Draft Initial Study and Mitigated Negative Declaration

SHELL ALAMEDA DISTRIBUTION CENTER REMEDIATION PROJECT

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ACRONYMS AND ABBREVIATIONS

µg/kg	micrograms per kilogram
µg/L	micrograms per liter
µg/m^3	micrograms per cubic meter
AAQS	Ambient Air Quality Standard
ABAG	Association of Bay Area Governments
AB	Assembly Bill
ACCMA	Alameda County Congestion Management Agency
ACCWP	Alameda Countywide Clean Water Program
AC Transit	Alameda–Contra Costa Transit District
ACTC	Alameda County Transportation Commission
ACM	asbestos-containing materials
ADT	average daily trip
AFD	Alameda Fire Department
AIA	Airport Influence Area
Alameda CTC	Alameda County Transportation Commission
ALS	advanced life support
AMC	Alameda Municipal Code
AMP	Alameda Municipal Power
Annual ADT	Annual average daily trips
APD	Alameda Police Department
APE	area of potential effect
APN	Assessor Parcel Number
APCO	Air Pollution Control Officer
ARCADIS	Arcadis G&M, Inc.
AST	aboveground storage tank
ATC	ATC Associates, Inc.
AUSD	Alameda Unified School District
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
Basin	San Francisco Bay Area Air Basin

ACRONYMS AND ABBREVIATIONS (Cont'd)

bcy	banked cubic yards
bgs	below ground surface
BCDC	San Francisco Bay Conservation and Development Commission
BMP	best management practices
BTEX	benzene, toluene, ethylbenzene, and xylene compounds
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Cal FIRE	California Department of Fire and Forestry
CalGreen	California Green Building Standards
CalRecycle	California Department of Recycling and Recovery
Caltrans	California Department of Transportation
CAO	Clean-up and Abatement Order
CAPCOA	California Air Pollution Control Office Association
CARB	California Air Resources Board
CARP	Climate Action and Resiliency Plan
CCC	Central California Coast
CCR	California Code of Regulations
CCV	California Central Valley
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CDO	Cease and Desist Order
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFC	chlorofluorocarbons
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
CH_4	methane
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society

ACRONYMS AND ABBREVIATIONS (Cont'd)

CO	carbon monoxide
CO_2	carbon dioxide
COC	contaminant of concern
CRA	Conestoga-Rovers & Associates
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CTP	Countywide Transportation Plan
CWA	Clean Water Act
cy	cubic yards
dba	doing business as
dBA	A-weighted decibels
DNL	day-night average noise level
DTSC	Department of Toxic Substances Control
EBMUD	East Bay Municipal Utility District
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EMFAC	CARB's Emission Factor Model
EOP	Emergency Operations Plan
ERM	ERM-West, Inc.
ESA	Environmental Site Assessment
ESL	Environmental Screening Levels
FEMA	Federal Emergency Management Agency
FHSZ	fire hazard severity zone
FHWA	Federal Highway Administration
FMP	Fisheries Management Plan
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GSA	groundwater sustainability agencies
GSP	groundwater sustainability plan

ACRONYMS AND ABBREVIATIONS (Cont'd)

HAPC	habitat areas of particular concern
HASP	Health and Safety Plan
HCP	Habitat Conservation Plan
HCFC	hydrochlorofluorocarbons
HLA	Harding Lawson Associates
HSC	Health and Safety Code
H_sS	Hydrogen Sulfide
ICES	Innovative and Creative Environmental Solutions
ICS	Innovative Construction Solutions
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
LBP	lead-based paint
lbs/day	pounds/day
LCFS	Low Carbon Fuel Standard
L_{eq}	equivalent sound level
LCP	lead-containing paint
L_{max}	instantaneous maximum noise level for a specified period of time
LOS	Level of Service
LRA	local responsibility area
LTCP	Low Threat Underground Storage Tank Case Closure Policy
LUC	Land Use Covenant
LUST	Leaking Underground Storage Tank
mgd	million gallons per day
mg/kg	milligrams/kilogram
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
MRP	Municipal Regional Stormwater NPDES Permit
MS4	municipal separate storm sewer systems
MSL	mean sea level
MTC	Metropolitan Transportation Commission
MT CO_2e	metric tons of carbon dioxide equivalent

ACRONYMS AND ABBREVIATIONS (Cont'd)

