that the quality of helium data is sufficient and adequate for this purpose, ACDEH requests that (1) the encapsulating shroud entirely encompass the sample apparatus and surface completion of the soil gas well or vapor pin; (2) an at least 20% helium atmosphere is maintained within the encapsulating shroud throughout the duration of purging and sampling; and (3) shroud helium concentrations be monitored, recorded, and reported in field logs. Helium monitoring may be conducted using a field meter as long as the detector is capable of reporting Helium detections between 100% and 0.1% with a precision of at least +10% at 0.1%.

Additionally, the *Work Plan* states that soil gas will be analyzed for VOCs using EPA Method TO-15 and by TPH-g and TPH-d by EPA Method TO-3 and TO-17, respectively. The *Work Plan* also states Helium will be analyzed using ASTM D1946. ACDEH request that additional fixed

gases including hydrogen, carbon monoxide, carbon dioxide, oxygen, and methane be analyzed under ASTM D1946. ACDEH also requests a copy of the field logs associated with field procedures such as leak testing and sampling be included as a attachment to the submitted Report.

Redevelopment Schedule

2. **Vapor Migration Engineering Controls** – The *Redevelopment Schedule* states that Roux with submit Revision 1 of the VMEC Basis of Design (BOD) and Plans & Specs (Plans) to Geotrcaker by January 2, 2020. The Schedule also reflects that ACDEH will then conduct our review of Revision 1 of the VMEC BOD and Plans from January 3, 2020 3 through January 29, 2020. In order to capture the adequate timeline and a potential second revision to the document, ACDEH request you insert two additional line items to the schedule including; (1) Roux submittal of Revision 2 of the VMEC BOD and Plans and (2) ACDEH review and conditional approval of Revision 2 VMEC BOD and Plans (15 days).

SECTION III - DELIVERABLES

ACDEH requests that you submit the requested *Deliverables* to the State Water Resources Control Board's GeoTracker website in accordance with the compliance schedule provided below and the *Responsible Party (ies) Legal Requirement/Obligations Instructions* and *File Naming Conventions* which are included as Attachments 1 and 2 respectively. ACDEH requests email notification verifying the requested deliverables have been uploaded to Geotracker (e-mail preferred to: andrew.york@acgov.org).

1. **Corrective Action Plan** – Due to the petroleum and non-petroleum related COCs and the potential for vapor intrusion to proposed residential occupants at the site, a Corrective Action Plan (CAP) must be prepared under the direction of a Registered Civil Engineer and submitted to ACDEH for review and approval. Please incorporate the data collected in accordance with the above approved *Work Plan* into the CSM used to support selection of corrective actions presented in the CAP.

The CAP should include the following minimum information:

- COCs identified at the site including the physical and chemical characteristics of each COC, persistence, and potential for migration in water, soil, and air
- Hydrogeologic setting of the site and surrounding areas where impacts have migrated or may migrate in soil, groundwater, and soil gas
- Distribution of COCs in each media, including figures depicting the distribution and cumulative tables of site characterization data
- Receptor information including likely future land use scenarios, adjacent land use and sensitive receptors, and potential groundwater receptors.
- Identification of complete or potentially complete exposure pathways, points of exposure during implementation of corrective actions and/or under the scenario that no corrective actions are implemented

- Proposed cleanup goals, basis for cleanup goals, and corrective action objectives for all media.
- Description of proposed remediation including confirmation sampling and monitoring during implementation. Potential remediation measures include but are not limited to: Excavation; Soil Vapor Extraction (SVE); Bioventing; Dual Phase Extraction (DPE); Air- or Bio- Sparging; Chemical Oxidation/Reduction; Bio-remediation; Monitored Natural Attenuation (MNA).
- Description of proposed engineering controls to mitigate potentially complete exposure pathways described in the CAP. Potential engineering controls may include but are not limited to: Permeable Reactive Barrier (PRB), Soil or Hardscape Cap, Vapor Intrusion Mitigation Systems (VIMS), Trench dams.
- Evaluation of a minimum of three active remedial alternatives including discussion of feasibility, cost effectiveness, estimated time to reach cleanup goals, and limitations for each remedial alternative.
- Post-remediation monitoring.
- Schedule for implementation of cleanup.

Please be aware that public participation is a requirement for the CAP process. Therefore, ACDEH will request that you submit a Draft CAP for ACDEH review. Upon ACDEH approval of a Draft CAP, ACDEH will notify potentially affected members of the public who live or own property in the surrounding area of the proposed remediation described in the Draft CAP. Public comments on the proposed remediation will be accepted for a 30-day period.

CAP Compliance Date: Friday, July 5, 2019.

File to be named: RO3282_CAP-2019-07-05

2. **Entitlement and Planning Department Approvals** - A copy of the City of Oakland Planning entitlement approvals for the redevelopment project including any California Environmental Quality Act (CEQA) compliance documents, a letter from the environmental consultant documenting compliance with the conceptual plans presented in the CAP, and any proposed changes to the site redevelopment, subterranean automotive or elevator pits, and first floor building plans. Any substantial changes may invalidate the conclusions of the protectiveness of the proposed redevelopment of the site with respect to the residual contamination and the proposed corrective actions presented in the CAP.

Planning Department Approval Compliance Date– Monday, July 29, 2019.

File to be named: RO3282_DEV_PLANNING-2019-07-05

3. **Building Permit Plans** - A copy of the building permit plan construction sets documenting compliance with the plans presented in the ACDEH-approved corrective action documents (i.e. CAP, CAIP, VMEC Design documents). The plans must be submitted with a transmittal letter from your environmental consultant, stating they have read and acknowledged the content, recommendations and/or conclusions contained in the attached document or report submitted. ACDEH also requests a cover sheet identifying the specific sheets that were used in the design of the engineering controls (i.e. mechanical, electrical, plumbing plans at ground level, foundation plan, roofing plan, grading, etc.) ACDEH must be notified if the project proponent or the City

Building Department proposes changes to the site development, subterranean garage, and first floor building plans. Any substantial changes made to the plans without review by ACDEH may invalidate the conclusions of the protectiveness of the proposed redevelopment of the site with respect to the residual contamination and the proposed corrective actions.

Building Department Approval Compliance Date– Friday, February 21, 2020.

File to be named: RO3282_DEV_PLANNING-2019-02-22

4. **Corrective Action Implementation Plan (CAIP)** - A CAIP must be prepared under the direction of a Registered Civil Engineer and submitted to ACDEH for review and approval. The CAIP must include the results of any additional soil, soil vapor, and groundwater investigation proposed in the CAP and present a comprehensive design and detailed plan for implementing the corrective actions identified in the ACDEH-approved CAP. The CAIP may also identify additional soil, soil vapor and/or groundwater remediation activities, if warranted.

CAIP Compliance Date: Wednesday, November 20, 2019.

File to be named: RO3282_CAIP-2019-11-20

5. **Construction Soil and Groundwater Management Plan (Construction SGMP)** – A Construction SGMP must be prepared under the direction of a registered civil engineer or registered geologist and submitted to ACDEH for review and approval. The Construction SGMP will describe procedures to be followed by environmental consultants, construction contractors and workers, and other property owner representatives during redevelopment construction, identifying safety and training requirements for construction workers, establishing procedures for assessing and managing contaminated media

Construction SGMP Compliance Date: Wednesday, December 18, 2019.

File to be named: RO3282_SGMP-2019-12-18

Prior to all site demolition and construction activities including building/slab demolition, grading, and excavation the following documents must be submitted to ACDEH for review and approval:

6. **Construction SGMP Certification Form** - A copy of the Construction SGMP Certification Form signed by you and all your environmental professionals and contractors associated with the implementation of corrective actions at the Site certifying that they agree to comply with the ACDEH approved SGMP. The Certification Form must be submitted to ACDEH prior to the start of construction activities.

Construction SGMP Certification Compliance Date: Monday, February 10, 2020.

File to be named: RO3282_SGMP_CERT-2020-02-10

7. **Vapor Mitigation Engineering Controls (VMEC) Design Documents** – If proposed corrective actions include installation of VMEC consisting of vapor mitigation system (VMS) beneath buildings and/or trench dams and plugs within utility corridors. VMEC documents must be prepared by a Registered Civil Engineer and submitted to ACDEH for review and approval. The VMEC design

documents must include a basis of design (BOD) that identifies design objectives, assumptions, engineering calculations, and construction quality assurance and quality control measures (CQA/QC); construction plan set and specifications (Plans & Specs); and an Operations, Maintenance, and Monitoring (OM&M) Plan including post-construction/pre-occupancy VMEC system testing procedures, and long-term operation and maintenance. The BOD and Plans & Specs must be prepared with sufficient detail to evaluate the validity, constructability, and design performance of the engineering controls. The BOD, Plans & Specs, and OM&M Plan can be submitted as appendices to the CAIP or as stand-alone documents. The VMEC plans and specifications must be incorporated into the building and utility construction plan and specifications.

VMECs Design Documents Compliance Date – Wednesday, November 20, 2019.

File to be named: RO3282_VMEC-2019-11-20

Prior to backfilling remedial excavations and soil import activities the following documents must be submitted to ACDEH for review and approval:

8. **Remedial Soil Excavation Documentation** – Submittal of a soil excavation documentation for source excavation, confirmation sampling and analytical results, must be submitted prior to the start of construction of the final foundation system. The submittal must include but not be limited to scaled figures (plan views and cross-sections) showing sampling locations and extents of excavation, volume of soil excavated and final disposition, waste manifests if disposed of off-site, tabulated analytical results and environmental screening levels, and laboratory analytical reports. The data should be initially submitted to ACDEH via email correspondence to facilitate quick review and backfill approval. Subsequent to ACDEH approval to backfill the data must be incorporated into the Remedial Action Completion Report of Soil Excavation and Groundwater.

Remedial Soil Excavation Documentation Compliance Date – Tuesday, April 14, 2020

File to be named: RO3282_SOIL_EXPORT-2020-04-14

9. **Soil Import Documentation (if required for backfill)** - Submittal of requisite documentation to ACDEH for review and approval prior to import of fill to confirm compliance with ACDEH's Fill Material Characterization Guidance (FMCG), dated August 1, 2018. Information must include but not be limited to proposed sources, sampling and profiling protocols, analytical laboratory reports, and tables with analytical results and applicable environmental screening levels. The data should be initially submitted to ACDEH via email correspondence to facilitate quick review and backfill approval. Subsequent to ACDEH approval to backfill the data must be incorporated into the Remedial Action Completion Report of Soil Excavation and Groundwater.

Soil Import Documentation Compliance Date – Monday, March 30, 2020

File to be named: RO3282_SOIL_IMPORT-2020-03-30

Prior to building occupancy and issuance of a No Further Action Letter the following documents must be submitted to ACDEH prior to closure for review and approval:

10. **Remedial Action Completion Report (RACR)** - A comprehensive report documenting implementation of the CAIP and demonstrating that corrective action objectives have been met or identifying any corrective action objectives that have not yet been met. The report must include as-built drawings and photo documentation and must include a certification by the remediation design

engineer that the remedial measures were implemented in accordance with the approved CAIP. The report must also include copies of all permits and must document at a minimum the following (if applicable):

- Description of soil excavation activities, including but not limited to volume of soil excavated, waste manifests for off-site disposal, figures (plan view and cross sections) depicting the excavation extents and locations of confirmation sampling, tabulated analytical results with ESLs and delineation and/or over-excavation samples, and laboratory analytical reports including pre-characterization results of in-situ sampling and/or stockpiling sampling;
- Description of final fill importation in accordance with the ACDEH approved SIMP or FMCG and import documentation submitted to ACDEH for approval prior to import. The documentation must also include manifests documenting source of material transported to site, and figures (plan view and cross sections) depicting the soil import backfill extents,
- Description of construction groundwater dewatering activities with supporting documentation including but not limited to tables, figures, laboratory analytical reports, copies of discharge reports, and corrective actions associated with unauthorized releases during construction activities; and
- Certification of compliance with the Construction SGMP protocols during implementation of remedial measures including but not limited to agency notification and reporting requirements, pre-field activities (site security and access, traffic control, excavation permits, notification and utility clearance), waste management, soil and groundwater management, stormwater management, dust and odor emission control, and contingency measures for discovery of unexpected underground structures.

RACR Compliance Date – Thursday, April 16, 2020

File to be named: RO3282_RACR-2020-04-16

11. VMEC Record Report of Construction (RRoC) – A comprehensive report documenting the construction quality assurance (CQA) activities and observation and findings during construction of the VMEC including vapor mitigation systems beneath buildings and trench dams/plugs in utility corridors. This report can be submitted as a standalone document or with the RACR. The report must include as-built drawings, photo documentation, certification by the CQA Manager and VMEC Design Engineer that the completed VMEC and utility trench plugs were installed in accordance with the ACDEH, approved basis of design report, plans, and specifications. The report must also include copies of the following documents as standalone appendices:

- **VMEC Operations and Maintenance (O&M) Plan** – An O&M Plan for the vapor mitigation engineering controls. The O&M Plan must include at a minimum documentation of the installed VMEC components, including As-Built drawings and specifications, and photo documentation; responsible party information; details of required O&M activities; emergency contacts and protocols in case of system failure; and copies of the field forms to be completed during routine and emergency inspections.
- **Trench Dam & Plug Maintenance Plan** – A maintenance plan for the trench dams and plugs installed within the utility corridors. The plan must include at a minimum documentation of the installed dams and plugs including As-Built construction drawings and specifications, surveyed

coordinates, and photo documentation; responsible party information; and contacts and protocols in case that utility repair requires replacement of the dams or plugs.

VMEC RRoC Compliance Date – Friday, July 30, 2021

File to be named: RO3282_RROC-2021-07-30

12. **VMECS Post Construction Performance Monitoring Report** – A report documenting the results of the VMS performance monitoring (indoor air, sub-slab soil vapor, and vent riser sampling) and certification by the VMEC Design Engineer that the VMS is functioning as designed.

VMEC Post Construction Performance Monitoring Report Compliance Date – Friday, July 30, 2021 (estimated)

File to be named: RO3282_VMS_MON_R-2021-07-30

13. **Institutional Controls (ICs)** – Recordation of institutional controls including a Land Use Covenant and Disclosure Covenants, Conditions and Restrictions (CC&Rs) providing legal and administrative controls and methods for dissemination of information to site users and occupants, homeowners associations, property managers and property owners to minimize risk during property development, future below-ground construction and maintenance, and long-term site use. ACDEH will provide the LUC for your recordation under a separate correspondence.

Institutional Controls Compliance Date – – Friday, July 30, 2021 (estimated)

File to be named: RO3282_IC-2021-07-30

Land Use Covenant Compliance Date – – Friday, July 30, 2021 (estimated)

File to be named: RO3282_LUC-2021-07-30

14. **Financial Assurance** – Documentation of an appropriate financial instrument to assure ACDEH of implementation and maintenance of the VMECs. The details of this financial assurance must be worked out by the project proponent and ACDEH as design, construction, and monitoring plans are finalized and approved. The financial assurance instrument must provide for sufficient funds to construct, monitor, and provide regulatory oversight costs for long-term operations and maintenance of the VMEC. Estimates of these costs must be based, in part, on the cost estimates for project implementation that are established in the CAIP. Additionally, an allowance for regulatory oversight must be included in the financial assurance mechanism.

Financial Assurance Mechanism Compliance Date – – Friday, July 30, 2021 (estimated)

File to be named: RO3282_FAM-2021-07-30

15. **Long Term Site Management Plan (SMP)** – A SMP for long-term site management plan written for the property owner to facilitate compliance with the requirements of the Land Use Covenant. The SMP must provide a description the VMEC, permitted activities, maintenance and reporting requirements and schedule, and notification and documentation procedures should the VMEC be damaged. The SMP must include the VMECs, O&M Plans, and SGMP as standalone appendices and must be maintained at the site address by the property manager or designated representative.

Long Term SMP Compliance Date – – Friday, July 30, 2021 (estimated)

File to be named: RO3282_SMP-2021-07-30

Required for all environmental site data and reports performed at the subject site and/or submitted for ACDEH review or approval

- 16. Project Schedule** - The Project Schedule is a living document that will be used and updated throughout the lifecycle of the project as a planning and scheduling tool. The project schedule should be updated and re-submitted as-needed to be reflective of the actual project timetables. The purposes of the Project Schedule are to (1) identify milestones and important target dates such as the start and end of public comment, the start and end of phases of construction, and the target occupancy date; and (2) facilitate the allocation of resources to allow for reasonable and timely preparation and review of documents. At a minimum, the project schedule should include permitting and phases of construction; entries for each deliverable or technical report that requires submittal to or approval from ACDEH; ACDEH or design engineer/geologist inspections; approval letters or directives from ACDEH; and other relevant or applicable project deadlines. ACDEH typically requires that the schedule reflect a minimum of 30 days of review time for ACDEH on any technical report submittals).

Project Schedule Compliance Date – ongoing as investigation and reports are conducted

- 17. GeoTracker Database Compliance** – Site data and documents are maintained in the State Water Board's GeoTracker website. The database acts as repositories for Portable Document Format (PDF) files of regulatory directives and reports and has the functionality to store electronic compliance data in Electronic Deliverable Format (EDF) including analytical laboratory data for soil, vapor, and groundwater samples, monitoring well depth-to-water measurements, and surveyed location and elevation data for sampling locations.

ACDEH requests OWOW upload all historical environmental documents related to the subject site including but not limited the missing soil and groundwater analytical data, documents and reports, maps, and boring logs to GeoTracker. See Attachment 1 regarding electronic submittal requests to GeoTracker. Notification of, and a list of, the documents uploaded to GeoTracker can be emailed to my attention (Attention Drew York).

GeoTracker Database Compliance – ongoing as investigation and reports are conducted

Thank you for your cooperation. ACDEH looks forward to working with you and your environmental consultants to advance the case toward closure. If you have any questions, please call me at (510) 639-1276 or send me an email message at andrew.york@acgov.org

Mr. Haber
RO0003282
June 14, 2019, Page 11

Sincerely,



Drew
York

Digitally signed
by Drew York
Date:
2019.06.14
15:39:39 -07'00'

Drew J. York
Senior Hazardous Materials Specialist



Dilan Roe, PE, C73703
Chief - Land Water Division

Encl.: Attachment 1 – Responsible Party (ies) Legal Requirement/Obligations Instructions
Attachment 2 – Electronic File Naming Conventions

cc: Jeremy Harris, OWOW (*Sent via E-mail to: jeremy@owow.com*)
Angle Liang Cutting Harris, OWOW (*Sent via E-mail to: acutting@rouxinc.com*)
Dilan Roe, ACDEH, Chief Land and Water Division (*Sent via E-mail to: dilan.roe@acgov.org*)
Paresh Khatri, ACDEH (*Sent via E-mail to: paresh.khatri@acgov.org*)
Drew York, ACDEH (*Sent via E-mail to: andrew.york@acgov.org*)
Electronic File, GeoTracker

ATTACHMENT 1

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: December 14, 2017
	ISSUE DATE: July 25, 2012
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016
SECTION: ACDEH Procedures	SUBJECT: Responsible Party(ies) Legal Requirements / Obligations

REPORT & DELIVERABLE REQUESTS

Alameda County Department of Environmental Health (ACDEH) Cleanup Oversight Programs, Local Oversight Program (LOP) and Site Cleanup Program (SCP) require submission of all reports in electronic form to the State Water Board's (SWB) GeoTracker website in accordance with California Code of Regulations, Chapter 30, Division 3, Title 23 and Division 3, Title 27.

Leaking Underground Fuel Tank (LUFT) Cases

Reports and deliverable requests are pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party (RP) in conjunction with an unauthorized release from a petroleum underground storage tank (UST) system.

Site Cleanup Program (SCP) Cases

For non-petroleum UST cases, reports and deliverables requests are pursuant to California Health and Safety Code Section 101480.

ELECTRONIC SUBMITTAL OF REPORTS

A complete report submittal includes the PDF report and all associated electronic data files, including but not limited to GEO_MAP, GEO_XY, GEO_Z, GEO_BORE, GEO_WELL, and laboratory analytical data in Electronic Deliverable Format™ (EDF). Additional information on these requirements is available on the State Water Board's website (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

- Do not upload draft reports to GeoTracker
- Rotate each page in the PDF document in the direction that will make it easiest to read on a computer monitor.

GEOTRACKER UPLOAD CERTIFICATION

Each report submittal is to include a GeoTracker Upload Summary Table with GeoTracker valid values¹ as illustrated in the example below to facilitate ACDEH review and verify compliance with GeoTracker requirements.

GeoTracker Upload Table Example

Report Title	Sample Period	PDF Report	GEO_MAPS	Sample ID	Matrix	GEO_Z	GEO_XY	GEO_BORE	GEO_WELL	EDF
2016 Subsurface Investigation Report	2016 S1	✓	✓	Effluent	SO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
2012 Site Assessment Work Plan	2012	✓	✓			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2010 GW Investigation Report	2008 Q4	✓	✓	SB-10	W	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
				SB-10-6	SO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓
				MW-1	WG	✓	✓	✓	✓	✓
				SW-1	W	✓	✓	✓	✓	✓

¹ GeoTracker Survey XYZ, Well Data, and Site Map Guidelines & Restrictions, CA State Water Resources Control Board, April 2005

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: NA
	ISSUE DATE: December 14, 2017
	PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016
SECTION: ACDEH Procedures	SUBJECT: Responsible Party(ies) Legal Requirements / Obligations

ACKNOWLEDGEMENT STATEMENT

All work plans, technical reports, or technical documents submitted to ACDEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to the State Water Board's GeoTracker website." This letter must be signed by the Responsible Party, or legally authorized representative of the Responsible Party.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6731, 6735, and 7835) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately licensed or certified professional and include the professional registration stamp, signature, and statement of professional certification. Additional information is available on the Board of Professional Engineers, Land Surveyors, and Geologists website at: <http://www.bpelsg.ca.gov/laws/index.shtml>.

UNDERGROUND STORAGE TANK CLEANUP FUND

For LUFT cases, RP's non-compliance with these regulations may result in ineligibility to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse the cost of cleanup. Additional information is available on the internet at: https://www.waterboards.ca.gov/water_issues/programs/ustcf/

AGENCY OVERSIGHT

Significant delays in conducting site assessment/cleanup or report submittals may result in referral of the case to the Regional Water Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

ATTACHMENT 2

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	REVISION DATE: October 30, 2018
	PREVIOUS REVISIONS: July 26, 2018, April 4, 2018, July 17, 2017, November 8, 2016, December 15, 2015, December 16, 2014, June 19, 2013, June 15, 2011, March 26, 2009, April 29, 2008, October 29, 2018 October 30, 2018, November 16, 2018
	ISSUE DATE: June 16, 2006
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: File Names for Electronic Reports

Format: REPORT_NAME_R_YYYY-MM-DD

Ex: SWI_R_VOL1_2006-05-25

LOP and SCP (VRAP) INCOMING REPORTS AND LETTERS	
Document Name	Abbreviation File Name= Abbreviation + Date (yyyy- mm-dd)
Abandoned Well Information/Water Supply Well Information	ABWELLINF_R
Addendum	ADEND_R (added after report name)
Additional Information Report	ADD_R
Analytical Reports (Loose data sheets not in report)	ANALYT_R
As Built Drawings (or Plans)	AS_BUILT
Basis of Design	BOD_R
Corrective Action Implementation Plan	CAIP_R
Case File Scanned By OFD	CASE_FILE
Cleanup and Abatement Report	CAO_R
Case Transfer Form (from CUPA)	CASE_TRNSFR_F
Conduit Study/Well Search/Sensitive Receptor/Well Survey/Preferential	COND_WELL_R
Corrective Action Plan (CAP)	CAP_R
Correspondence	CORRES_L
Court Injunctions	INJ_L

Development Entitlement	DEV_ENTITLE
Development Plans (Includes Plan Set, Cross-sections, and Related Drawings)	DEV_PLAN
Development Schedule (Project Schedule, Gant Chart, etc.)	DEV_SCHD
DWR Confidential Well Logs (Report containing)	report name_R_CONFIDENTIAL_YYYY-MM-DD (Ex: SWI_R_CONFIDENTIAL_YYYY-MM-DD)
DWR Well Completion Report-Confidential (Loose well logs)	DWR_WELL_CONFIDENTIAL_YYYY-MM-DD (Date of Well Log)
ESI/DAR (Environmental Site Investigation, Data Assessment Report)	ESI_R
Excavation Report	EX_R
Extension Request Letter	EXT_RQ_L
Fact Sheet	FACT_SHT
Feasibility Study	FEASSTUD_R
Fill Material Characterization Report	FMCR_R
Groundwater Monitoring/Quarterly Summary Report	GWM_R
Financial Assurance/Letter of Credit	FNCL_ASSRNC_LOC
Interim Remedial Action Plan	IRAP_R
Interim Remediation Results (Includes Pilot Test Reports, Vapor Mitigation Reports, Soil Management Reports, Free Product Removal Reports, & Dual-Phase Extraction Reports)	IR_R
Lawsuit	LAWSUIT_R
Migration Control Report	MIG_R
Miscellaneous Report/Soil Sample	MISC_R
Miscellaneous Sample Report (analytical results)	MISC_SAMP_R
Notification Letter	NOT_L
NPDES Miscellaneous Reports	NPDES_R
Operations & Maintenance Plan	OM_P
Operations & Maintenance Report	OM_R
Pay for Performance	PFP_R

Petition	PETITION_R
Phase 1 Environmental Assessment Report	PHASE1_R
Photos	PHOTO
Preliminary Site Assessment Report/Phase 2 (historic reports only)	PSA_R
Remedial Action Plan	RAP_R
Remedial Design & Implementation Plan	RDIP_R
Remediation Progress Report	REM_R
Request for Closure	RFC(_L or _R)
Record Report of Construction	RROC_R
Review Summary Report	RS_R
Risk Assessment Report	RISK_R
Risk Based Corrective Action	RBCA_R
List of Landowners Forms	LNDOWNR_F
SB2004 Letter of Commitment	LOC_L
Site Conceptual Model/Conceptual Site Model	SCM_R
Site Health & Safety Plan	SFTY_PLAN_R
Soil and Groundwater Management Plan	SGMP_R
Soil Import Summary Report	SISR_R
Site Management	SITE_MANAGE_R_
Acknowledgement Statement for Site Management Plan	SMP_ACK_L
Site Management Plan	SMP_R
Site Summary Report	SITE_SUM_R
Soil and Water Investigation Report (Includes soil gas/vapor reports, indoor, additional site investigation, well installation, site characterization, cross section, indoor air, additional onsite investigation, Phase II/preliminary site assessment)	SWI_R
Soil Disposal Report	SOIL_DSPL_R
Source Area Characterization	SOURCAREA_R
State Information	STATE_INFO (no date)
Status Report(monthly remediation status reports addressed to sanitary district requires no stamp/perjury letter)	STAT_R

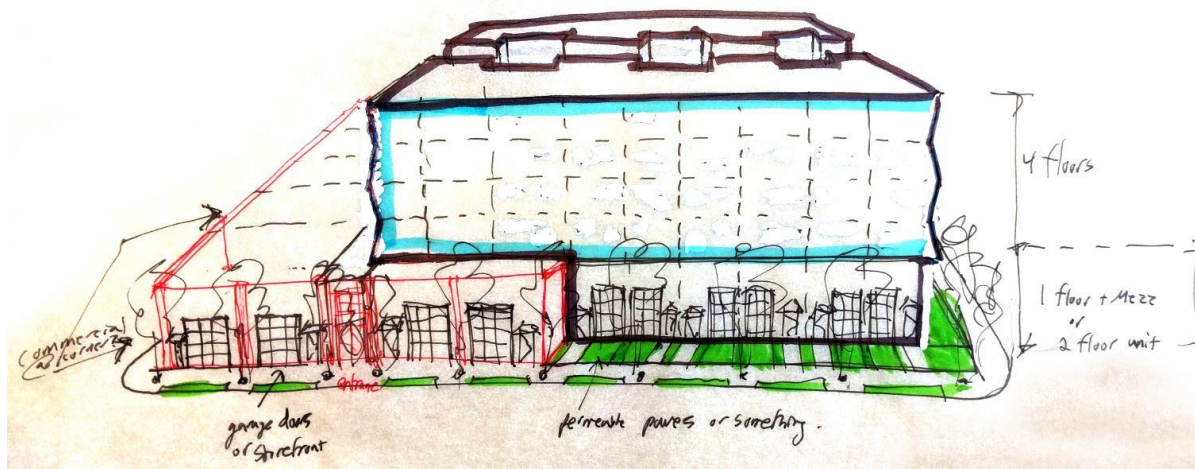
Tank/Tank System Removal Report	TNK_R
Tentative Order Report	TENT_R
Unauthorized Release Form	URF_R
UST Sampling Report	UST_SAMP_R
USTCF 5 Year Review	USTCF_5YR
USTCF issued Public Notice	USTCF_PP_L
Well Construction Report (limited to water supply wells)	WELL_CST_R
Well Decommissioning Report/Letter (well destruction/abandonment)	WELL_DCM_R
Work Plan	WP_R

LOP and SLIC ACEH OUTGOING LETTERS AND CASE FILE DOCUMENTATION	
Document Name	Abbreviation File Name= Abbreviation + Date (yyyy-mm-dd)
90 Day Letter	90D_L
CAP Approval	CAP_AP_L
RP Certification of Public Notice	CAP_CERT_L
CAP Public Participation Letter	CAP_PP_L
CAP Public Participation Letter to RP	CAP_PPRP_L
Certified Mail Receipt	CERT_MAIL_RECEIPT
Cleanup and Abatement Order	CAO_L
Closure Public Participation Letter	CL_PP_L
Closure Package (Letter, RACC, Summary, Deed Restriction)	CLOS_L
Correspondence	CORRES_L
Deed Restriction	DEED_L_ (Copied from CLOS_L_)
Directive Letter containing Public Notice and/or Landowner request form	DIR_PP_L
Directive Letter (Landowner form, site management requirements, well decommission scheduling prior to closure of PP, copy of PP to all RPs)	DIR_L
Enforcement	ENF_L
Enforcement Referral Letter	ENF_REF_L
Extension Approval Letter	EXT_AP_L
Extension Denial Letter	EXT_DNY_L
Fact Sheet Public Participation Letter	FACT_SHT_PP_L
Fund Requests	FUND_REQ_L
Final Voluntary Remedial Action Agreement	FVRAA_date
GeoTracker info	GEOTRACK_R

Late Letter	LATE_L
List of Landowners Forms	LNDOWNR_F
Land Use Covenant	LUC_L
Mailing List for Public Notice in Excel Format	MAIL_PP
Maps & Assessor's Parcel Information	MAPS_ASSESSOR (no date)
Meeting Agenda, Minutes, Sign in Sheet	MEETING
Miscellaneous Letter	MISC_L
New Landowner Letters	LNDOWNR_REQ_L
Notice of Responsibility	NOR_L
Notice of Violation	NOV_L
Phone Log	PHONE_LOG
Photos	PHOTO
Post Closure Monitoring	PCMP_L
QA/QC Checklist (confidential only)	QAC_report name_date
Responsible Parties Information	RPINFO_L_DATE OF THE LETTERHEAD
Returned Mail	RTN_MAIL_date
Site Visit/Inspection Report	SITEVISIT_R
Transfer Letter	TRANS_L
UST Permit	UST_PRMT
Voluntary Remedial Action Notice to State Agencies	VRA_NOTICE
Voluntary Remedial Action Request Form from RP	VREQ_F

APPENDIX D: ENVIRONMENTAL NOISE STUDY

2715 ADELINE STREET, OAKLAND, CA
ENVIRONMENTAL NOISE STUDY



Owow

December 21, 2017

**2715 Adeline Street, Oakland, CA
Environmental Noise Study**

December 21, 2017

Prepared for:

Jeremy Harris, Project Manager
Owow

Prepared by:

Randy Waldeck, PE
Tom Neeld
CSDA Design Group
475 Sansome Street, Suite 800
San Francisco, CA 94111

CSDA Project No. 1786.01

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1.0 Executive Summary

CSDA conducted an environmental noise survey for the project at 2715 Adeline Street to meet Oakland (City) and California (State) Code requirements. The following summarizes our findings:

- Per the City's General Plan Noise Element, the existing environmental noise levels at the project site, ranging from L_{dn} ¹ 66 to 71 dBA, require a detailed noise analysis be undertaken.
- Based on assumed unit sizes and 40% window area, the project may require up to STC ² 38 windows to comply with the 2016 California Building Code requirement of a maximum interior L_{dn} of 45 dBA in the dwelling units. As the design progresses, these STC ratings will need to be refined to reflect the actual unit sizes and glazing areas; it is likely the required STC ratings will decrease.
- Where sound rated windows and/or doors are required at residences, fresh air ventilation must be provided.

2.0 Project Description

The 2715 Adeline Street development is located in the McClymonds neighborhood of Oakland, on the west side of Adeline Street at the 28th Street intersection. The project spans from Adeline Street to Magnolia Street with the northern façade facing 28th Street. The development consists of 111 work/live units, one commercial space, one community art/ event space, outdoor courtyard spaces, and parking for bicycles and cars. The unit mix consists of 100 flats and 11 loft units. The parcel is zoned CIX-1A/S-19 and CIX1B/S-19 (Housing and Business Mix). The main noise sources are local traffic on Adeline Street, 28th Street, and Magnolia Street; general city noise is an additional source.

CSDA conducted an environmental noise study to quantify the existing environmental noise levels and determine the building components necessary to meet Code interior noise requirements. This report summarizes our findings and recommendations.

3.0 Acoustical Criteria

3.1 Oakland General Plan

The 2005 Oakland General Plan Noise Element³ contains the following policies/actions applicable to this project:

- POLICY 1: Ensure the compatibility of existing and, especially, of proposed development projects not only with neighboring land uses but also with their surrounding noise environment.
 - ACTION 1.1: Use the noise-land use compatibility matrix (Figure 6, reprinted as Figure 1 below) in conjunction with the noise contour maps (especially for roadway traffic) to evaluate the

¹ Day/Night Average Sound Level (L_{dn} or DNL): A descriptor established by the U.S. Environmental Protection Agency to describe the average day-night level with a 10 dB penalty applied to noise occurring during the nighttime hours (10 pm to 7 am) to account for the increased sensitivity of people during sleeping hours. A 10 dB increase in sound level is perceived by people to be twice as loud.

² Sound Transmission Class (STC): A single number used to rate how well a building partition (wall, floor/ceiling assembly, door) attenuates airborne sound.

³ <http://www2.oaklandnet.com/oakca1/groups/ceda/documents/webcontent/oak035231.pdf>

acceptability of residential and other proposed land uses and also the need for any mitigation or abatement measures to achieve the desired degree of acceptability.

- **POLICY 3:** Reduce the community's exposure to noise by minimizing the noise levels that are received by Oakland residents and others in the City. (This policy addresses the reception of noise whereas Policy 2 addresses the generation of noise.)
 - **ACTION 3.1:** Continue to use the building-permit application process to enforce the California Noise Insulation Standards regulating the maximum allowable interior noise level in new multi-unit buildings.

NOISE-LAND USE COMPATIBILITY MATRIX

FIGURE 6

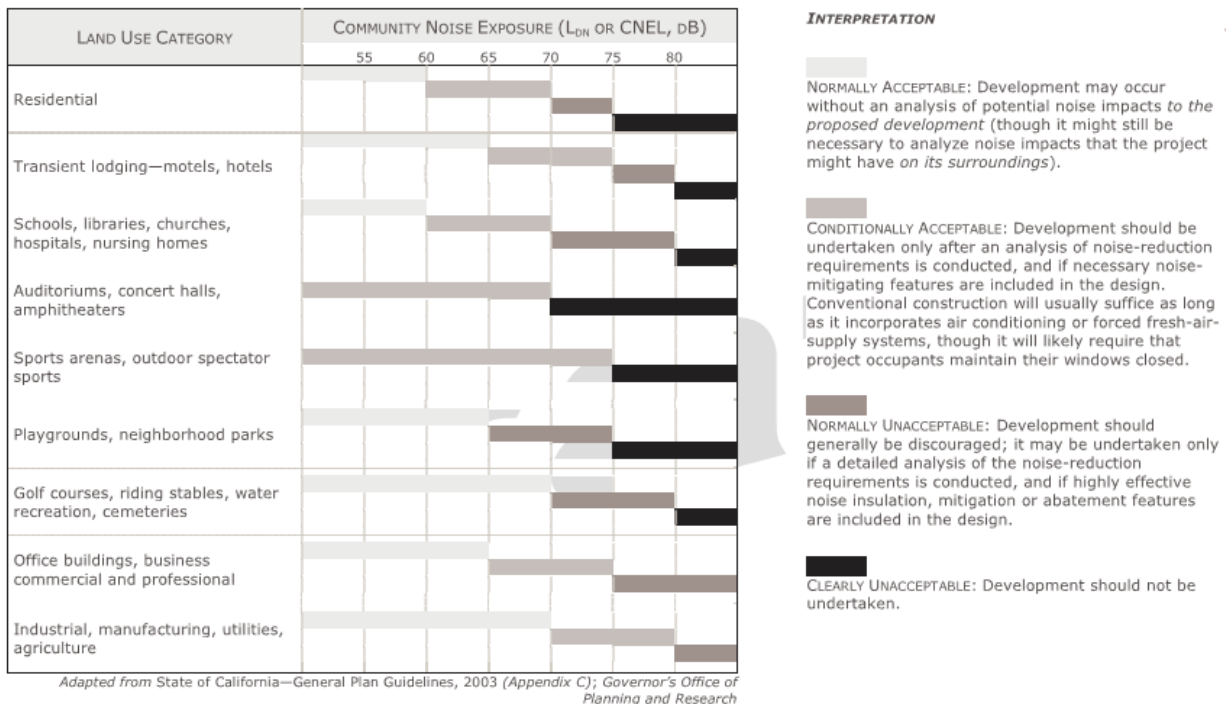


Figure 1: Oakland Noise and Land-Use Compatibility Matrix

3.2 Oakland Building Code

Chapter 15 of the Oakland Municipal Code contains criteria for Joint Living and Work Quarters, summarized below:⁴

- **Section 3B.18:** Individual JLWQ shall comply with CBC Section 1207 as for apartment houses and as provided in this division.

4

https://library.municode.com/ca/oakland/codes/code_of_ordinances/283553?nodeId=TIT15BUCO_CH15.04OAMCABUELMEPLCO_PT1CABUCO_15.04.697CBCH3BAD

3.3 California Building Code

For the residential portion of the project, the California Building Code stipulates that an interior noise level attributed to exterior sources shall not exceed L_{dn} 45 dBA for any habitable room in a multi-family building.⁵

CALGreen stipulates noise criteria for commercial/retail spaces: for sites with hourly noise levels above 65 dBA, interior noise levels must be no greater than L_{eq} 50 dBA during the noisiest hour of operation (Performance Method).⁷

3.4 Criteria Summary

Based on the above, noise levels at the project should not exceed L_{dn} 45 dBA inside of the residences; noise levels not exceed 50 dBA in the commercial/retail spaces.

The means and methods to achieve this criteria are discussed in Section 5.0 of this report.

4.0 Noise Measurements

Long-term (i.e., 48-hour) noise measurements were conducted at the project site from December 12 to 14, 2017, to quantify the existing environmental noise levels at the site. The long term measurements were taken in secured lock boxes 15 feet above the ground. Measurements commenced around 1:00 PM on December 12th and ended around 1:00 PM on December 14th.

4.1 Weather

During the measurements, the maximum wind speed was 15 miles per hour (mph). Based upon a review of the noise levels during this time, wind noise did not affect the measurements. The temperature ranged from a low of 41°F to a high of 57°F, and averaged 49°F. The humidity level ranged from a low of 48% to a high of 100%, averaging 76% with no precipitation.

4.2 General Noise Conditions

The noise environment is dominated by local traffic on Adeline Street for units along Adeline Street and the westerly units along 28th Street. The major noise source for the northern units is 28th Street; the major noise source for the Magnolia Street units is Magnolia Street traffic, as well as noise from the commercial warehouses located across Magnolia Street. Minor noise sources include general city noise. During the nighttime hours, general city noise becomes more predominant as local traffic volumes are low.

⁵ 2016 California Building Code (CBC), California Code of Regulations, Title 24, Volume 1, Section 1207.4

⁶ L_{eq} : The equivalent continuous sound level which would contain the same sound energy as the time varying sound level.

⁷ 2013 California Green Building Standards Code, Section 5.507.

4.3 Noise Measurement Results

The equipment was calibrated immediately before and after the measurements with no significant drift in response. Figure 2 shows the measurement locations, and Table 1 summarizes the noise measurement results.



Figure 2: Long Term (LT) Measurement Locations

Table 1: Noise Measurement Results

Location	Measured Levels	
	L _{dn} , dBA	Noisiest Hour, dBA
Adeline Street (LT-1)	72	71 (at 4 PM)
28 th Street (LT-2)	67	68 (at 12 PM)
Magnolia (LT-3)	66	65 (at 10 AM)

5.0 Analysis and Recommendations

The following sections summarize the results of the noise measurements as they relate to the acoustical criteria outlined in Section 3.3, and provide detailed recommendations for achieving them.

5.1 Noise and Land-Use Compatibility

Per the City's General Plan, the measured noise levels at the site (measured up to L_{dn} 72 dBA) warrant a detailed noise analysis. The required analysis involves calculating expected noise levels inside of the habitable rooms (i.e., Actions 1.1 and 3.1, which reference the California Building Code) and providing recommendations as necessary for the facade construction to meet the interior L_{dn} 45 dBA Code requirement.

5.2 Interior Noise Levels

In order to achieve an interior L_{dn} of 45 dBA in the residences (and an L_{eq} of 50 dBA in the retail/commercial space on the ground floor), sound-rated windows and exterior doors are needed at various building facades. **Please note that these calculations are conservative and the required STC ratings will likely decrease when the project design is further along.** Our calculations are based upon the following:

- The concept sketches sent in an email dated December 11, 2017.
- Due to the limited information contained in the sketches, it was assumed that each habitable room (e.g., living room, bedroom) would consist of 40% glazing. It was also assumed that bedroom dimensions are 10 ft. x 10 ft. and living room dimensions are 10 ft. x 15 ft.
- For the commercial space, we have assumed it would be at the corner of Adeline Street and 28th Street, and would incorporate 60% glazing area.
- A typical construction grade window achieves STC 28.
- A typical exterior entry door with gasketing and a door bottom/shoe (swing doors) achieves STC 28. Standard sliding glass doors also typically achieve STC 28.
- We assume wood-frame construction per the "Exhibit G" document sent on December 11, 2017; please inform us if the construction type changes.
- The STC rating of operable fenestration corresponds to performance in the closed position, which halts natural ventilation; therefore, fresh air must be provided using an active mechanical (e.g., HVAC) or passive (e.g., stack-effect) system. The mechanical engineer should review this recommendation.
- The STC ratings below need to be refined when the unit plans and elevations are finalized.

Table 2 and Figure 3 show the preliminary window and exterior door STC ratings.

Table 2: Preliminary Window and Exterior Door STC Recommendations

Facade/Location	Window and Door, STC Ratings	Ventilation required?
Commercial Space facing Adeline Street	30	n/a
Residences facing Adeline Street	33	Y
Residences at Adeline Street and 28 th Street intersection	38	Y
Residences facing 28 th Street	28	Y
Residences at Magnolia Street and 28 th Street intersection	33	Y
Residences facing Magnolia Street	30	Y

*n/a = not applicable



Figure 3: Preliminary Window/Door STC Ratings

This concludes our environmental noise study for 2715 Adeline Street; please contact us with questions.

APPENDIX E: TRANSPORTATION ASSESSMENTS AND TRANSPORTATION DEMAND MANAGEMENT PLAN



DRAFT MEMORANDUM

Date: June 21, 2019
To: Sharon Wright, Lamphier-Gregory
From: Sam Tabibnia, Fehr & Peers
Subject: **2715 Adeline – Transportation Assessment (non-CEQA)**

OK17-0230

This memorandum summarizes the non-CEQA transportation assessment that Fehr & Peers completed for the proposed 2715 Adeline project in Oakland. This document provides a brief description of the project, an estimate of project trip generation, a review of the project site plan, and a collision analysis. This memorandum also provides recommendations that improve multi-modal access, circulation, and safety.

PROJECT DESCRIPTION

The proposed project is located along the south side of 28th Street between Magnolia and Adeline Streets in West Oakland. It would consist of 106 work-live units and about 19,460 square feet of light industrial space. The project would also provide 137 automobile parking spaces and 140 bicycle parking spaces. The project parking spaces would be accessed through a driveway on Magnolia Street. Currently, there are no active uses on the site.

TRIP GENERATION AND INTERSECTION COUNTS

Automobile Trip Generation

Trip generation is the process of estimating the number of vehicles that would likely access the project on any given day. **Table 1** summarizes the trip generation for the proposed project. Trip generation data published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual (10th Edition)* was used as a starting point to estimate the vehicle trip generation.



TABLE 1
AUTOMOBILE TRIP GENERATION

Land Use	Size ¹	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Work-Live Units								
Residential ²	106 DU	580	9	27	36	29	18	47
Office ³	60.6 DU	650	71	12	83	11	60	71
Internalization ⁴		-120	-6	-6	-12	-3	-3	-6
<i>Subtotal</i>		<i>1,110</i>	<i>74</i>	<i>33</i>	<i>107</i>	<i>37</i>	<i>75</i>	<i>112</i>
Light Industrial ⁵	19.5 KSF	130	11	2	13	2	10	12
<i>Subtotal</i>		<i>1,240</i>	<i>85</i>	<i>35</i>	<i>120</i>	<i>39</i>	<i>85</i>	<i>124</i>
<i>City of Oakland Trip Generation Adjustment ⁷</i>		-290	-20	-8	-28	-9	-20	-29
<i>Net-New Vehicle Trip Generation</i>		950	65	27	92	30	65	95

1. DU = Dwelling Units, KSF = 1,000 square feet
2. ITE Trip Generation (10th Edition) land use category 220 (Multifamily Housing - Mid Rise, General Urban/ Suburban):
Daily: $T = 5.45 \cdot (X) - 1.75$
AM Peak Hour: $\ln(T) = 0.98 \cdot \ln(X) - 0.98$ (26% in, 74% out)
PM Peak Hour: $\ln(T) = 0.96 \cdot \ln(X) - 0.63$ (61% in, 39% out)
3. ITE Trip Generation (10th Edition) land use category 710 (General Office Building, General Urban/Suburban):
Daily: $\ln(T) = 9.74 \cdot X$
AM Peak Hour: $T = 1.16 \cdot X$ (86% in, 14% out)
PM Peak Hour: $\ln(T) = 1.15 \cdot X$ (16% in, 84% out)
4. Residential trips adjusted by -10% (daily), -22% (AM) and -12% (PM) to account for 50 percent internalization of home-based work trips. Per the Alameda CTC Countywide Travel Demand Model, home-based work trips comprise 20% of daily, 44% of AM peak period and 24% of PM peak period trips for residential units. The office trips also adjusted accordingly to account for the office end of the trips.
5. ITE Trip Generation (10th Edition) land use category 110 (Light Industrial, General Urban/Suburban):
Daily: $T = 3.79 \cdot X + 57.96$
AM Peak Hour: $\ln(T) = 0.95 \cdot \ln(X) + 0.36$ (88% in, 12% out)
PM Peak Hour: $\ln(T) = 0.69 \cdot \ln(X) + 0.43$ (16% in, 84% out)
6. The 23.1% reduction is based on the City of Oakland's *TIRG* for development in an urban environment more than 1.0 miles from a BART Station and over 10,000 people per square mile population density.

Source: Fehr & Peers, 2019.



ITE does not include trip generation data for work-live units, which display unique travel behavior. Residents of work-live units are expected to complete some or all their work from home, rather than commuting to their place of employment. Therefore, the ITE data for mid-rise multi-family housing (Code 221) was used to estimate trip generation for the residential component of the work-live units. A variety of office and/or light industrial uses may occupy the non-residential component of the work-live units. This analysis applies the ITE data for office (Code 710) to the non-residential component of the work-live units (which is about 67 percent of the 90,500 square feet of the work-live units, corresponding to about 60,600 square feet).

To account for the internalization of residents who work on-site, a 50 percent reduction in home-based work trips was assumed based on the assumption that each unit would have an average of two workers, and one would work on-site. According to the Alameda County Transportation Commission (CTC) Countywide Travel Demand Model, home-based work trips account for 20 percent of daily, 44 percent of AM peak period, and 24 percent of PM peak period trips; therefore, reductions of 10 percent for daily trips (50 percent x 20 percent), 22 percent for AM trips (50 percent x 44 percent) and 12 percent for PM trips (50 percent x 24 percent) is applied to the residential trips and the same reduction is applied to the office trips to account for both ends of these internalized trips.

The light manufacturing component of the project was considered as light industrial (Code 110) for the purposes of trip generation.

ITE's *Trip Generation Manual* is primarily based on data collected at single-use suburban sites where the automobile is often the only travel mode. However, the project site is in an urban environment where many trips are walk, bike, or transit trips. Since the proposed project is about 1.5 miles from the West Oakland, 19th Street, and MacArthur BART Stations, the City of Oakland's TIRG recommends a 23.1-percent reduction from the ITE-based trip generation to account for the non-automobile trips. This reduction is based on Census commute data for Alameda County from the 2014 5-Year Estimates of the American Community Survey (ACS), which shows that the non-automobile mode share for urban¹ areas more than 1.0 mile from a BART Station is about 23.1-percent.

¹ The project vicinity is categorized as "urban" based on the City of Oakland's TIRG, which defines "urban" areas as having a density of more than 10,000 people per square mile.



The net automobile trip generation for the proposed development, as summarized in Table 1, is approximately 950 daily, 92 AM peak hour, and 95 PM peak hour automobile trips.

Non-Vehicular Trip Generation

Consistent with the City of Oakland TIRG, **Table 2** presents the estimates of project trip generation for all travel modes for the project site.

TABLE 2
PROJECT TRIP GENERATION BY TRAVEL MODE

Mode	Mode Share Adjustment Factors ¹	Daily	AM Peak Hour	PM Peak Hour
Automobile	76.9%	950	92	95
Transit	17.9%	220	21	22
Bike	1.9%	20	2	2
Walk	2.0%	20	2	2
Total Trips		1,210	118	122

Notes:

1. Based on *City of Oakland Transportation Impact Study Guidelines* assuming project site is in an urban environment more than 1.0 miles of a BART Station and over 10,000 people per square mile population density. Percentages do not add to 100%.

Source: Fehr & Peers, 2019.

STUDY INTERSECTION SELECTION

According to the City of Oakland's TIRG, the criteria for selecting study intersections include:

- All intersection(s) of streets adjacent to project site;
- All signalized intersection(s), all-way stop-controlled intersection(s) or roundabouts where 100 or more peak hour trips are added by the project;
- All signalized intersection(s) with 50 or more project-related peak hour trips and existing LOS D-E-F; and
- Side-street stop-controlled intersection(s) where 50 or more peak hour trips are added by the project to any individual movement other than the major-street through movement.



Following these criteria, the following two intersections should be evaluated in the study due to being adjacent to the project site:

1. Adeline Street/28th Street
2. Magnolia Street/28th Street

Considering the trip generation for the project, the location of the project and its driveway on Magnolia Street, and the direction of approach and departure for the trips generated by the project, the project is estimated to add fewer than 50 trips to any intersection. Therefore, no additional study intersections are required.

Automobile turning movements, pedestrian counts, and bicycle counts, were collected at the two intersections during the AM and PM peak commuting hours (7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM) on June 5, 2019. See **Appendix A** for the existing intersection counts.

SITE ACCESS AND CIRCULATION ANALYSIS

Fehr & Peers reviewed the project site plan dated October 5, 2018 and the street network around the project site to evaluate safety, access, and circulation for all travel modes.

Automobile Access and Circulation

The proposed project would provide 137 off-street parking spaces in a facility on the west side of the project. The parking facility would consist of a garage accommodating 120 spaces in parking lifts and four accessible ADA parking spaces, and 13 surface parking spaces outside the garage. All parking spaces would be accessed through a mid-block driveway on Magnolia Street with all movements allowed. Based on the project site plan, the driveway would have adequate sight distance between motorists exiting the driveway and pedestrians on the adjacent sidewalk. Adequate sight distance is defined as a continuous line-of-sight between an exiting motorist ten feet back from the sidewalk and a pedestrian ten feet away on the adjacent sidewalk on either side of the driveway.

The off-street project parking areas would provide adequate circulation for passenger vehicles. Vehicles would have adequate space to wait and maneuver into and out of spaces with minimal conflict.



The project is adjacent to two side-street stop-controlled intersections: the Adeline Street/28th Street intersection at the northeast corner of the project and the Magnolia Street/28th Street intersection on the northwest corner of the project. The Adeline Street/28th Street intersection is controlled by stop-signs on the 28th Street approaches of the intersection and the Magnolia Street/28th Street intersection is controlled by stop-signs on the Magnolia Street approaches. Both stop-controlled 28th Street approaches at the Adeline Street/28th Street intersection may not provide adequate sight distance to the north because of parked cars along Adeline Street.

Recommendation 1: The following should be considered as part of the final design for the project:

- a. Designate 10 feet of curb immediately north and south of the project driveway on Magnolia Street as red no parking zones to ensure adequate sight distance between motorists and bicyclists traveling on the street and motorists exiting the driveway.
- b. Designate 50 feet of curb on both sides of Adeline Street, north of 28th Street, as red no parking zones to ensure adequate sight distance between vehicles on the 28th Street approaches of the intersection and through vehicles on Adeline Street.

Bicycle Access and Bicycle Parking

Currently, nearest bicycle facilities to the project site are buffered bike lanes on Market Street about 0.3 miles east of the site, and a neighborhood bike route on 32nd Street about 0.25 miles north of the project site. The *2019 Oakland Bike Plan* recommends protected bike lanes on Adeline Street adjacent to the project site and a neighborhood bike route on 26th Street one block south of the project site.

The nearest BayWheels (formerly Ford GoBike) bikeshare stations are located about 0.3 miles north of the project site on 32nd Street west of Adeline Street, and about 0.5 miles southeast of the project site on 24th Street just west of Market Street.

Chapter 17.117 of the Oakland Municipal Code requires long-term and short-term bicycle parking for new buildings and new living units in existing buildings. Long-term bicycle parking includes lockers or locked enclosures, and short-term bicycle parking includes bicycle racks. The Code requires one long-term space for every four units and one short-term space for every 20 units. The Code requires a minimum of two long-term spaces and zero short-term spaces for the light industrial use.



Table 3 presents the bicycle parking requirements for the proposed project. The project is required to provide at least 29 long-term bicycle parking spaces and six short-term spaces. The project would provide long-term bicycle parking for 140 bicycles in a bicycle room on the mezzanine level of the project, which would require cyclists to use either the elevator or stairs to access the bicycle room. The project site plan identifies short-term bicycle parking in the form of six bicycle racks in the project breezeway just south of the pedestrian entrance on 28th Street. The project would meet both the long-term and short-term bicycle parking required by the Code.

**TABLE 3
BICYCLE PARKING REQUIREMENTS**

Land Use	Size ¹	Long-Term		Short-Term	
		Spaces per Unit ²	Spaces	Spaces per Unit ²	Spaces
Residential	106 DU	1:4 DU	27	1:20 DU	6
Light Industrial	19.5 KSF	Min.	2	None Required	0
Total Required Bicycle Spaces			29		6
Total Bicycle Parking Provided			140		6
Bicycle Parking Met?			Yes		Yes

Notes:

1. DU = dwelling unit, KSF = 1,000 square feet
2. Based on Oakland Municipal Code Sections 17.117.090 and 17.117.120

Source: Fehr & Peers, 2019.

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

- Explore the feasibility of (and implement, if feasible) relocating all or some of the long-term bicycle parking to a more convenient location on the ground level of the project.

Pedestrian Access and Circulation

Existing sidewalks adjacent to the proposed project include an approximately 9.5-foot wide sidewalk along Adeline Street, 13-foot wide sidewalk along 28th Street, and 10.5-foot wide sidewalk on Magnolia Street. The sidewalks along the project frontage do not have any trees or landscaping but accommodate utility and/or light poles.



Pedestrian facilities at the intersections adjacent to the site include:

- The Adeline Street/28th Street intersection is stop-controlled on the 28th Street approaches. The intersection provides diagonal curb ramps with truncated domes on all four corners. The intersection provides a marked yellow school crossing crosswalk and signage across the north approach of Adeline Street. The other three approaches of the intersection do not provide any marked crosswalks.
- The Magnolia Street/28th Street intersection is stop-controlled on the Magnolia Street approaches. The intersection provides diagonal curb ramps without truncated domes on all four corners. The intersection does not provide any marked crosswalks.

Pedestrian access to the work-live units would be provide through internal pedestrian breezeways which could be accessed on Adeline, 28th, or Magnolia Streets, and would connect to internal stairways and an elevator near the northwest corner of the building. The light manufacturing components of the project would be along the project frontages on Adeline and 28th Streets.

The City's *2017 Pedestrian Master Plan* does not list any planned improvements near the project site.

Recommendation 3: While not required to address a CEQA impact, the following should be considered as part of the final design for the project:

- a. Explore the feasibility of (and implement, if determined feasible by City of Oakland staff) installing directional curb ramps with truncated domes on all corners of the Magnolia Street/28th Street.
- b. Explore the feasibility of (and implement, if determined feasible by City of Oakland staff) installing directional curb ramps with truncated domes on all corners of the Adeline Street/28th Street intersections. Ensure that the improvements would not conflict with the recommended protected bike lanes on Adeline Street.
- c. Explore the feasibility of (and implement, if determined feasible by City of Oakland staff) installing a marked yellow school crosswalk on the south approach of the Adeline Street/28th Street intersection with school crossing signage and advanced yield lines and signage on Adeline Street north and south of the intersection.

Transit Access

Transit service providers in the vicinity of the proposed project include BART and AC Transit.



BART provides regional rail service throughout the East Bay and across the San Francisco Bay. The proposed project is about 1.5 miles from the West Oakland, 19th Street, and MacArthur BART Stations. The 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. The nearest bus stops to the project site are adjacent to the project on both sides of Adeline Street just south of 28th Street. Line 36, which operate at 30-minute peak headway serves these stops and provides bus service to the West Oakland BART station to the south and Emeryville, West Berkeley, Downtown Berkeley, and UC Berkeley to the north. No amenities are provided at either bus stop adjacent to the project site. The project would not modify access between the project site and these bus stops. No major changes to the bus routes operating near the project are planned.

Automobile Parking Requirements

The *City of Oakland Municipal Code* sets minimum and maximum parking requirements. According to Section 17.73.040, the proposed project has minimum required off-street parking of 1.0 spaces per unit. Section 17.116.090 establishes a minimum requirement of 1.0 off-street spaces for each 3,500 square feet of industrial floor area. There are no maximum parking requirements applicable to the project.

Table 4 presents the off-street automobile parking requirements for the proposed project. Overall, the project is required to provide a minimum of 112 spaces. The proposed project would include 137 off-street parking spaces, less than required by City Code.

Consistent with Code Section 17.116.310, all parking spaces would be leased separately from the rent of the units.

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

- Designate 30 feet of curb on southbound Adeline Street just south of the existing bus stop as yellow loading zones for deliveries and passenger pick-up/drop offs.²

² According to Oakland Municipal Code Section 10.40.020, yellow curb restricts stopping or parking on non-Sundays between 7:00 AM and 6:00 PM for any purpose except for the loading or unloading of passengers for three or fewer minutes, or the loading or unloading of materials for 30 or fewer minutes.



TABLE 4
AUTOMOBILE PARKING CODE REQUIREMENTS

Land Use	Size ¹	Minimum Required Off-Street Parking Supply	Off-Street Parking Supply	Meet Code?
Work-Live ²	106 DU	106		
Light Industrial ³	19.5 KSF	6		
Total		112	137	Yes

Notes:

1. DU = Dwelling Unit, KSF = 1,000 square feet
2. City of Oakland off-street parking requirement for work-live residents in the CIX zone is a minimum of 1.0 spaces per unit (Section 17.73.040).
3. City of Oakland off-street parking requirement for Industrial Activities in the CIX zone is a minimum of 1.0 space for each 3,500 square feet of floor area (Section 17.116.090).

Source: Fehr & Peers, 2019.

Loading Requirements

City Municipal Code Section 17.73.040 requires two off-street loading spaces for a work-live development between 70,000 and 130,000 square feet. The project site plan identifies one off-street loading spaces within the project parking facility, which does not meet Code requirement.

Recommendation 5: While not required to address a CEQA impact, the following should be considered as part of the final design for the project:

- Consider eliminating some of the on-site parking spaces to provide a second off-street loading space.

COLLISION ANALYSIS

A five-year history (January 1, 2013 to December 31, 2017) of collision data along the project frontage was obtained from the Statewide Integrated Traffic Records System (SWITRS) and evaluated for this collision analysis. **Table 5** summarizes the collision data by type and location, and **Table 6** summarizes the collision data by severity and location.

As shown in Table 5, 12 collisions were reported during this five-year timeframe in the study area. Seven collisions were at the Adeline Street/28th Street intersection, one was along Magnolia Street between 26th and 28th Streets, and four were along Adeline Street between 26th and 28th Streets. None of the reported collisions involved pedestrians or cyclists, and no fatalities were reported.



TABLE 5
SUMMARY OF COLLISIONS BY TYPE

Location	Head-on	Sideswipe	Rear-End	Broadside	Hit Object	Pedestrian-Involved	Bicycle-Involved	Other	Total
Intersection									
Adeline Street/28th Street	1	0	0	6	0	0	0	0	7
Magnolia Street/28th Street	0	0	0	0	0	0	0	0	0
Roadway Segment									
28th Street between Adeline and Magnolia Streets	0	0	0	0	0	0	0	0	0
Magnolia Street between 26th and 28th Streets	0	0	0	0	0	0	0	1	1
Adeline Street between 26th and 28th Streets	0	1	0	0	1	1	0	2	4
Total	0	1	0	6	1	1	0	3	12

Notes:

1. Based on SWITRS five-year collision data reported from January 1, 2013 to December 31, 2017.
Source: Fehr & Peers, 2019



TABLE 6
SUMMARY OF COLLISION SEVERITY

Location	Property Damage Only Collisions	Injury Collisions	Fatality Collisions	Total	Person-Injuries			
					Bike	Ped	Driver/ Passenger	Total
Intersection								
Adeline Street/28th Street	1	6	0	7	0	0	6	6
Magnolia Street/28th Street	0	0	0	0	0	0	0	0
Roadway Segment								
28th Street between Adeline and Magnolia Streets	0	0	0	0	0	0	0	0
Magnolia Street between 26th and 28th Streets	1	0	0	1	0	0	0	0
Adeline Street between 26th and 28th Streets	3	1	0	4	0	0	1	1
Total	5	7	0	12	0	1	7	7

Notes:

1. Based on SWITRS five-year collision data reported from January 1, 2013 to December 31, 2017.
Source: Fehr & Peers, 2019



Six of the seven reported collisions at the Adeline Street/28th Street intersection were broadsides, which is consistent with the limited sight distance for both eastbound and westbound 28th Street approaches of the intersection to the north. Recommendation 1b, which would designate red-curb on both sides of Adeline Street north of the intersection to improve sight distances would improve safety at this intersection.

The *Highway Safety Manual* (HSM, Predictive Method - Volume 2, Part C) provides a methodology to predict the number of collisions for intersections and street segments based on roadway and intersection characteristics like vehicle and pedestrian volumes, number of lanes, signal phasing, on-street parking, and number of driveways. **Table 7** presents the predicted collision frequencies for the two study intersections and three study segments using the HSM Predictive Method for Urban and Suburban Arterials and compares predicted collision frequencies to reported collision frequencies. **Appendix B** provides detailed predicted collision frequency calculation sheets based on the HSM methodology. Intersections or roadway segments with collision frequency greater than the predicted frequency should have their collision trends and potential roadway or intersection modifications evaluated in greater detail.

As shown in Table 7, two study segments have a higher reported collision frequency than predicted by the HSM. The Magnolia Street segment between 26th and 28th Streets has a higher collision frequency than predicted because the predicted frequency is very low, and the one collision reported along this segment during the five-year study period is above the predicted rate. The Adeline Street segment between 26th and 28th Streets had four collisions reported during the five-year period, which corresponds to a collision frequency of 0.8 collisions per year, and is higher than the predicted frequency of 0.7 collisions per year. However, there are no discernable trends in the collision data along this segment. Thus, no additional modifications related to roadway safety beyond Recommendations 1 and 3 are recommended.



TABLE 7
PREDICTED AND ACTUAL COLLISION FREQUENCIES

Location	Predicted Collision Frequency ¹ (per year)	Actual Collision Frequency ² (per year)	Difference	Higher Than Predicted?
Intersection				
Adeline Street/28th Street	1.5	1.4	-0.1	No
Magnolia Street/28th Street	0.3	0.0	-0.3	No
Roadway Segment				
28th Street between Adeline and Magnolia Streets	0.05	0.0	-0.05	No
Magnolia Street between 26th and 28th Streets	0.04	0.2	+0.16	Yes
Adeline Street between 26th and 28th Streets	0.7	0.8	+0.1	Yes

Notes:

1. Based on the Highway Safety Manual Predictive Method (Volume 2, Part C)

2. Based on five-year collision data reported from January 1, 2013 to December 31, 2017.

Source: Fehr & Peers, 2019

CONCLUSION

Per the site plan review, the project would have adequate automobile, bicycle, pedestrian, and transit access and circulation with the inclusion of the following recommendations:

Recommendation 1: The following should be considered as part of the final design for the project:

- a. Designate 10 feet of curb immediately north and south of the driveway on Magnolia Street as red no parking zones to ensure adequate sight distance between motorists and bicyclists traveling on the street and motorists exiting the driveway.
- b. Designate 50 feet of curb on both sides of Adeline Street, north of 28th Street, as red no parking zones to ensure adequate sight distance between vehicles on the 28th Street approaches of the intersection and through vehicles on Adeline Street.



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

- Explore the feasibility of (and implement, if feasible) relocating all or some of the long-term bicycle parking to a more convenient location on the ground level of the project.

Recommendation 3: While not required to address a CEQA impact, the following should be considered as part of the final design for the project:

- a. Explore the feasibility of (and implement, if determined feasible by City of Oakland staff) installing directional curb ramps with truncated domes on all corners of the Magnolia Street/28th Street.
- b. Explore the feasibility of (and implement, if determined feasible by City of Oakland staff) installing directional curb ramps with truncated domes on all corners of the Adeline Street/28th Street intersections. Ensure that the improvements would not conflict with the recommended protected bike lanes on Adeline Street.
- c. Explore the feasibility of (and implement, if determined feasible by City of Oakland staff) installing a marked yellow school crosswalk on the south approach of the Adeline Street/28th Street intersection with school crossing signage and advanced yield lines and signage on Adeline Street north and south of the intersection.

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

- Designate 30 feet of curb on southbound Adeline Street just south of the existing bus stop as yellow loading zones for deliveries and passenger pick-up/drop offs.

Recommendation 5: While not required to address a CEQA impact, the following should be considered as part of the final design for the project:

- Consider eliminating some of the on-site parking spaces to provide a second off-street loading space.

Please contact Sam Tabibnia at stabibnia@fehrnadpeers.com or 510-835-1943 with questions.

ATTACHMENTS

Appendix A – Traffic Counts

Appendix B – Predicted Crash Frequency Calculation Sheets

APPENDIX A
TRAFFIC COUNTS



National Data & Surveying Services

Intersection Turning Movement Count

Location: Adeline St & 28th St
City: Oakland
Control: 2-Way Stop (EB/WB)

Project ID: 19-08333-002
Date: 6/5/2019

Total																	
NS/EW Streets:		Adeline St				Adeline St				28th St				28th St			
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	1	16	0	0	1	45	1	1	0	1	0	0	1	3	0	0	70
7:15 AM	1	40	2	0	0	64	1	0	0	0	2	0	1	1	1	0	113
7:30 AM	4	37	5	0	0	67	3	0	2	1	3	0	5	2	4	0	133
7:45 AM	0	54	2	0	0	69	2	0	2	1	1	0	5	3	1	0	140
8:00 AM	4	55	2	0	3	69	3	0	2	1	7	0	3	0	3	0	152
8:15 AM	2	38	4	0	3	63	2	0	1	3	1	0	8	2	4	0	131
8:30 AM	2	45	6	0	2	79	2	0	2	4	1	0	6	2	5	0	156
8:45 AM	6	55	5	1	7	70	5	0	2	1	4	0	5	3	3	0	167
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	20	340	26	1	16	526	19	1	11	12	19	0	34	16	21	0	1062
	5.17%	87.86%	6.72%	0.26%	2.85%	93.59%	3.38%	0.18%	26.19%	28.57%	45.24%	0.00%	47.89%	22.54%	29.58%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	14	193	17	1	15	281	12	0	7	9	13	0	22	7	15	0	606
PEAK HR FACTOR :	0.583	0.877	0.708	0.250	0.536	0.889	0.600	0.000	0.875	0.563	0.464	0.000	0.688	0.583	0.750	0.000	0.907
	0.840				0.928				0.725				0.786				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	4	95	7	0	5	69	7	0	3	3	8	0	6	4	6	0	217
4:15 PM	4	84	3	0	2	93	4	0	6	4	5	0	5	6	3	0	219
4:30 PM	2	81	7	0	7	74	4	0	3	7	11	0	8	5	2	0	211
4:45 PM	7	98	8	0	2	87	0	0	4	10	7	0	2	2	2	0	229
5:00 PM	5	99	6	1	5	81	3	0	3	4	7	1	5	4	7	0	231
5:15 PM	6	99	5	1	4	101	1	0	3	8	5	0	1	7	5	0	246
5:30 PM	5	122	10	0	6	92	4	0	5	5	2	0	2	3	6	0	262
5:45 PM	3	94	5	0	5	85	6	0	5	7	9	0	4	4	13	0	240
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	36	772	51	2	36	682	29	0	32	48	54	1	33	35	44	0	1855
	4.18%	89.66%	5.92%	0.23%	4.82%	91.30%	3.88%	0.00%	23.70%	35.56%	40.00%	0.74%	29.46%	31.25%	39.29%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	19	414	26	2	20	359	14	0	16	24	23	1	12	18	31	0	979
PEAK HR FACTOR :	0.792	0.848	0.650	0.500	0.833	0.889	0.583	0.000	0.800	0.750	0.639	0.250	0.600	0.643	0.596	0.000	0.934
	0.841				0.927				0.762				0.726				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Adeline St & 28th St
City: Oakland
Control: 2-Way Stop (EB/WB)

Project ID: 19-08333-002
Date: 6/5/2019

NS/EW Streets:		Adeline St				Adeline St				28th St				28th St				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM 7:15 AM 7:30 AM 7:45 AM		1	14	0	0	1	43	1	1	0	1	0	0	1	3	0	0	66
		1	36	1	0	0	61	0	0	0	0	2	0	1	1	1	0	104
		4	34	5	0	0	66	3	0	2	1	3	0	5	2	4	0	129
		0	50	2	0	0	64	2	0	2	1	1	0	5	3	1	0	131
8:00 AM 8:15 AM 8:30 AM 8:45 AM		4	53	2	0	3	67	2	0	2	1	6	0	3	0	3	0	146
		2	36	4	0	3	61	2	0	1	3	1	0	8	1	4	0	126
		2	44	6	0	2	78	2	0	2	4	1	0	6	2	5	0	154
		4	52	5	1	7	69	5	0	2	1	4	0	5	2	3	0	160
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		18	319	25	1	16	509	17	1	11	12	18	0	34	14	21	0	1016
PEAK HR :		4.96%	87.88%	6.89%	0.28%	2.95%	93.74%	3.13%	0.18%	26.83%	29.27%	43.90%	0.00%	49.28%	20.29%	30.43%	0.00%	
PEAK HR VOL :		08:00 AM - 09:00 AM				15	275	11	0	7	9	12	0	22	5	15	0	TOTAL
PEAK HR FACTOR :		12	185	17	1	0.536	0.881	0.550	0.000	0.875	0.563	0.500	0.000	0.688	0.625	0.750	0.000	586
		0.867				0.918				0.778				0.808				0.916

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0	2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM 4:15 PM 4:30 PM 4:45 PM		4	94	7	0	5	64	6	0	3	3	8	0	6	4	6	0	210
		4	82	3	0	2	90	3	0	6	4	4	0	5	6	3	0	212
		2	80	7	0	7	70	4	0	3	7	11	0	8	5	2	0	206
		7	98	8	0	2	84	0	0	3	10	7	0	2	2	2	0	225
5:00 PM 5:15 PM 5:30 PM 5:45 PM		5	97	6	1	5	77	3	0	3	4	7	1	5	4	7	0	225
		6	99	5	1	4	96	1	0	3	8	5	0	1	7	5	0	241
		5	120	10	0	6	90	4	0	5	5	2	0	2	3	6	0	258
		3	92	5	0	5	84	6	0	5	7	9	0	4	4	13	0	237
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		36	762	51	2	36	655	27	0	31	48	53	1	33	35	44	0	1814
PEAK HR :		4.23%	89.54%	5.99%	0.24%	5.01%	91.23%	3.76%	0.00%	23.31%	36.09%	39.85%	0.75%	29.46%	31.25%	39.29%	0.00%	
PEAK HR VOL :		05:00 PM - 06:00 PM				20	347	14	0	16	24	23	1	12	18	31	0	TOTAL
PEAK HR FACTOR :		19	408	26	2	0.833	0.904	0.583	0.000	0.800	0.750	0.639	0.250	0.600	0.643	0.596	0.000	961
		0.843				0.943				0.762				0.726				0.931

National Data & Surveying Services

Intersection Turning Movement Count

Location: Adeline St & 28th St
City: Oakland
Control: 2-Way Stop (EB/WB)

Project ID: 19-08333-002
Date: 6/5/2019

HT

NS/EW Streets:	Adeline St				Adeline St				28th St				28th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	2 NT	0 NR	0 NU	0 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	4	1	0	0	3	1	0	0	0	0	0	0	0	0	0	9
7:30 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	9
8:00 AM	0	2	0	0	0	2	1	0	0	0	1	0	0	0	0	0	6
8:15 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	5
8:30 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	2	3	0	0	0	1	0	0	0	0	0	0	0	1	0	0	7
TOTAL VOLUMES :	NL 2	NT 21	NR 1	NU 0	SL 0	ST 17	SR 2	SU 0	EL 0	ET 0	ER 1	EU 0	WL 0	WT 2	WR 0	WU 0	TOTAL 46
APPROACH %'s :	8.33%	87.50%	4.17%	0.00%	0.00%	89.47%	10.53%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	2	8	0	0	0	6	1	0	0	0	1	0	0	2	0	0	20
PEAK HR FACTOR :	0.250	0.667	0.000	0.000	0.000	0.750	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.500	0.000	0.000	0.714
	0.500				0.583				0.250				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	2 NT	0 NR	0 NU	0 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	0	1	0	0	0	5	1	0	0	0	0	0	0	0	0	0	7
4:15 PM	0	2	0	0	0	3	1	0	0	0	1	0	0	0	0	0	7
4:30 PM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5
4:45 PM	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	4
5:00 PM	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	6
5:15 PM	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
5:30 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
TOTAL VOLUMES :	NL 0	NT 10	NR 0	NU 0	SL 0	ST 27	SR 2	SU 0	EL 1	ET 0	ER 1	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 41
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	93.10%	6.90%	0.00%	50.00%	0.00%	50.00%	0.00%	0	0	0	0	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	6	0	0	0	12	0	0	0	0	0	0	0	0	0	0	18
PEAK HR FACTOR :	0.00	0.750	0.000	0.000	0.000	0.600	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
	0.750				0.600												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Adeline St & 28th St
City: Oakland
Control: 2-Way Stop (EB/WB)

Project ID: 19-08333-002
Date: 6/5/2019

Bikes

NS/EW Streets:	Adeline St				Adeline St				28th St				28th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	2 NT	0 NR	0 NU	0 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2
7:15 AM	0	0	0	0	0	3	0	0	1	0	0	0	1	0	0	0	5
7:30 AM	0	0	0	0	0	4	0	0	0	1	0	0	0	0	1	0	6
7:45 AM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	3	1	0	0	4	0	0	0	1	0	0	0	1	1	0	11
8:15 AM	0	0	0	0	1	8	0	0	0	0	0	0	1	1	0	0	11
8:30 AM	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	6
8:45 AM	0	6	0	0	0	4	0	0	0	0	0	0	1	2	0	0	13
TOTAL VOLUMES :	NL 0	NT 9	NR 1	NU 0	SL 1	ST 33	SR 0	SU 0	EL 1	ET 3	ER 0	EU 0	WL 4	WT 4	WR 2	WU 0	TOTAL 58
APPROACH %'s :	0.00%	90.00%	10.00%	0.00%	2.94%	97.06%	0.00%	0.00%	25.00%	75.00%	0.00%	0.00%	40.00%	40.00%	20.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	9	1	0	1	21	0	0	0	2	0	0	2	4	1	0	41
PEAK HR FACTOR :	0.000	0.375	0.250	0.000	0.250	0.656	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.500	0.250	0.000	0.788
	0.417				0.611				0.500				0.583				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	2 NT	0 NR	0 NU	0 SL	2 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	0	2	0	0	1	0	0	0	0	1	0	0	0	0	1	0	5
4:15 PM	0	6	0	0	1	2	0	0	0	0	0	0	0	0	0	0	9
4:30 PM	0	2	1	0	0	1	0	0	0	0	0	0	1	0	1	0	6
4:45 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	2	0	0	7
5:00 PM	0	1	0	0	0	1	1	0	0	2	0	0	2	0	0	0	7
5:15 PM	2	2	1	0	0	1	0	0	0	0	1	0	0	2	1	0	10
5:30 PM	0	1	0	0	0	3	0	0	0	0	1	0	0	1	1	0	7
5:45 PM	0	6	0	0	0	1	0	0	0	2	0	0	0	0	2	0	11
TOTAL VOLUMES :	NL 2	NT 23	NR 2	NU 0	SL 2	ST 11	SR 1	SU 0	EL 0	ET 5	ER 2	EU 0	WL 3	WT 5	WR 6	WU 0	TOTAL 62
APPROACH %'s :	7.41%	85.19%	7.41%	0.00%	14.29%	78.57%	7.14%	0.00%	0.00%	71.43%	28.57%	0.00%	21.43%	35.71%	42.86%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	2	10	1	0	0	6	1	0	0	4	2	0	2	3	4	0	35
PEAK HR FACTOR :	0.25	0.417	0.250	0.000	0.000	0.500	0.250	0.000	0.000	0.500	0.500	0.000	0.250	0.375	0.500	0.000	0.795
	0.542				0.583				0.750				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Adeline St & 28th St
City: Oakland

Project ID: 19-08333-002
Date: 6/5/2019

Pedestrians (Crosswalks)

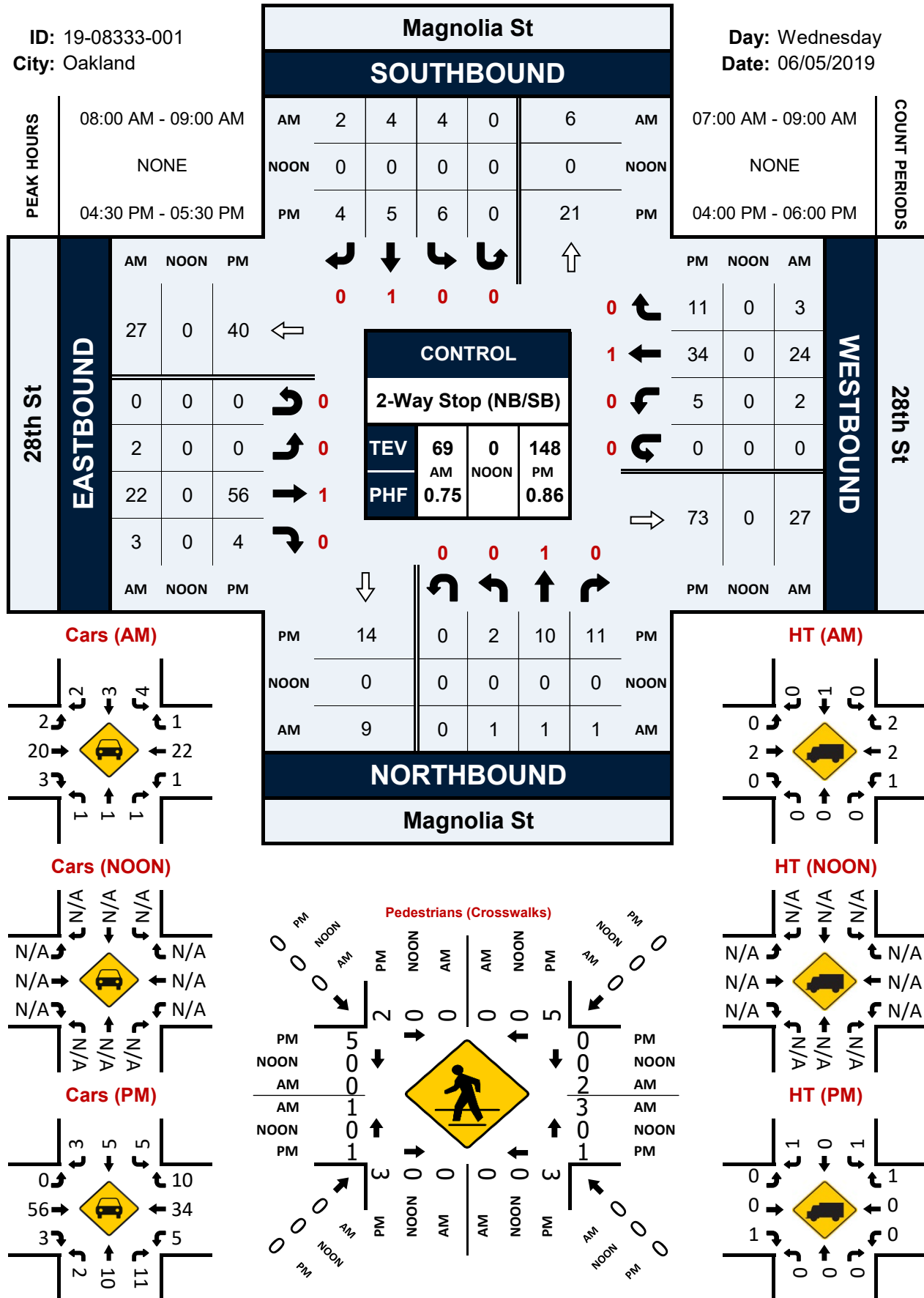
NS/EW Streets:	Adeline St		Adeline St		28th St		28th St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
	7:00 AM	10	00	00	10	00	00	10	3
	7:15 AM	12	10	00	00	00	00	00	4
	7:30 AM	01	00	00	01	10	10	00	3
	7:45 AM	01	00	00	00	00	10	10	3
	8:00 AM	01	00	00	01	10	10	10	4
	8:15 AM	11	00	00	00	00	00	10	3
	8:30 AM	01	00	00	00	00	00	00	1
	8:45 AM	02	00	00	11	10	00	40	8
TOTAL VOLUMES :	EB 3	WB 9	EB 1	WB 0	NB 2	SB 3	NB 3	SB 8	TOTAL 29
APPROACH %'s :	25.00%	75.00%	100.00%	0.00%	40.00%	60.00%	27.27%	72.73%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	1	5	0	0	1	2	1	6	16
PEAK HR FACTOR :	0.250	0.625			0.250	0.500	0.250	0.375	0.500
	0.750				0.375		0.438		

Magnolia St & 28th St

Peak Hour Turning Movement Count

ID: 19-08333-001
City: Oakland

Day: Wednesday
Date: 06/05/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Magnolia St & 28th St
City: Oakland
Control: 2-Way Stop (NB/SB)

Project ID: 19-08333-001
Date: 6/5/2019

Total																		
NS/EW Streets:	Magnolia St				Magnolia St				28th St				28th St					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU		
7:00 AM	1	0	0	0	0	0	1	0	0	1	0	0	2	2	1	0	8	
7:15 AM	1	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	6	
7:30 AM	2	0	0	0	1	1	0	0	1	5	2	0	2	3	2	0	19	
7:45 AM	0	1	0	0	0	2	2	0	0	4	1	0	2	3	0	0	15	
8:00 AM	1	0	1	0	3	3	0	0	0	7	1	0	0	7	0	0	23	
8:15 AM	0	0	0	0	0	0	0	0	0	2	1	0	0	5	1	0	9	
8:30 AM	0	1	0	0	0	1	1	0	1	7	1	0	1	5	1	0	19	
8:45 AM	0	0	0	0	1	0	1	0	1	6	0	0	1	7	1	0	18	
TOTAL VOLUMES :	NL 5	NT 3	NR 1	NU 0	SL 6	ST 7	SR 5	SU 0	EL 3	ET 32	ER 6	EU 0	WL 8	WT 35	WR 6	WU 0	TOTAL 117	
APPROACH %'s :	55.56%	33.33%	11.11%	0.00%	33.33%	38.89%	27.78%	0.00%	7.32%	78.05%	14.63%	0.00%	16.33%	71.43%	12.24%	0.00%		
PEAK HR :	08:00 AM - 09:00 AM																TOTAL	
PEAK HR VOL :	1	1	1	0	4	4	2	0	2	22	3	0	2	24	3	0	69	
PEAK HR FACTOR :	0.250	0.250	0.250	0.000	0.333	0.333	0.500	0.000	0.500	0.786	0.750	0.000	0.500	0.857	0.750	0.000	0.750	
	0.375				0.417				0.750				0.806					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU		
4:00 PM	0	0	2	0	1	1	0	0	1	13	1	0	2	6	3	0	30	
4:15 PM	0	1	0	0	4	0	1	0	2	12	1	0	1	10	2	0	34	
4:30 PM	1	1	3	0	1	0	0	0	0	14	2	0	0	12	1	0	35	
4:45 PM	0	3	3	0	3	3	1	0	0	18	1	0	0	6	1	0	39	
5:00 PM	1	4	3	0	1	0	2	0	0	8	0	0	3	6	3	0	31	
5:15 PM	0	2	2	0	1	2	1	0	0	16	1	0	2	10	6	0	43	
5:30 PM	1	1	2	0	2	4	0	0	0	9	2	0	3	6	4	0	34	
5:45 PM	0	2	1	0	1	0	0	0	0	13	1	0	2	7	0	0	27	
TOTAL VOLUMES :	NL 3	NT 14	NR 16	NU 0	SL 14	ST 10	SR 5	SU 0	EL 3	ET 103	ER 9	EU 0	WL 13	WT 63	WR 20	WU 0	TOTAL 273	
APPROACH %'s :	9.09%	42.42%	48.48%	0.00%	48.28%	34.48%	17.24%	0.00%	2.61%	89.57%	7.83%	0.00%	13.54%	65.63%	20.83%	0.00%		
PEAK HR :	04:30 PM - 05:30 PM																TOTAL	
PEAK HR VOL :	2	10	11	0	6	5	4	0	0	56	4	0	5	34	11	0	148	
PEAK HR FACTOR :	0.500	0.625	0.917	0.000	0.500	0.417	0.500	0.000	0.000	0.778	0.500	0.000	0.417	0.708	0.458	0.000	0.860	
	0.719				0.536				0.789				0.694					

National Data & Surveying Services

Intersection Turning Movement Count

Location: Magnolia St & 28th St
City: Oakland
Control: 2-Way Stop (NB/SB)

Project ID: 19-08333-001
Date: 6/5/2019

NS/EW Streets:		Magnolia St				Magnolia St				28th St				28th St				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	7:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	2	2	1	0	7
	7:15 AM	1	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	5
	7:30 AM	2	0	0	0	1	1	0	0	1	5	2	0	2	3	2	0	19
	7:45 AM	0	1	0	0	0	2	2	0	0	4	1	0	2	3	0	0	15
	8:00 AM	1	0	1	0	3	2	0	0	0	6	1	0	0	6	0	0	20
	8:15 AM	0	0	0	0	0	0	0	0	0	2	1	0	0	5	0	0	8
	8:30 AM	0	1	0	0	0	1	1	0	1	7	1	0	1	4	1	0	18
	8:45 AM	0	0	0	0	1	0	1	0	1	5	0	0	0	7	0	0	15
TOTAL VOLUMES :		NL 4	NT 3	NR 1	NU 0	SL 6	ST 6	SR 5	SU 0	EL 3	ET 30	ER 6	EU 0	WL 7	WT 32	WR 4	WU 0	TOTAL 107
APPROACH %'s :		50.00%	37.50%	12.50%	0.00%	35.29%	35.29%	29.41%	0.00%	7.69%	76.92%	15.38%	0.00%	16.28%	74.42%	9.30%	0.00%	
PEAK HR :		08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :		1	1	1	0	4	3	2	0	2	20	3	0	1	22	1	0	61
PEAK HR FACTOR :		0.25	0.250	0.250	0.000	0.333	0.375	0.500	0.000	0.500	0.714	0.750	0.000	0.250	0.786	0.250	0.000	0.763
		0.375				0.450				0.694				0.857				
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	4:00 PM	0	0	2	0	1	1	0	0	1	11	1	0	2	6	2	0	27
	4:15 PM	0	1	0	0	2	0	1	0	2	11	1	0	1	9	1	0	29
	4:30 PM	1	1	3	0	1	0	0	0	0	14	1	0	0	12	1	0	34
	4:45 PM	0	3	3	0	2	3	1	0	0	18	1	0	0	6	1	0	38
	5:00 PM	1	4	3	0	1	0	1	0	0	8	0	0	3	6	3	0	30
	5:15 PM	0	2	2	0	1	2	1	0	0	16	1	0	2	10	5	0	42
	5:30 PM	1	0	2	0	1	3	0	0	0	8	2	0	3	6	4	0	30
	5:45 PM	0	2	1	0	1	0	0	0	0	13	1	0	2	7	0	0	27
TOTAL VOLUMES :		NL 3	NT 13	NR 16	NU 0	SL 10	ST 9	SR 4	SU 0	EL 3	ET 99	ER 8	EU 0	WL 13	WT 62	WR 17	WU 0	TOTAL 257
APPROACH %'s :		9.38%	40.63%	50.00%	0.00%	43.48%	39.13%	17.39%	0.00%	2.73%	90.00%	7.27%	0.00%	14.13%	67.39%	18.48%	0.00%	
PEAK HR :		04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :		2	10	11	0	5	5	3	0	0	56	3	0	5	34	10	0	144
PEAK HR FACTOR :		0.50	0.625	0.917	0.000	0.625	0.417	0.750	0.000	0.000	0.778	0.750	0.000	0.417	0.708	0.500	0.000	0.857
		0.719				0.542				0.776				0.721				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Magnolia St & 28th St

City: Oakland

Control: 2-Way Stop (NB/SB)

Project ID: 19-08333-001

Date: 6/5/2019

HT																	
NS/EW Streets:	Magnolia St				Magnolia St				28th St				28th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	3
TOTAL VOLUMES :	NL 1	NT 0	NR 0	NU 0	SL 0	ST 1	SR 0	SU 0	EL 0	ET 2	ER 0	EU 0	WL 1	WT 3	WR 2	WU 0	TOTAL 10
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	16.67%	50.00%	33.33%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	2	0	0	1	2	2	0	8
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.250	0.500	0.500	0.000	0.667
0.2500.5000.625																	
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	3
4:15 PM	0	0	0	0	2	0	0	0	0	1	0	0	0	1	1	0	5
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL 0	NT 1	NR 0	NU 0	SL 4	ST 1	SR 1	SU 0	EL 0	ET 4	ER 1	EU 0	WL 0	WT 1	WR 3	WU 0	TOTAL 16
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	66.67%	16.67%	16.67%	0.00%	0.00%	80.00%	20.00%	0.00%	0.00%	25.00%	75.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	1	0	0	0	1	0	0	0	1	0	4
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	1.000
0.5000.2500.250																	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Magnolia St & 28th St
City: Oakland
Control: 2-Way Stop (NB/SB)

Project ID: 19-08333-001
Date: 6/5/2019

Bikes																			
NS/EW Streets:		Magnolia St				Magnolia St				28th St				28th St					
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
		0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	7:15 AM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0		2
	7:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0		2
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	8:00 AM	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0		4
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0		1
	8:30 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0		2
	8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0		3
TOTAL VOLUMES :		NL 2	NT 1	NR 1	NU 0	SL 0	ST 2	SR 1	SU 0	EL 0	ET 3	ER 0	EU 0	WL 1	WT 3	WR 0	WU 0	TOTAL	14
APPROACH %'s :		50.00%	25.00%	25.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	25.00%	75.00%	0.00%	0.00%		
PEAK HR :		08:00 AM - 09:00 AM																TOTAL	
PEAK HR VOL :		1	1	1	0	0	1	1	0	0	1	0	0	1	3	0	0	10	
PEAK HR FACTOR :		0.250	0.250	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.250	0.750	0.000	0.000	0.625	
		0.375				0.500				0.250				0.500					
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
		0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU		
	4:00 PM	0	1	0	0	0	0	0	0	0	2	1	0	0	0	0	0		4
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0		2
	4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0		2
	5:00 PM	0	0	0	0	0	1	0	0	0	2	0	0	0	1	0	0		4
	5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0		4
	5:30 PM	0	1	0	0	0	0	0	0	1	2	0	0	0	2	0	0		6
	5:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0		2
TOTAL VOLUMES :		NL 0	NT 4	NR 0	NU 0	SL 1	ST 1	SR 0	SU 0	EL 1	ET 7	ER 2	EU 0	WL 2	WT 5	WR 1	WU 0	TOTAL	24
APPROACH %'s :		0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	10.00%	70.00%	20.00%	0.00%	25.00%	62.50%	12.50%	0.00%		
PEAK HR :		04:30 PM - 05:30 PM																TOTAL	
PEAK HR VOL :		0	1	0	0	0	1	0	0	0	3	1	0	2	3	1	0	12	
PEAK HR FACTOR :		0.00	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.375	0.250	0.000	0.500	0.750	0.250	0.000	0.750	
		0.250				0.250				0.500				0.500					

National Data & Surveying Services

Intersection Turning Movement Count

Location: Magnolia St & 28th St
City: Oakland

Project ID: 19-08333-001
Date: 6/5/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Magnolia St		Magnolia St		28th St		28th St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	2	2	0	0	1	1	0	0	6
7:30 AM	1	0	1	1	1	0	1	0	5
7:45 AM	1	0	1	1	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	1	0	0	2
8:30 AM	0	0	0	0	2	1	0	0	3
8:45 AM	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES :	EB 4	WB 2	EB 2	WB 2	NB 5	SB 3	NB 2	SB 0	TOTAL 20
APPROACH %'s :	66.67%	33.33%	50.00%	50.00%	62.50%	37.50%	100.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	3	2	1	0	6
PEAK HR FACTOR :					0.375	0.500	0.250		0.500
					0.417		0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	1	1
4:15 PM	0	2	1	0	1	0	3	0	7
4:30 PM	1	0	1	0	0	0	0	0	2
4:45 PM	1	0	1	2	1	0	0	2	7
5:00 PM	0	2	0	0	0	0	0	2	4
5:15 PM	0	3	1	1	0	0	1	1	7
5:30 PM	2	0	1	0	2	1	0	0	6
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB 4	WB 7	EB 5	WB 3	NB 4	SB 1	NB 4	SB 6	TOTAL 34
APPROACH %'s :	36.36%	63.64%	62.50%	37.50%	80.00%	20.00%	40.00%	60.00%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	2	5	3	3	1	0	1	5	20
PEAK HR FACTOR :	0.500	0.417	0.750	0.375	0.250		0.250	0.625	0.714
	0.583		0.500		0.250		0.750		

APPENDIX B
PREDICTED CRASH
FREQUENCY
CALCULATION



Worksheet 2A -- General Information and Input Data for Urban and Suburban Arterial Intersections			
General Information		Location Information	
Analyst	Gaby Picado	Roadway	Magnolia Street and 28th Street
Agency or Company	Fehr & Peers	Intersection	
Date Performed	06/07/19	Jurisdiction	
		Analysis Year	Oakland, CA
			2019
Input Data		Base Conditions	Site Conditions
Intersection type (3ST, 3SG, 4ST, 4SG)		--	4ST
AADT _{major} (veh/day)	AADT _{MAX} = 46,800 (veh/day)	--	1,100
AADT _{minor} (veh/day)	AADT _{MAX} = 5,900 (veh/day)	--	380
Intersection lighting (present/not present)		Not Present	Present
Calibration factor, C _i		1.00	1.00
Data for unsignalized intersections only:		--	--
Number of major-road approaches with left-turn lanes (0,1,2)		0	0
Number of major-road approaches with right-turn lanes (0,1,2)		0	0
Data for signalized intersections only:		--	--
Number of approaches with left-turn lanes (0,1,2,3,4) [for 3SG, use maximum value of 3]		0	
Number of approaches with right-turn lanes (0,1,2,3,4) [for 3SG, use maximum value of 3]		0	
Number of approaches with left-turn signal phasing [for 3SG, use maximum value of 3]		--	
Type of left-turn signal phasing for Leg #1		Permissive	
Type of left-turn signal phasing for Leg #2		--	
Type of left-turn signal phasing for Leg #3		--	
Type of left-turn signal phasing for Leg #4 (if applicable)		--	
Number of approaches with right-turn-on-red prohibited [for 3SG, use maximum value of 3]		0	
Intersection red light cameras (present/not present)		Not Present	
Sum of all pedestrian crossing volumes (PedVol) -- Signalized intersections only			
Maximum number of lanes crossed by a pedestrian (n _{lanesx})		--	
Number of bus stops within 300 m (1,000 ft) of the intersection		0	
Schools within 300 m (1,000 ft) of the intersection (present/not present)		Not Present	
Number of alcohol sales establishments within 300 m (1,000 ft) of the intersection		0	

Worksheet 2B -- Crash Modification Factors for Urban and Suburban Arterial Intersections						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
CMF for Left-Turn Lanes	CMF for Left-Turn Signal Phasing	CMF for Right-Turn Lanes	CMF for Right Turn on Red	CMF for Lighting	CMF for Red Light Cameras	Combined CMF
CMF _{1i}	CMF _{2i}	CMF _{3i}	CMF _{4i}	CMF _{5i}	CMF _{6i}	CMF _{COMB}
from Table 12-24	from Table 12-25	from Table 12-26	from Equation 12-35	from Equation 12-36	from Equation 12-37	(1)*(2)*(3)*(4)*(5)*(6)
1.00	1.00	1.00	1.00	0.91	0.98	0.90

Worksheet 2C -- Multiple-Vehicle Collisions by Severity Level for Urban and Suburban Arterial Intersections

(1)	(2)			(3)	(4)	(5)	(6)	(7)	(8)	(9)
Crash Severity Level	SPF Coefficients			Overdispersion Parameter, k	Initial N _{bimv}	Proportion of Total Crashes	Adjusted N _{bimv}	Combined CMFs	Calibration Factor, C _i	Predicted N _{bimv}
	from Table 12-10			from Table 12-10	from Equation 12- 21		(4) _{TOTAL} *(5)	(7) from Worksheet 2B		(6)*(7)*(8)
	a	b	c							
Total	-8.90	0.82	0.25	0.40	0.188	1.000	0.188	0.90	1.00	0.168
Fatal and Injury (FI)	-11.13	0.93	0.28	0.48	0.052	(4) _{FI} /((4) _{FI} +(4) _{PDO})	0.052	0.90	1.00	0.046
						0.274				
Property Damage Only (PDO)	-8.74	0.77	0.23	0.40	0.138	(5) _{TOTAL} -(5) _{FI}	0.136	0.90	1.00	0.122
						0.726				

Worksheet 2D -- Multiple-Vehicle Collisions by Collision Type for Urban and Suburban Arterial Intersections

(1)	(2)	(3)	(4)	(5)	(6)
Collision Type	Proportion of Collision Type _(FI)	Predicted N_{bimv} (FI) (crashes/year)	Proportion of Collision Type (PDO)	Predicted N_{bimv} (PDO) (crashes/year)	Predicted N_{bimv} (TOTAL) (crashes/year)
	from Table 12-11	(9) _{FI} from Worksheet 2C	from Table 12-11	(9) _{PDO} from Worksheet 2C	(9) _{PDO} from Worksheet 2C
Total	1.000	0.046	1.000	0.122	0.168
		(2)*(3) _{FI}		(4)*(5) _{PDO}	(3)+(5)
Rear-end collision	0.338	0.016	0.374	0.046	0.061
Head-on collision	0.041	0.002	0.030	0.004	0.006
Angle collision	0.440	0.020	0.335	0.041	0.061
Sideswipe	0.121	0.006	0.044	0.005	0.011
Other multiple-vehicle collision	0.060	0.003	0.217	0.026	0.029

Worksheet 2E -- Single-Vehicle Collisions by Severity Level for Urban and Suburban Arterial Intersections

(1)	(2)			(3)	(4)	(5)	(6)	(7)	(8)	(9)
Crash Severity Level	SPF Coefficients			Overdispersion Parameter, k	Initial N _{bisv}	Proportion of Total Crashes	Adjusted N _{bimv}	Combined CMFs	Calibration Factor, C _i	Predicted N _{bisv}
	from Table 12-12			from Table 12-12	from Eqn. 12-24; (FI) from Eqn. 12- 24 or 12-27		(4) _{TOTAL} *(5)	(7) from Worksheet 2B		(6)*(7)*(8)
	a	b	c							
Total	-5.33	0.33	0.12	0.65	0.100	1.000	0.100	0.90	1.00	0.089
Fatal and Injury (FI)	--	--	--	--	0.028	(4) _{FI} /((4) _{FI} +(4) _{PDO})	0.037	0.90	1.00	0.033
						0.367				
Property Damage Only (PDO)	-7.04	0.36	0.25	0.54	0.048	(5) _{TOTAL} -(5) _{FI}	0.063	0.90	1.00	0.056
						0.633				

Worksheet 2F -- Single-Vehicle Collisions by Collision Type for Urban and Suburban Arterial Intersections

(1)	(2)	(3)	(4)	(5)	(6)
Collision Type	Proportion of Collision Type _(FI)	Predicted $N_{bisv (FI)}$ (crashes/year)	Proportion of Collision Type _(PDO)	Predicted $N_{bisv (PDO)}$ (crashes/year)	Predicted $N_{bisv (TOTAL)}$ (crashes/year)
	from Table 12-13	(9) _{FI} from Worksheet 2E	from Table 12-13	(9) _{PDO} from Worksheet 2E	(9) _{PDO} from Worksheet 2E
Total	1.000	0.033	1.000	0.056	0.089
		(2)*(3) _{FI}		(4)*(5) _{PDO}	(3)+(5)
Collision with parked vehicle	0.001	0.000	0.001	0.000	0.000
Collision with animal	0.001	0.000	0.026	0.001	0.002
Collision with fixed object	0.679	0.022	0.847	0.048	0.070
Collision with other object	0.089	0.003	0.070	0.004	0.007
Other single-vehicle collision	0.051	0.002	0.007	0.000	0.002
Single-vehicle noncollision	0.179	0.006	0.049	0.003	0.009

Worksheet 2G -- Vehicle-Pedestrian Collisions for Urban and Suburban Arterial Stop-Controlled Intersections

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Crash Severity Level	Predicted N_{bimv}	Predicted N_{bisv}	Predicted N_{bi}	f_{pedi}	Calibration factor, C_i	Predicted N_{pedi}
	(9) from Worksheet 2C	(9) from Worksheet 2E	(2) + (3)	from Table 12-16		(4)*(5)*(6)
Total	0.168	0.089	0.257	0.022	1.00	0.006
Fatal and injury (FI)	--	--	--	--	1.00	0.006

Worksheet 2H -- Crash Modification Factors for Vehicle-Pedestrian Collisions for Urban and Suburban Arterial Signalized Intersections

(1)	(2)	(3)	(4)
CMF for Bus Stops	CMF for Schools	CMF for Alcohol Sales Establishments	Combined CMF
CMF _{1p}	CMF _{2p}	CMF _{3p}	
from Table 12-28	from Table 12-29	from Table 12-30	(1)*(2)*(3)
--	--	--	--

Worksheet 2I -- Vehicle-Pedestrian Collisions for Urban and Suburban Arterial Signalized Intersections

(1)	(2)					(3)	(4)	(5)	(6)	(7)
Crash Severity Level	SPF Coefficients					Overdispersion Parameter, k	$N_{pedbase}$	Combined CMF	Calibration factor, C_i	Predicted N_{pedi}
	from Table 12-14						from Equation 12-29	(4) from Worksheet 2H		(4)*(5)*(6)
	a	b	c	d	e					
Total	--	--	--	--	--	--	--	--	1.00	--
Fatal and Injury (FI)	--	--	--	--	--	--	--	--	1.00	--

Worksheet 2J -- Vehicle-Bicycle Collisions for Urban and Suburban Arterial Intersections						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Crash Severity Level	Predicted N_{bimv}	Predicted N_{bisv}	Predicted N_{bi}	f_{bikei}	Calibration factor, C_i	Predicted N_{bikei}
	(9) from Worksheet 2C	(9) from Worksheet 2E	(2) + (3)	from Table 12-17		(4)*(5)*(6)
Total	0.168	0.089	0.257	0.018	1.00	0.005
Fatal and injury (FI)	--	--	--	--	1.00	0.005

Worksheet 2K -- Crash Severity Distribution for Urban and Suburban Arterial Intersections			
(1)	(2)	(3)	(4)
Collision type	Fatal and injury (FI)	Property damage only (PDO)	Total
	(3) from Worksheet 2D and 2F; (7) from 2G or 2I and 2J	(5) from Worksheet 2D and 2F	(6) from Worksheet 2D and 2F; (7) from 2G or 2I and 2J
MULTIPLE-VEHICLE			
Rear-end collisions (from Worksheet 2D)	0.016	0.046	0.061
Head-on collisions (from Worksheet 2D)	0.002	0.004	0.006
Angle collisions (from Worksheet 2D)	0.020	0.041	0.061
Sideswipe (from Worksheet 2D)	0.006	0.005	0.011
Other multiple-vehicle collision (from Worksheet 2D)	0.003	0.026	0.029
Subtotal	0.046	0.122	0.168
SINGLE-VEHICLE			
Collision with parked vehicle (from Worksheet 2F)	0.000	0.000	0.000
Collision with animal (from Worksheet 2F)	0.000	0.001	0.002
Collision with fixed object (from Worksheet 2F)	0.022	0.048	0.070
Collision with other object (from Worksheet 2F)	0.003	0.004	0.007
Other single-vehicle collision (from Worksheet 2F)	0.002	0.000	0.002
Single-vehicle noncollision (from Worksheet 2F)	0.006	0.003	0.009
Collision with pedestrian (from Worksheet 2G or 2I)	0.006	0.000	0.006
Collision with bicycle (from Worksheet 2J)	0.005	0.000	0.005
Subtotal	0.043	0.056	0.100
Total	0.089	0.179	0.268

Worksheet 2L -- Summary Results for Urban and Suburban Arterial Intersections	
(1)	(2)
Crash severity level	Predicted average crash frequency, $N_{predicted\ int}$ (crashes/year)
	(Total) from Worksheet 2K
Total	0.3
Fatal and injury (FI)	0.1
Property damage only (PDO)	0.2

Worksheet 2A -- General Information and Input Data for Urban and Suburban Arterial Intersections

General Information		Location Information	
Analyst	Gaby Picado	Roadway	Adeline Street and 28th Street
Agency or Company	Fehr & Peers	Intersection	Oakland, CA
Date Performed	06/07/19	Jurisdiction	2019
		Analysis Year	
Input Data		Base Conditions	Site Conditions
Intersection type (3ST, 3SG, 4ST, 4SG)		--	4ST
AADT _{major} (veh/day)	AADT _{MAX} = 46,800 (veh/day)	--	8,540
AADT _{minor} (veh/day)	AADT _{MAX} = 5,900 (veh/day)	--	1,250
Intersection lighting (present/not present)		Not Present	Present
Calibration factor, C _i		1.00	1.00
Data for unsignalized intersections only:		--	--
Number of major-road approaches with left-turn lanes (0,1,2)		0	0
Number of major-road approaches with right-turn lanes (0,1,2)		0	0
Data for signalized intersections only:		--	--
Number of approaches with left-turn lanes (0,1,2,3,4) [for 3SG, use maximum value of 3]		0	
Number of approaches with right-turn lanes (0,1,2,3,4) [for 3SG, use maximum value of 3]		0	
Number of approaches with left-turn signal phasing [for 3SG, use maximum value of 3]		--	
Type of left-turn signal phasing for Leg #1		Permissive	
Type of left-turn signal phasing for Leg #2		--	
Type of left-turn signal phasing for Leg #3		--	
Type of left-turn signal phasing for Leg #4 (if applicable)		--	
Number of approaches with right-turn-on-red prohibited [for 3SG, use maximum value of 3]		0	
Intersection red light cameras (present/not present)		Not Present	
Sum of all pedestrian crossing volumes (PedVol) -- Signalized intersections only			
Maximum number of lanes crossed by a pedestrian (n _{lanesx})		--	
Number of bus stops within 300 m (1,000 ft) of the intersection		0	
Schools within 300 m (1,000 ft) of the intersection (present/not present)		Not Present	
Number of alcohol sales establishments within 300 m (1,000 ft) of the intersection		0	

Worksheet 2B -- Crash Modification Factors for Urban and Suburban Arterial Intersections

(1)	(2)	(3)	(4)	(5)	(6)	(7)
CMF for Left-Turn Lanes	CMF for Left-Turn Signal Phasing	CMF for Right-Turn Lanes	CMF for Right Turn on Red	CMF for Lighting	CMF for Red Light Cameras	Combined CMF
CMF _{1i}	CMF _{2i}	CMF _{3i}	CMF _{4i}	CMF _{5i}	CMF _{6i}	CMF _{COMB}
from Table 12-24	from Table 12-25	from Table 12-26	from Equation 12-35	from Equation 12-36	from Equation 12-37	(1)*(2)*(3)*(4)*(5)*(6)
1.00	1.00	1.00	1.00	0.91	0.97	0.89

Worksheet 2C -- Multiple-Vehicle Collisions by Severity Level for Urban and Suburban Arterial Intersections

(1)	(2)			(3)	(4)	(5)	(6)	(7)	(8)	(9)
Crash Severity Level	SPF Coefficients			Overdispersion Parameter, k	Initial N _{bimv}	Proportion of Total Crashes	Adjusted N _{bimv}	Combined CMFs	Calibration Factor, C _i	Predicted N _{bimv}
	from Table 12-10			from Table 12-10	from Equation 12- 21		(4) _{TOTAL} *(5)	(7) from Worksheet 2B		(6)*(7)*(8)
	a	b	c							
Total	-8.90	0.82	0.25	0.40	1.358	1.000	1.358	0.89	1.00	1.206
Fatal and Injury (FI)	-11.13	0.93	0.28	0.48	0.489	(4) _{FI} /((4) _{FI} +(4) _{PDO})	0.486	0.89	1.00	0.431
						0.358				
Property Damage Only (PDO)	-8.74	0.77	0.23	0.40	0.879	(5) _{TOTAL} -(5) _{FI}	0.872	0.89	1.00	0.774
						0.642				

Worksheet 2D -- Multiple-Vehicle Collisions by Collision Type for Urban and Suburban Arterial Intersections

(1)	(2)	(3)	(4)	(5)	(6)
Collision Type	Proportion of Collision Type _(FI)	Predicted N_{bimv} (FI) (crashes/year)	Proportion of Collision Type (PDO)	Predicted N_{bimv} (PDO) (crashes/year)	Predicted N_{bimv} (TOTAL) (crashes/year)
	from Table 12-11	(9) _{FI} from Worksheet 2C	from Table 12-11	(9) _{PDO} from Worksheet 2C	(9) _{PDO} from Worksheet 2C
Total	1.000	0.431	1.000	0.774	1.206
		(2)*(3) _{FI}		(4)*(5) _{PDO}	(3)+(5)
Rear-end collision	0.338	0.146	0.374	0.290	0.435
Head-on collision	0.041	0.018	0.030	0.023	0.041
Angle collision	0.440	0.190	0.335	0.259	0.449
Sideswipe	0.121	0.052	0.044	0.034	0.086
Other multiple-vehicle collision	0.060	0.026	0.217	0.168	0.194

Worksheet 2E -- Single-Vehicle Collisions by Severity Level for Urban and Suburban Arterial Intersections

(1)	(2)			(3)	(4)	(5)	(6)	(7)	(8)	(9)
Crash Severity Level	SPF Coefficients			Overdispersion Parameter, k	Initial N _{bisv}	Proportion of Total Crashes	Adjusted N _{bimv}	Combined CMFs	Calibration Factor, C _i	Predicted N _{bisv}
	from Table 12-12			from Table 12-12	from Eqn. 12-24; (FI) from Eqn. 12- 24 or 12-27		(4) _{TOTAL} *(5)	(7) from Worksheet 2B		(6)*(7)*(8)
	a	b	c							
Total	-5.33	0.33	0.12	0.65	0.226	1.000	0.226	0.89	1.00	0.201
Fatal and Injury (FI)	--	--	--	--	0.063	(4) _{FI} /((4) _{FI} +(4) _{PDO})	0.072	0.89	1.00	0.064
						0.318				
Property Damage Only (PDO)	-7.04	0.36	0.25	0.54	0.136	(5) _{TOTAL} -(5) _{FI}	0.154	0.89	1.00	0.137
						0.682				

Worksheet 2F -- Single-Vehicle Collisions by Collision Type for Urban and Suburban Arterial Intersections

(1)	(2)	(3)	(4)	(5)	(6)
Collision Type	Proportion of Collision Type _(FI)	Predicted N _{bisv (FI)} (crashes/year)	Proportion of Collision Type (PDO)	Predicted N _{bisv (PDO)} (crashes/year)	Predicted N _{bisv (TOTAL)} (crashes/year)
	from Table 12-13	(9) _{FI} from Worksheet 2E	from Table 12-13	(9) _{PDO} from Worksheet 2E	(9) _{PDO} from Worksheet 2E
Total	1.000	0.064	1.000	0.137	0.201
		(2)*(3) _{FI}		(4)*(5) _{PDO}	(3)+(5)
Collision with parked vehicle	0.001	0.000	0.001	0.000	0.000
Collision with animal	0.001	0.000	0.026	0.004	0.004
Collision with fixed object	0.679	0.043	0.847	0.116	0.159
Collision with other object	0.089	0.006	0.070	0.010	0.015
Other single-vehicle collision	0.051	0.003	0.007	0.001	0.004
Single-vehicle noncollision	0.179	0.011	0.049	0.007	0.018

Worksheet 2G -- Vehicle-Pedestrian Collisions for Urban and Suburban Arterial Stop-Controlled Intersections

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Crash Severity Level	Predicted N _{bimv}	Predicted N _{bisv}	Predicted N _{bi}	f _{pedi}	Calibration factor, C _i	Predicted N _{pedi}
	(9) from Worksheet 2C	(9) from Worksheet 2E	(2) + (3)	from Table 12-16		(4)*(5)*(6)
Total	1.206	0.201	1.406	0.022	1.00	0.031
Fatal and injury (FI)	--	--	--	--	1.00	0.031

Worksheet 2H -- Crash Modification Factors for Vehicle-Pedestrian Collisions for Urban and Suburban Arterial Signalized Intersections

(1)	(2)	(3)	(4)
CMF for Bus Stops	CMF for Schools	CMF for Alcohol Sales Establishments	Combined CMF
CMF _{1p}	CMF _{2p}	CMF _{3p}	
from Table 12-28	from Table 12-29	from Table 12-30	(1)*(2)*(3)
--	--	--	--

Worksheet 2I -- Vehicle-Pedestrian Collisions for Urban and Suburban Arterial Signalized Intersections

(1)	(2)					(3)	(4)	(5)	(6)	(7)
Crash Severity Level	SPF Coefficients					Overdispersion Parameter, k	N _{pedbase}	Combined CMF	Calibration factor, C _i	Predicted N _{pedi}
	from Table 12-14						from Equation 12-29	(4) from Worksheet 2H		(4)*(5)*(6)
	a	b	c	d	e					
Total	--	--	--	--	--	--	--	--	1.00	--
Fatal and Injury (FI)	--	--	--	--	--	--	--	--	1.00	--

Worksheet 2J -- Vehicle-Bicycle Collisions for Urban and Suburban Arterial Intersections						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Crash Severity Level	Predicted N_{bimv}	Predicted N_{bisv}	Predicted N_{bi}	f_{bikei}	Calibration factor, C_i	Predicted N_{bikei}
	(9) from Worksheet 2C	(9) from Worksheet 2E	(2) + (3)	from Table 12-17		(4)*(5)*(6)
Total	1.206	0.201	1.406	0.018	1.00	0.025
Fatal and injury (FI)	--	--	--	--	1.00	0.025

Worksheet 2K -- Crash Severity Distribution for Urban and Suburban Arterial Intersections			
(1)	(2)	(3)	(4)
Collision type	Fatal and injury (FI)	Property damage only (PDO)	Total
	(3) from Worksheet 2D and 2F; (7) from 2G or 2I and 2J	(5) from Worksheet 2D and 2F	(6) from Worksheet 2D and 2F; (7) from 2G or 2I and 2J
MULTIPLE-VEHICLE			
Rear-end collisions (from Worksheet 2D)	0.146	0.290	0.435
Head-on collisions (from Worksheet 2D)	0.018	0.023	0.041
Angle collisions (from Worksheet 2D)	0.190	0.259	0.449
Sideswipe (from Worksheet 2D)	0.052	0.034	0.086
Other multiple-vehicle collision (from Worksheet 2D)	0.026	0.168	0.194
Subtotal	0.431	0.774	1.206
SINGLE-VEHICLE			
Collision with parked vehicle (from Worksheet 2F)	0.000	0.000	0.000
Collision with animal (from Worksheet 2F)	0.000	0.004	0.004
Collision with fixed object (from Worksheet 2F)	0.043	0.116	0.159
Collision with other object (from Worksheet 2F)	0.006	0.010	0.015
Other single-vehicle collision (from Worksheet 2F)	0.003	0.001	0.004
Single-vehicle noncollision (from Worksheet 2F)	0.011	0.007	0.018
Collision with pedestrian (from Worksheet 2G or 2I)	0.031	0.000	0.031
Collision with bicycle (from Worksheet 2J)	0.025	0.000	0.025
Subtotal	0.120	0.137	0.257
Total	0.552	0.911	1.463

Worksheet 2L -- Summary Results for Urban and Suburban Arterial Intersections	
(1)	(2)
Crash severity level	Predicted average crash frequency, $N_{predicted\ int}$ (crashes/year)
	(Total) from Worksheet 2K
Total	1.5
Fatal and injury (FI)	0.6
Property damage only (PDO)	0.9

Worksheet 1A -- General Information and Input Data for Urban and Suburban Roadway Segments					
General Information			Location Information		
Analyst	Gaby Picado		Roadway	Magnolia	
Agency or Company	Fehr & Peers		Roadway Section	Between 26th Street and 28th Street	
Date Performed	06/06/19		Jurisdiction	Oakland, CA	
			Analysis Year	2019	
Input Data			Base Conditions	Site Conditions	
Roadway type (2U, 3T, 4U, 4D, ST)			--	2U	
Length of segment, L (mi)			--	0.11	
AADT (veh/day)	AADT _{MAX} = 32,600 (veh/day)		--	370	
Type of on-street parking (none/parallel/angle)			None	Parallel (Comm/Ind)	
Proportion of curb length with on-street parking			--	0.62	
Median width (ft) - for divided only			15	Not Present	
Lighting (present / not present)			Not Present	Present	
Auto speed enforcement (present / not present)			Not Present	Not Present	
Major commercial driveways (number)			--	0	
Minor commercial driveways (number)			--	1	
Major industrial / institutional driveways (number)			--	0	
Minor industrial / institutional driveways (number)			--	6	
Major residential driveways (number)			--	0	
Minor residential driveways (number)			--	0	
Other driveways (number)			--	0	
Speed Category			--	Posted Speed 30 mph or Lower	
Roadside fixed object density (fixed objects / mi)			0	80	
Offset to roadside fixed objects (ft) [If greater than 30 or Not Present, input 30]			30	10	
Calibration Factor, Cr			1.00	1.00	

Worksheet 1B -- Crash Modification Factors for Urban and Suburban Roadway Segments					
(1)	(2)	(3)	(4)	(5)	(6)
CMF for On-Street Parking	CMF for Roadside Fixed Objects	CMF for Median Width	CMF for Lighting	CMF for Automated Speed Enforcement	Combined CMF
<i>CMF 1r</i>	<i>CMF 2r</i>	<i>CMF 3r</i>	<i>CMF 4r</i>	<i>CMF 5r</i>	<i>CMF comb</i>
from Equation 12-32	from Equation 12-33	from Table 12-22	from Equation 12-34	from Section 12.7.1	(1)*(2)*(3)*(4)*(5)
1.67	1.35	1.00	0.93	1.00	2.10

Worksheet 1C -- Multiple-Vehicle Nondriveway Collisions by Severity Level for Urban and Suburban Roadway Segments									
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Crash Severity Level	SPF Coefficients		Overdispersion Parameter, k	Initial N _{brmv}	Proportion of Total Crashes	Adjusted N _{brmv}	Combined CMFs	Calibration Factor, Cr	Predicted N _{brmv}
	from Table 12-3		from Table 12-3	from Equation 12-10		(4) _{TOTAL} *(5)	(6) from Worksheet 1B		(6)*(7)*(8)
	a	b							
Total	-15.22	1.68	0.84	0.001	1.000	0.001	2.10	1.00	0.001
Fatal and Injury (FI)	-16.22	1.66	0.65	0.000	(4) _{FI} /((4) _{FI} +(4) _{PDO})	0.000	2.10	1.00	0.000
					0.315				
Property Damage Only (PDO)	-15.62	1.69	0.87	0.000	(5) _{TOTAL} -(5) _{FI}	0.000	2.10	1.00	0.001
					0.685				

Worksheet 1D -- Multiple-Vehicle Nondriveway Collisions by Collision Type for Urban and Suburban Roadway Segments

(1)	(2)	(3)	(4)	(5)	(6)
Collision Type	Proportion of Collision Type _(FI)	Predicted N _{brmv (FI)} (crashes/year)	Proportion of Collision Type _(PDO)	Predicted N _{brmv (PDO)} (crashes/year)	Predicted N _{brmv (TOTAL)} (crashes/year)
	from Table 12-4	(9) _{FI} from Worksheet 1C	from Table 12-4	(9) _{PDO} from Worksheet 1C	(9) _{TOTAL} from Worksheet 1C
Total	1.000	0.000	1.000	0.001	0.001
		(2)*(3) _{FI}		(4)*(5) _{PDO}	(3)+(5)
Rear-end collision	0.730	0.000	0.778	0.001	0.001
Head-on collision	0.068	0.000	0.004	0.000	0.000
Angle collision	0.085	0.000	0.079	0.000	0.000
Sideswipe, same direction	0.015	0.000	0.031	0.000	0.000
Sideswipe, opposite direction	0.073	0.000	0.055	0.000	0.000
Other multiple-vehicle collision	0.029	0.000	0.053	0.000	0.000

Worksheet 1E -- Single-Vehicle Collisions by Severity Level for Urban and Suburban Roadway Segments

(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Crash Severity Level	SPF Coefficients		Overdispersion Parameter, k	Initial N _{brsv}	Proportion of Total Crashes	Adjusted N _{brsv}	Combined CMFs	Calibration Factor, Cr	Predicted N _{brsv}
	from Table 12-5		from Table 12-5	from Equation 12-13		(4) _{TOTAL} *(5)	(6) from Worksheet 1B		(6)*(7)*(8)
	a	b							
Total	-5.47	0.56	0.81	0.013	1.000	0.013	2.10	1.00	0.027
Fatal and Injury (FI)	-3.96	0.23	0.50	0.008	(4) _{FI} /((4) _{FI} +(4) _{PDO})	0.007	2.10	1.00	0.014
					0.531				
Property Damage Only (PDO)	-6.51	0.64	0.87	0.007	(5) _{TOTAL} -(5) _{FI}	0.006	2.10	1.00	0.012
					0.469				

Worksheet 1F -- Single-Vehicle Collisions by Collision Type for Urban and Suburban Roadway Segments

(1)	(2)	(3)	(4)	(5)	(6)
Collision Type	Proportion of Collision Type _(FI)	Predicted N _{brsv (FI)} (crashes/year)	Proportion of Collision Type _(PDO)	Predicted N _{brsv (PDO)} (crashes/year)	Predicted N _{brsv (TOTAL)} (crashes/year)
	from Table 12-6	(9) _{FI} from Worksheet 1E	from Table 12-6	(9) _{PDO} from Worksheet 1E	(9) _{TOTAL} from Worksheet 1E
Total	1.000	0.014	1.000	0.012	0.027
		(2)*(3) _{FI}		(4)*(5) _{PDO}	(3)+(5)
Collision with animal	0.026	0.000	0.066	0.001	0.001
Collision with fixed object	0.723	0.010	0.759	0.009	0.020
Collision with other object	0.010	0.000	0.013	0.000	0.000
Other single-vehicle collision	0.241	0.003	0.162	0.002	0.005

Worksheet 1G -- Multiple-Vehicle Driveway-Related Collisions by Driveway Type for Urban and Suburban Roadway Segments					
(1)	(2)	(3)	(4)	(5)	(6)
Driveway Type	Number of driveways, n_j	Crashes per driveway per year, N_j	Coefficient for traffic adjustment, t	Initial N_{brdwy}	Overdispersion parameter, k
		from Table 12-7	from Table 12-7	Equation 12-16	from Table 12-7
				$n_j * N_j * (AADT/15,000)^t$	
Major commercial	0	0.158	1.000	0.000	--
Minor commercial	1	0.050	1.000	0.001	
Major industrial/institutional	0	0.172	1.000	0.000	
Minor industrial/institutional	6	0.023	1.000	0.003	
Major residential	0	0.083	1.000	0.000	
Minor residential	0	0.016	1.000	0.000	
Other	0	0.025	1.000	0.000	
Total	--	--	--	0.005	0.81

Worksheet 1H -- Multiple-Vehicle Driveway-Related Collisions by Severity Level for Urban and Suburban Roadway Segments						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Crash Severity Level	Initial N_{brdwy}	Proportion of total crashes (f_{dwy})	Adjusted N_{brdwy}	Combined CMFs	Calibration factor, C_r	Predicted N_{brdwy}
	(5) _{TOTAL} from Worksheet 1G	from Table 12-7	(2) _{TOTAL} * (3)	(6) from Worksheet 1B		(4)*(5)*(6)
Total	0.005	1.000	0.005	2.10	1.00	0.010
Fatal and injury (FI)	--	0.323	0.001	2.10	1.00	0.003
Property damage only (PDO)	--	0.677	0.003	2.10	1.00	0.007

Worksheet 1I -- Vehicle-Pedestrian Collisions for Urban and Suburban Roadway Segments							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crash Severity Level	Predicted N_{brmv}	Predicted N_{brsv}	Predicted N_{brdwy}	Predicted N_{br}	f_{pedr}	Calibration factor, C_r	Predicted N_{pedr}
	(9) from Worksheet 1C	(9) from Worksheet 1E	(7) from Worksheet 1H	(2)+(3)+(4)	from Table 12-8		(5)*(6)*(7)
Total	0.001	0.027	0.010	0.038	0.036	1.00	0.001
Fatal and injury (FI)	--	--	--	--	--	1.00	0.001

Worksheet 1J -- Vehicle-Bicycle Collisions for Urban and Suburban Roadway Segments							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crash Severity Level	Predicted N_{brmv}	Predicted N_{brsv}	Predicted N_{brdwy}	Predicted N_{br}	f_{biker}	Calibration factor, C_r	Predicted N_{biker}
	(9) from Worksheet 1C	(9) from Worksheet 1E	(7) from Worksheet 1H	(2)+(3)+(4)	from Table 12-9		(5)*(6)*(7)
Total	0.001	0.027	0.010	0.038	0.018	1.00	0.001
Fatal and injury (FI)	--	--	--	--	--	1.00	0.001

Worksheet 1K -- Crash Severity Distribution for Urban and Suburban Roadway Segments			
(1)	(2)	(3)	(4)
Collision type	Fatal and injury (FI)	Property damage only (PDO)	Total
	(3) from Worksheet 1D and 1F; (7) from Worksheet 1H; and (8) from Worksheet 1I and 1J	(5) from Worksheet 1D and 1F; and (7) from Worksheet 1H	(6) from Worksheet 1D and 1F; (7) from Worksheet 1H; and (8) from Worksheet 1I and 1J
MULTIPLE-VEHICLE			
Rear-end collisions (from Worksheet 1D)	0.000	0.001	0.001
Head-on collisions (from Worksheet 1D)	0.000	0.000	0.000
Angle collisions (from Worksheet 1D)	0.000	0.000	0.000
Sideswipe, same direction (from Worksheet 1D)	0.000	0.000	0.000
Sideswipe, opposite direction (from Worksheet 1D)	0.000	0.000	0.000
Driveway-related collisions (from Worksheet 1H)	0.003	0.007	0.010
Other multiple-vehicle collision (from Worksheet 1D)	0.000	0.000	0.000
Subtotal	0.004	0.007	0.011
SINGLE-VEHICLE			
Collision with animal (from Worksheet 1F)	0.000	0.001	0.001
Collision with fixed object (from Worksheet 1F)	0.010	0.009	0.020
Collision with other object (from Worksheet 1F)	0.000	0.000	0.000
Other single-vehicle collision (from Worksheet 1F)	0.003	0.002	0.005
Collision with pedestrian (from Worksheet 1I)	0.001	0.000	0.001
Collision with bicycle (from Worksheet 1J)	0.001	0.000	0.001
Subtotal	0.016	0.012	0.029
Total	0.020	0.020	0.040

Worksheet 1L -- Summary Results for Urban and Suburban Roadway Segments			
(1)	(2)	(3)	(4)
Crash Severity Level	Predicted average crash frequency, $N_{\text{predicted rs}}$ (crashes/year)	Roadway segment length, L (mi)	Crash rate (crashes/mi/year)
	(Total) from Worksheet 1K		(2) / (3)
Total	0.040	0.11	0.4
Fatal and injury (FI)	0.0	0.11	0.2
Property damage only (PDO)	0.0	0.11	0.2

Worksheet 1A -- General Information and Input Data for Urban and Suburban Roadway Segments					
General Information			Location Information		
Analyst	Gaby Picado		Roadway	Adeline	
Agency or Company	Fehr & Peers		Roadway Section	Between 26th Street and 28th Street	
Date Performed	06/06/19		Jurisdiction	Oakland, CA	
			Analysis Year	2019	
Input Data			Base Conditions	Site Conditions	
Roadway type (2U, 3T, 4U, 4D, ST)			--	4U	
Length of segment, L (mi)			--	0.11	
AADT (veh/day)	AADT _{MAX} = 40,100 (veh/day)		--	8,550	
Type of on-street parking (none/parallel/angle)			None	Parallel (Comm/Ind)	
Proportion of curb length with on-street parking			--	0.58	
Median width (ft) - for divided only			15	Not Present	
Lighting (present / not present)			Not Present	Present	
Auto speed enforcement (present / not present)			Not Present	Not Present	
Major commercial driveways (number)			--	0	
Minor commercial driveways (number)			--	3	
Major industrial / institutional driveways (number)			--	0	
Minor industrial / institutional driveways (number)			--	2	
Major residential driveways (number)			--	0	
Minor residential driveways (number)			--	8	
Other driveways (number)			--	0	
Speed Category			--	Posted Speed 30 mph or Lower	
Roadside fixed object density (fixed objects / mi)			0	90	
Offset to roadside fixed objects (ft) [If greater than 30 or Not Present, input 30]			30	14	
Calibration Factor, Cr			1.00	1.00	

Worksheet 1B -- Crash Modification Factors for Urban and Suburban Roadway Segments					
(1)	(2)	(3)	(4)	(5)	(6)
CMF for On-Street Parking	CMF for Roadside Fixed Objects	CMF for Median Width	CMF for Lighting	CMF for Automated Speed Enforcement	Combined CMF
<i>CMF 1r</i>	<i>CMF 2r</i>	<i>CMF 3r</i>	<i>CMF 4r</i>	<i>CMF 5r</i>	<i>CMF comb</i>
from Equation 12-32	from Equation 12-33	from Table 12-22	from Equation 12-34	from Section 12.7.1	(1)*(2)*(3)*(4)*(5)
1.41	1.20	1.00	0.92	1.00	1.55

Worksheet 1C -- Multiple-Vehicle Nondriveway Collisions by Severity Level for Urban and Suburban Roadway Segments									
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Crash Severity Level	SPF Coefficients		Overdispersion Parameter, k	Initial N _{brmv}	Proportion of Total Crashes	Adjusted N _{brmv}	Combined CMFs	Calibration Factor, Cr	Predicted N _{brmv}
	from Table 12-3		from Table 12-3	from Equation 12-10		(4) _{TOTAL} *(5)	(6) from Worksheet 1B		(6)*(7)*(8)
	a	b							
Total	-11.63	1.33	1.01	0.166	1.000	0.166	1.55	1.00	0.257
Fatal and Injury (FI)	-12.08	1.25	0.99	0.051	(4) _{FI} /((4) _{FI} +(4) _{PDO})	0.054	1.55	1.00	0.084
					0.326				
Property Damage Only (PDO)	-12.53	1.38	1.08	0.106	(5) _{TOTAL} -(5) _{FI}	0.112	1.55	1.00	0.173
					0.674				

Worksheet 1D -- Multiple-Vehicle Nondriveway Collisions by Collision Type for Urban and Suburban Roadway Segments

(1)	(2)	(3)	(4)	(5)	(6)
Collision Type	Proportion of Collision Type _(FI)	Predicted N _{brmv (FI)} (crashes/year)	Proportion of Collision Type _(PDO)	Predicted N _{brmv (PDO)} (crashes/year)	Predicted N _{brmv (TOTAL)} (crashes/year)
	from Table 12-4	(9) _{FI} from Worksheet 1C	from Table 12-4	(9) _{PDO} from Worksheet 1C	(9) _{TOTAL} from Worksheet 1C
Total	1.000	0.084	1.000	0.173	0.257
		(2)*(3) _{FI}		(4)*(5) _{PDO}	(3)+(5)
Rear-end collision	0.511	0.043	0.506	0.088	0.131
Head-on collision	0.077	0.006	0.004	0.001	0.007
Angle collision	0.181	0.015	0.130	0.023	0.038
Sideswipe, same direction	0.093	0.008	0.249	0.043	0.051
Sideswipe, opposite direction	0.082	0.007	0.031	0.005	0.012
Other multiple-vehicle collision	0.056	0.005	0.080	0.014	0.019

Worksheet 1E -- Single-Vehicle Collisions by Severity Level for Urban and Suburban Roadway Segments

(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Crash Severity Level	SPF Coefficients		Overdispersion Parameter, k	Initial N _{brsv}	Proportion of Total Crashes	Adjusted N _{brsv}	Combined CMFs	Calibration Factor, Cr	Predicted N _{brsv}
	from Table 12-5		from Table 12-5	from Equation 12-13		(4) _{TOTAL} *(5)	(6) from Worksheet 1B		(6)*(7)*(8)
	a	b							
Total	-7.99	0.81	0.91	0.057	1.000	0.057	1.55	1.00	0.088
Fatal and Injury (FI)	-7.37	0.61	0.54	0.017	(4) _{FI} /((4) _{FI} +(4) _{PDO})	0.016	1.55	1.00	0.025
					0.278				
Property Damage Only (PDO)	-8.50	0.84	0.97	0.045	(5) _{TOTAL} -(5) _{FI}	0.041	1.55	1.00	0.064
					0.722				

Worksheet 1F -- Single-Vehicle Collisions by Collision Type for Urban and Suburban Roadway Segments

(1)	(2)	(3)	(4)	(5)	(6)
Collision Type	Proportion of Collision Type _(FI)	Predicted N _{brsv (FI)} (crashes/year)	Proportion of Collision Type _(PDO)	Predicted N _{brsv (PDO)} (crashes/year)	Predicted N _{brsv (TOTAL)} (crashes/year)
	from Table 12-6	(9) _{FI} from Worksheet 1E	from Table 12-6	(9) _{PDO} from Worksheet 1E	(9) _{TOTAL} from Worksheet 1E
Total	1.000	0.025	1.000	0.064	0.088
		(2)*(3) _{FI}		(4)*(5) _{PDO}	(3)+(5)
Collision with animal	0.001	0.000	0.001	0.000	0.000
Collision with fixed object	0.612	0.015	0.809	0.052	0.067
Collision with other object	0.020	0.000	0.029	0.002	0.002
Other single-vehicle collision	0.367	0.009	0.161	0.010	0.019

Worksheet 1G -- Multiple-Vehicle Driveway-Related Collisions by Driveway Type for Urban and Suburban Roadway Segments					
(1)	(2)	(3)	(4)	(5)	(6)
Driveway Type	Number of driveways, n_j	Crashes per driveway per year, N_j	Coefficient for traffic adjustment, t	Initial N_{brdwy}	Overdispersion parameter, k
		from Table 12-7	from Table 12-7	Equation 12-16	from Table 12-7
				$n_j * N_j * (AADT/15,000)^t$	
Major commercial	0	0.182	1.172	0.000	--
Minor commercial	3	0.058	1.172	0.090	
Major industrial/institutional	0	0.198	1.172	0.000	
Minor industrial/institutional	2	0.026	1.172	0.027	
Major residential	0	0.096	1.172	0.000	
Minor residential	8	0.018	1.172	0.075	
Other	0	0.029	1.172	0.000	
Total	--	--	--	0.191	0.81

Worksheet 1H -- Multiple-Vehicle Driveway-Related Collisions by Severity Level for Urban and Suburban Roadway Segments						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Crash Severity Level	Initial N_{brdwy}	Proportion of total crashes (f_{dwy})	Adjusted N_{brdwy}	Combined CMFs	Calibration factor, C_r	Predicted N_{brdwy}
	(5) _{TOTAL} from Worksheet 1G	from Table 12-7	(2) _{TOTAL} * (3)	(6) from Worksheet 1B		(4)*(5)*(6)
Total	0.191	1.000	0.191	1.55	1.00	0.297
Fatal and injury (FI)	--	0.342	0.065	1.55	1.00	0.102
Property damage only (PDO)	--	0.658	0.126	1.55	1.00	0.195

Worksheet 1I -- Vehicle-Pedestrian Collisions for Urban and Suburban Roadway Segments							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crash Severity Level	Predicted N_{brmv}	Predicted N_{brsv}	Predicted N_{brdwy}	Predicted N_{br}	f_{pedr}	Calibration factor, C_r	Predicted N_{pedr}
	(9) from Worksheet 1C	(9) from Worksheet 1E	(7) from Worksheet 1H	(2)+(3)+(4)	from Table 12-8		(5)*(6)*(7)
Total	0.257	0.088	0.297	0.643	0.022	1.00	0.014
Fatal and injury (FI)	--	--	--	--	--	1.00	0.014

Worksheet 1J -- Vehicle-Bicycle Collisions for Urban and Suburban Roadway Segments							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crash Severity Level	Predicted N_{brmv}	Predicted N_{brsv}	Predicted N_{brdwy}	Predicted N_{br}	f_{biker}	Calibration factor, C_r	Predicted N_{biker}
	(9) from Worksheet 1C	(9) from Worksheet 1E	(7) from Worksheet 1H	(2)+(3)+(4)	from Table 12-9		(5)*(6)*(7)
Total	0.257	0.088	0.297	0.643	0.011	1.00	0.007
Fatal and injury (FI)	--	--	--	--	--	1.00	0.007

Worksheet 1K -- Crash Severity Distribution for Urban and Suburban Roadway Segments			
(1)	(2)	(3)	(4)
Collision type	Fatal and injury (FI)	Property damage only (PDO)	Total
	(3) from Worksheet 1D and 1F; (7) from Worksheet 1H; and (8) from Worksheet 1I and 1J	(5) from Worksheet 1D and 1F; and (7) from Worksheet 1H	(6) from Worksheet 1D and 1F; (7) from Worksheet 1H; and (8) from Worksheet 1I and 1J
MULTIPLE-VEHICLE			
Rear-end collisions (from Worksheet 1D)	0.043	0.088	0.131
Head-on collisions (from Worksheet 1D)	0.006	0.001	0.007
Angle collisions (from Worksheet 1D)	0.015	0.023	0.038
Sideswipe, same direction (from Worksheet 1D)	0.008	0.043	0.051
Sideswipe, opposite direction (from Worksheet 1D)	0.007	0.005	0.012
Driveway-related collisions (from Worksheet 1H)	0.102	0.195	0.297
Other multiple-vehicle collision (from Worksheet 1D)	0.005	0.014	0.019
Subtotal	0.185	0.369	0.554
SINGLE-VEHICLE			
Collision with animal (from Worksheet 1F)	0.000	0.000	0.000
Collision with fixed object (from Worksheet 1F)	0.015	0.052	0.067
Collision with other object (from Worksheet 1F)	0.000	0.002	0.002
Other single-vehicle collision (from Worksheet 1F)	0.009	0.010	0.019
Collision with pedestrian (from Worksheet 1I)	0.014	0.000	0.014
Collision with bicycle (from Worksheet 1J)	0.007	0.000	0.007
Subtotal	0.046	0.064	0.110
Total	0.231	0.433	0.664

Worksheet 1L -- Summary Results for Urban and Suburban Roadway Segments			
(1)	(2)	(3)	(4)
Crash Severity Level	Predicted average crash frequency, $N_{\text{predicted rs}}$ (crashes/year)	Roadway segment length, L (mi)	Crash rate (crashes/mi/year)
	(Total) from Worksheet 1K		(2) / (3)
Total	0.664	0.11	6.0
Fatal and injury (FI)	0.2	0.11	2.1
Property damage only (PDO)	0.4	0.11	3.9

Worksheet 1A -- General Information and Input Data for Urban and Suburban Roadway Segments					
General Information			Location Information		
Analyst	Gaby Picado		Roadway	28th Street	
Agency or Company	Fehr & Peers		Roadway Section	Between Magnolia and Adeline	
Date Performed	06/06/19		Jurisdiction	Oakland, CA	
			Analysis Year	2019	
Input Data			Base Conditions	Site Conditions	
Roadway type (2U, 3T, 4U, 4D, ST)			--	2U	
Length of segment, L (mi)			--	0.06	
AADT (veh/day)	AADT _{MAX} = 32,600 (veh/day)		--	1,150	
Type of on-street parking (none/parallel/angle)			None	Parallel (Comm/Ind)	
Proportion of curb length with on-street parking			--	0.79	
Median width (ft) - for divided only			15	Not Present	
Lighting (present / not present)			Not Present	Present	
Auto speed enforcement (present / not present)			Not Present	Not Present	
Major commercial driveways (number)			--	0	
Minor commercial driveways (number)			--	0	
Major industrial / institutional driveways (number)			--	0	
Minor industrial / institutional driveways (number)			--	2	
Major residential driveways (number)			--	0	
Minor residential driveways (number)			--	0	
Other driveways (number)			--	0	
Speed Category			--	Posted Speed 30 mph or Lower	
Roadside fixed object density (fixed objects / mi)			0	122	
Offset to roadside fixed objects (ft) [If greater than 30 or Not Present, input 30]			30	11	
Calibration Factor, Cr			1.00	1.00	

Worksheet 1B -- Crash Modification Factors for Urban and Suburban Roadway Segments					
(1)	(2)	(3)	(4)	(5)	(6)
CMF for On-Street Parking	CMF for Roadside Fixed Objects	CMF for Median Width	CMF for Lighting	CMF for Automated Speed Enforcement	Combined CMF
<i>CMF 1r</i>	<i>CMF 2r</i>	<i>CMF 3r</i>	<i>CMF 4r</i>	<i>CMF 5r</i>	<i>CMF comb</i>
from Equation 12-32	from Equation 12-33	from Table 12-22	from Equation 12-34	from Section 12.7.1	(1)*(2)*(3)*(4)*(5)
1.85	1.53	1.00	0.93	1.00	2.63

Worksheet 1C -- Multiple-Vehicle Nondriveway Collisions by Severity Level for Urban and Suburban Roadway Segments									
(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Crash Severity Level	SPF Coefficients		Overdispersion Parameter, k	Initial N _{brmv}	Proportion of Total Crashes	Adjusted N _{brmv}	Combined CMFs	Calibration Factor, Cr	Predicted N _{brmv}
	from Table 12-3		from Table 12-3	from Equation 12-10		(4) _{TOTAL} *(5)	(6) from Worksheet 1B		(6)*(7)*(8)
	a	b							
Total	-15.22	1.68	0.84	0.002	1.000	0.002	2.63	1.00	0.005
Fatal and Injury (FI)	-16.22	1.66	0.65	0.001	(4) _{FI} /((4) _{FI} +(4) _{PDO})	0.001	2.63	1.00	0.002
					0.308				
Property Damage Only (PDO)	-15.62	1.69	0.87	0.001	(5) _{TOTAL} -(5) _{FI}	0.001	2.63	1.00	0.004
					0.692				

Worksheet 1D -- Multiple-Vehicle Nondriveway Collisions by Collision Type for Urban and Suburban Roadway Segments

(1)	(2)	(3)	(4)	(5)	(6)
Collision Type	Proportion of Collision Type _(FI)	Predicted N _{brmv (FI)} (crashes/year)	Proportion of Collision Type _(PDO)	Predicted N _{brmv (PDO)} (crashes/year)	Predicted N _{brmv (TOTAL)} (crashes/year)
	from Table 12-4	(9) _{FI} from Worksheet 1C	from Table 12-4	(9) _{PDO} from Worksheet 1C	(9) _{TOTAL} from Worksheet 1C
Total	1.000	0.002	1.000	0.004	0.005
		(2)*(3) _{FI}		(4)*(5) _{PDO}	(3)+(5)
Rear-end collision	0.730	0.001	0.778	0.003	0.004
Head-on collision	0.068	0.000	0.004	0.000	0.000
Angle collision	0.085	0.000	0.079	0.000	0.000
Sideswipe, same direction	0.015	0.000	0.031	0.000	0.000
Sideswipe, opposite direction	0.073	0.000	0.055	0.000	0.000
Other multiple-vehicle collision	0.029	0.000	0.053	0.000	0.000

Worksheet 1E -- Single-Vehicle Collisions by Severity Level for Urban and Suburban Roadway Segments

(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)
Crash Severity Level	SPF Coefficients		Overdispersion Parameter, k	Initial N _{brsv}	Proportion of Total Crashes	Adjusted N _{brsv}	Combined CMFs	Calibration Factor, Cr	Predicted N _{brsv}
	from Table 12-5		from Table 12-5	from Equation 12-13		(4) _{TOTAL} *(5)	(6) from Worksheet 1B		(6)*(7)*(8)
	a	b							
Total	-5.47	0.56	0.81	0.013	1.000	0.013	2.63	1.00	0.034
Fatal and Injury (FI)	-3.96	0.23	0.50	0.006	(4) _{FI} /((4) _{FI} +(4) _{PDO})	0.005	2.63	1.00	0.014
					0.416				
Property Damage Only (PDO)	-6.51	0.64	0.87	0.008	(5) _{TOTAL} -(5) _{FI}	0.008	2.63	1.00	0.020
					0.584				

Worksheet 1F -- Single-Vehicle Collisions by Collision Type for Urban and Suburban Roadway Segments

(1)	(2)	(3)	(4)	(5)	(6)
Collision Type	Proportion of Collision Type _(FI)	Predicted N _{brsv (FI)} (crashes/year)	Proportion of Collision Type _(PDO)	Predicted N _{brsv (PDO)} (crashes/year)	Predicted N _{brsv (TOTAL)} (crashes/year)
	from Table 12-6	(9) _{FI} from Worksheet 1E	from Table 12-6	(9) _{PDO} from Worksheet 1E	(9) _{TOTAL} from Worksheet 1E
Total	1.000	0.014	1.000	0.020	0.034
		(2)*(3) _{FI}		(4)*(5) _{PDO}	(3)+(5)
Collision with animal	0.026	0.000	0.066	0.001	0.002
Collision with fixed object	0.723	0.010	0.759	0.015	0.026
Collision with other object	0.010	0.000	0.013	0.000	0.000
Other single-vehicle collision	0.241	0.003	0.162	0.003	0.007

Worksheet 1G -- Multiple-Vehicle Driveway-Related Collisions by Driveway Type for Urban and Suburban Roadway Segments					
(1)	(2)	(3)	(4)	(5)	(6)
Driveway Type	Number of driveways, n_j	Crashes per driveway per year, N_j	Coefficient for traffic adjustment, t	Initial N_{brdwy}	Overdispersion parameter, k
		from Table 12-7	from Table 12-7	Equation 12-16	from Table 12-7
				$n_j * N_j * (AADT/15,000)^t$	
Major commercial	0	0.158	1.000	0.000	--
Minor commercial	0	0.050	1.000	0.000	
Major industrial/institutional	0	0.172	1.000	0.000	
Minor industrial/institutional	2	0.023	1.000	0.004	
Major residential	0	0.083	1.000	0.000	
Minor residential	0	0.016	1.000	0.000	
Other	0	0.025	1.000	0.000	
Total	--	--	--	0.004	0.81

Worksheet 1H -- Multiple-Vehicle Driveway-Related Collisions by Severity Level for Urban and Suburban Roadway Segments						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Crash Severity Level	Initial N_{brdwy}	Proportion of total crashes (f_{dwy})	Adjusted N_{brdwy}	Combined CMFs	Calibration factor, C_r	Predicted N_{brdwy}
	(5) _{TOTAL} from Worksheet 1G	from Table 12-7	(2) _{TOTAL} * (3)	(6) from Worksheet 1B		(4)*(5)*(6)
Total	0.004	1.000	0.004	2.63	1.00	0.009
Fatal and injury (FI)	--	0.323	0.001	2.63	1.00	0.003
Property damage only (PDO)	--	0.677	0.002	2.63	1.00	0.006

Worksheet 1I -- Vehicle-Pedestrian Collisions for Urban and Suburban Roadway Segments							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crash Severity Level	Predicted N_{brmv}	Predicted N_{brsv}	Predicted N_{brdwy}	Predicted N_{br}	f_{pedr}	Calibration factor, C_r	Predicted N_{pedr}
	(9) from Worksheet 1C	(9) from Worksheet 1E	(7) from Worksheet 1H	(2)+(3)+(4)	from Table 12-8		(5)*(6)*(7)
Total	0.005	0.034	0.009	0.049	0.036	1.00	0.002
Fatal and injury (FI)	--	--	--	--	--	1.00	0.002

Worksheet 1J -- Vehicle-Bicycle Collisions for Urban and Suburban Roadway Segments							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crash Severity Level	Predicted N_{brmv}	Predicted N_{brsv}	Predicted N_{brdwy}	Predicted N_{br}	f_{biker}	Calibration factor, C_r	Predicted N_{biker}
	(9) from Worksheet 1C	(9) from Worksheet 1E	(7) from Worksheet 1H	(2)+(3)+(4)	from Table 12-9		(5)*(6)*(7)
Total	0.005	0.034	0.009	0.049	0.018	1.00	0.001
Fatal and injury (FI)	--	--	--	--	--	1.00	0.001

Worksheet 1K -- Crash Severity Distribution for Urban and Suburban Roadway Segments			
(1)	(2)	(3)	(4)
Collision type	Fatal and injury (FI)	Property damage only (PDO)	Total
	(3) from Worksheet 1D and 1F; (7) from Worksheet 1H; and (8) from Worksheet 1I and 1J	(5) from Worksheet 1D and 1F; and (7) from Worksheet 1H	(6) from Worksheet 1D and 1F; (7) from Worksheet 1H; and (8) from Worksheet 1I and 1J
MULTIPLE-VEHICLE			
Rear-end collisions (from Worksheet 1D)	0.001	0.003	0.004
Head-on collisions (from Worksheet 1D)	0.000	0.000	0.000
Angle collisions (from Worksheet 1D)	0.000	0.000	0.000
Sideswipe, same direction (from Worksheet 1D)	0.000	0.000	0.000
Sideswipe, opposite direction (from Worksheet 1D)	0.000	0.000	0.000
Driveway-related collisions (from Worksheet 1H)	0.003	0.006	0.009
Other multiple-vehicle collision (from Worksheet 1D)	0.000	0.000	0.000
Subtotal	0.005	0.010	0.015
SINGLE-VEHICLE			
Collision with animal (from Worksheet 1F)	0.000	0.001	0.002
Collision with fixed object (from Worksheet 1F)	0.010	0.015	0.026
Collision with other object (from Worksheet 1F)	0.000	0.000	0.000
Other single-vehicle collision (from Worksheet 1F)	0.003	0.003	0.007
Collision with pedestrian (from Worksheet 1I)	0.002	0.000	0.002
Collision with bicycle (from Worksheet 1J)	0.001	0.000	0.001
Subtotal	0.017	0.020	0.037
Total	0.022	0.030	0.052

Worksheet 1L -- Summary Results for Urban and Suburban Roadway Segments			
(1)	(2)	(3)	(4)
Crash Severity Level	Predicted average crash frequency, $N_{\text{predicted rs}}$ (crashes/year)	Roadway segment length, L (mi)	Crash rate (crashes/mi/year)
	(Total) from Worksheet 1K		(2) / (3)
Total	0.052	0.06	0.9
Fatal and injury (FI)	0.0	0.06	0.4
Property damage only (PDO)	0.0	0.06	0.5



DRAFT MEMORANDUM

Date: September 12, 2019
To: Sharon Wright, Lamphier-Gregory
From: Sam Tabibnia, Fehr & Peers
Subject: 2715 Adeline – Transportation and Parking Demand Management Plan

OK17-0230

The proposed project is required to prepare a Transportation and Parking Demand Management (TDM) Plan per the *City of Oakland's Transportation Impact Review Guidelines* and the City's Standard Conditions of Approval. Since the Project would generate between 50 and 100 net new peak hour trips, the goal of the TDM Plan is to achieve a 10 percent vehicle trip reduction (VTR). This memorandum describes the project and setting and lists the mandatory TDM strategies that the project shall implement to achieve the 10 percent VTR.

PROJECT DESCRIPTION

The proposed project is located along the south side of 28th Street between Magnolia and Adeline Streets in West Oakland. It would consist of 106 work-live units and about 19,460 square feet of ground-level light industrial space. The project would also provide 137 automobile parking spaces and 140 bicycle parking spaces.

PROJECT LOCATION

The project would be located in West Oakland, near Downtown Oakland and within walking distance of some neighborhood-serving services, retail, and restaurants. The project is about 1.5 miles from the West Oakland, 19th Street, and MacArthur BART Stations and adjacent to bus service along Adeline Street (Route 36, with 30-minute peak headways).

The project's proximity to regional transit, employment centers, and other neighborhood amenities is likely to result in moderate rates of walking, bicycling, and transit use by residents, workers and visitors. This is evidenced in part by the travel patterns of the area's existing



residents. Based on US Census data, **Table 1** summarizes vehicle ownership for households with employed residents, and **Table 2** summarizes the commute mode split for residents in the project census tract. Although 77 percent of households with at least one employed resident have one or more vehicles, only 51 percent of employed residents drive to work, while 33 percent take public transit, and nine percent either walk or bike to work.

Table 3 summarizes the automobile trip generation for the project. Consistent with the City's guidelines, the project trip generation was reduced by about 23 percent to account for the project proximity to transit. The project is estimated to generate about 92 AM and 95 PM peak hour trips. Similarly, the project would also be expected to generate a vehicle-miles traveled (VMT) per resident that is about half of the regional average, as the residential VMT per capita in the project traffic analysis zone (TAZ) is 7.5, compared to the regional average of 15.0, as documented in the Project CEQA Analysis document.

TABLE 1
VEHICLE OWNERSHIP FOR EMPLOYED RESIDENTS

Vehicles Available	Percent of Households
No vehicle available	23%
1 vehicle available	47%
2 vehicles available	20%
3 vehicles available	9%
4 or more vehicles available	1%
Total	100%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Census Tracts 4016, Table B08203.



TABLE 2
JOURNEY TO WORK FOR EMPLOYED RESIDENTS

Transportation Mode	Percent of Households
Drive Alone	38%
Carpool	13%
Public Transit	33%
Bicycle	7%
Walking	2%
Other Modes	3%
Worked at Home	4%
Total	100%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Census Tracts 4016, Table B08006.

TABLE 3
2715 ADELINE PROJECT TRIP GENERATION BY TRAVEL MODE

Mode	Mode Share Adjustment Factors ¹	Daily	AM Peak Hour	PM Peak Hour
Automobile	76.9%	950	92	95
Transit	17.9%	220	21	22
Bike	1.9%	20	2	2
Walk	2.0%	20	2	2
Total Trips		1,210	118	122

Notes:

1. Based on *City of Oakland Transportation Impact Study Guidelines* assuming project site is in an urban environment more than 1.0 miles of a BART Station and over 10,000 people per square mile population density. Percentages do not add to 100%.

Source: Fehr & Peers, 2019.



MANDATORY TDM STRATEGIES

This section describes the mandatory strategies that shall be implemented as part of the project. These strategies shall be directly implemented by the project applicant and building management. **Table 4** lists all mandatory TDM strategies that apply to the project, as well as the effectiveness of each strategy based on research compiled in Quantifying Greenhouse Gas Mitigation Measures (California Air Pollution Control Officers Association (CAPCOA), August 2010). The CAPCOA report is a resource for local agencies to quantify the benefit, in terms of reduced travel demand, of implementing various TDM strategies.

The mandatory strategies in Table 4 are generally targeted at project residents and workers. While some of the mandatory strategies would also affect the travel behavior of visitors and customers, these groups are not directly targeted with TDM programs, because they would likely not be aware of TDM programs or visit frequently enough to make them cost effective.

The TDM strategies include both one-time physical improvements and on-going operational strategies. Physical improvements will be constructed as part of the project and are therefore anticipated to have a one-time capital cost. Some level of ongoing maintenance cost may also be required for certain improvements. Operational strategies provide on-going incentives and support for the use of non-auto transportation modes. These TDM measures have monthly or annual costs and will require on-going management.

A more detailed description of the TDM measures that comprise the mandatory TDM program is provided below:

- *Infrastructure Improvements* – the following infrastructure improvements in the vicinity of the project would improve the bicycling, walking, and transit systems in the area and further encourage the use of these modes:
 - Designate 10 feet of curb immediately north and south of the driveway on Magnolia Street as red no parking zones to ensure adequate sight distance between motorists and bicyclists traveling on the street and motorists exiting the driveway.
 - Designate 50 feet of curb on both sides of Adeline Street, north of 28th Street, as red no parking zones to ensure adequate sight distance between vehicles on the 28th Street approaches of the intersection and through vehicles on Adeline Street.



TABLE 5
MANDATORY TDM PROGRAM COMPONENTS

TDM Strategy	Description	Estimated Vehicle Trip Reduction¹
Infrastructure Improvements	Various improvements	N/A ²
Unbundled Parking	Residents are required to pay for a parking space separately from their monthly rent	4 – 8% ³
Parking Management	Restrict on-site parking to a maximum of one parking space per work-live unit, thereby discouraging multiple car ownership	
Carshare Parking Spaces	Offer to dedicate on-site carshare parking spaces	<1%
Transit Fare Subsidy	Provide transit subsidy to residents and employees	6%-10%
Bicycle Parking Supply and Monitoring	Provide bicycle parking above the minimum requirement and monitor usage of the bicycle parking facilities	<1%
Marketing and Resident Education	Active marketing of carpooling, BART, AC Transit, bikesharing, and other non-auto modes	N/A ²
Total Estimated Vehicle Trip Generation		12% – 21%

Notes:

1. The focus of the CAPCOA document is reductions to VMT but the research used to generate the reductions also indicates vehicle trip reductions are applicable as well. For the purposes of this analysis the VTR is assumed to equal the VMT reduction. See the cited CAPCOA research for more information and related information on page 8 of the BAAQMD *Transportation Demand Management Tool User's Guide* (June 2012).
2. The effectiveness of this strategy cannot be quantified at this time. This does not necessarily imply that the strategy is ineffective. It only demonstrates that at the time of the CAPCOA report development, existing literature did not provide a robust methodology for calculating its effectiveness. In addition, many strategies are complementary to each other and isolating their specific effectiveness may not be feasible.
3. CAPCOA document suggest that limited parking supply combined with unbundled parking can result in up to 20% VTR. However, the CAPCOA results assume minimal other parking facilities in the area. Thus, the CAPCOA-based results are adjusted because free unrestricted on-street parking that is often at or near capacity is available in the project area.
4. Assuming a subsidy of about \$1.75 per unit and per employee per day (value to transit user) available to all residents and employees.

Source: Fehr & Peers, 2019.



- Explore the feasibility of installing directional curb ramps with truncated domes on all corners of the Magnolia Street/28th Street. This measure shall be implemented if determined to be feasible by City staff.
- Explore the feasibility of installing directional curb ramps with truncated domes on all corners of the Adeline Street/28th Street intersections. Ensure that the improvements would not conflict with the recommended protected bike lanes on Adeline Street. This measure shall be implemented if determined feasible by City staff.
- Explore the feasibility of installing a marked yellow school crosswalk on the south approach of the Adeline Street/28th Street intersection with school crossing signage and advanced yield lines and signage on Adeline Street north and south of the intersection. This measure shall be implemented if determined feasible by City staff.
- Designate 30 feet of curb on southbound Adeline Street just south of the existing bus stop as yellow loading zones for deliveries and passenger pick-up/drop offs.
- *Unbundle Parking* – Unbundle parking costs from the work-live unit costs (as required by Oakland Municipal Code, Section 17.116.310). This would result in residents paying one price for the work-live unit and a separate price for parking, should they opt for a space. The price of a parking space can be adjusted so that parking demand matches the building's parking supply.
- *Parking Management* – Restrict parking to one parking space per work-live unit or less, thereby discouraging multiple car ownership and/or use. Exceptions will only be made for residents with management approved Reasonable Accommodation Requests. A Reasonable Accommodation Request shall need to demonstrate a hardship wherein a household requires more than one vehicle per unit. Examples could include households with multiple disabled residents requiring vehicles or households with multiple residents with places of work inaccessible via transit.
- *Carshare Parking Spaces* – Offer to dedicate for free at least two on-site parking spaces available for carsharing. Monitor the usage of the carsharing spaces and adjust if necessary.
- *Transit Fare Subsidy* – Provide a monthly transit benefit to each work-live unit. Options include providing discounted Adult 31-Day AC Transit Pass (valued at \$84.60 as of June 2019), AC Transit EasyPass, or monthly Clipper Card contributions.
- *Bicycle Parking Supply and Monitoring* – The project would exceed the City's minimum requirements for bicycle parking. Building management shall monitor the usage of these facilities and provide additional bicycle parking, if necessary.



- *Marketing and Education* – Site management shall provide work-live residents and work-live and light industrial employees information about transportation options. This information would also be posted at central location(s) and be updated as necessary. This information shall include:
 - *Transit Routes* – Promote the use of transit by providing user-focused maps. These maps provide residents with wayfinding to nearby transit stops and transit-accessible destinations and are particularly useful for those without access to portable mapping applications. The project should consider installing real-time transit information, such as TransitScreen, in a visible location to provide residents with up-to-date transit arrival and departure times.
 - *Transit Fare Discounts* – Provide information about local discounted fare options offered by BART and AC Transit, including discounts for youth, elderly, persons with disabilities, and Medicare cardholders.
 - *Car Sharing* – Promote accessible car sharing programs, such as GIG, Zipcar, and Getaround by informing residents and employees of on-site and nearby car sharing locations and applicable membership information.
 - *Ridesharing* – Provide work-live residents and work-live and light industrial employees with phone numbers and contact information for ride sharing options including Uber, Lyft, and Oakland taxicab services.
 - *Carpooling* – Provide work-live residents and work-live and light industrial employees with phone numbers and contact information for carpool matching services such as the Metropolitan Transportation Commission's 511 RideMatching.
 - *Walking and Biking Events* – Provide information about local biking and walking events, such as Oaklavia, as events are planned.
 - *Bikeshare/Scooters* – Educate residents and employees about nearby bike sharing station locations and membership information and dockless bikeshare/scooters.

MONITORING, EVALUATION AND ENFORCEMENT

According to the City's *Transportation Impact Review Guidelines*, projects generating more than 100 net new peak hour trips are required to submit an annual compliance report for the first five years following completion of the project for review and approval by the City. Since the project would generate fewer than 100 net peak hour automobile trips, the project applicant is not required to submit an annual compliance report to the City.



Please contact Sam Tabibnia (s.tabibnia@fehrandpeers.com or 510-835-1943) with questions or comments.