M-1	Intermediate Industrial (Manufacturing) District
M-2	General Industrial (Manufacturing) District
MU-4	Medium Density ResidentialMU-6 Specified Mixed Use
MWWTP	Main Wastewater Treatment Plant
M-X	Mixed Use
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plans
ND	Negative Declaration
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NOAA	National Oceanic Atmospheric Association
NPDES	National Pollutant Discharge Elimination System
NWIC	Northwest Information Center
O_3	ozone
OAK	Oakland International Airport
OPR	State of California Governor's Office of Planning and Research
Order	San Francisco Bay RWQCB Site Cleanup Requirements Order
OSHA	Occupational Safety and Health Administration
PAH	polycyclic aromatic hydrocarbons
PDA	priority development area
PFMC	Pacific Fishery Management Council
PG&E	Pacific Gas and Electric
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppb	parts per billion
PPE	personal protective equipment
ppm	parts per million

ACRONYMS AND ABBREVIATIONS (Cont'd)

ppt	parts per thousand
PRC, Inc.	PRC Environmental Management, Inc.
R-3	Garden Residential District
R-4	Neighborhood Residential District
R-4-PD	Planned Development Combining District
RAP	Remedial Action Plan
ROG	Reactive Organic Gas
RPS	Renewables Portfolio Standard
RTP/SCS	Regional Transportation Plan and Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SAP	Sampling Analysis Plan
SB	Senate Bill
SFBAAB	San Francisco Bay Area Air Basin
SGMA	Sustainable Groundwater Management Act
SMP	Soil Management Plan
SO_2	sulfur dioxide
SOPUS	Pennzoil-Quaker State Company dba SOPUS Products
SO_x	sulfur oxides
SPH	separate phase hydrocarbon
SR	State Route
SSC	species of special concern
SWMP	Stormwater Monitoring Plan
SWPPP	Stormwater Pollution and Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TBA	tertiary butyl alcohol
TCP	Traffic Control Plan
TPH	total petroleum hydrocarbons
TPHd	total petroleum hydrocarbons (diesel)
TPHg	total petroleum hydrocarbons (gasoline)

ACRONYMS AND ABBREVIATIONS (Cont'd)

TPHmo	total petroleum hydrocarbons (motor oil)
TRPH	total recoverable petroleum hydrocarbons
TSDF	Treatment, Storage, and Disposal Facilities
UCMP	University of California Museum of Paleontology
USA	Underground Service Alert
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zone
VdB	vibration decibels
VIMS	vapor intrusion mitigation system
VMT	vehicle miles traveled
VOC	volatile organic compound
WEAP	Worker Environmental Awareness Program
WHSRN	Western Hemisphere Shorebird Reserve
WMTP	Waste Management and Transportation Plan
Wood	Wood Environment & Infrastructure Solutions, Inc.
WSMP	Water Supply Management Program 2040 Plan

1.0 INTRODUCTION

This Initial Study (IS) has been prepared to address the potential environmental impacts of the proposed Shell Alameda Distribution Center Remediation Project (Project).

This IS has been prepared in accordance with California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations [CCR] Section 15000 et seq.). Under CEQA, the lead agency is the public agency with primary responsibility over approval of a proposed Project. Pursuant to CEQA Guidelines Section 15367, the lead agency for the proposed Project is the San Francisco Bay Regional Water Quality Control Board (RWQCB). The San Francisco Bay RWQCB will consider the information in this IS when determining whether to approve and issue appropriate permits for the proposed Project. Responsible agencies, which have discretionary approval power over the proposed Project include the County of Alameda, City of Alameda, the Bay Area Air Quality Management District, East Bay Municipal Utility District (EBMUD), and the California State Water Board (see Section 2.13, *Other Public Agencies Approvals*).

CEQA requires that the potential environmental impacts of a project be evaluated and disclosed to the public and decision-makers prior to implementation. Preparation of an IS guided by CEQA Guidelines Section 15063, whereas CEQA Guidelines Sections 15070–15075 outline the process for preparing a Negative Declaration (ND) or a Mitigated Negative Declaration (MND). Where appropriate and supportive to an understanding of the issues, reference will be made to the statute, the CEQA Guidelines, and/or appropriate case law. This IS includes a discussion of the potential environmental impacts of the proposed Project and identifies standard construction-related best management practices (BMPs) and required mitigation measures, as necessary. The San Francisco Bay RWQCB has determined that a MND is the appropriate level of CEQA-compliant documentation for the proposed Project because the potential environmental impacts resulting from proposed Project implementation would be reduced below the applicable significance thresholds with the implementation of all required mitigation measures.

Document Organization

This Initial Study/Mitigated Negative Declaration (IS/MND) is organized as follows:

Chapter 1: Introduction provides an overview of CEQA and describes the purpose and organization of this IS/MND.

Chapter 2: Project Description and Background describes the purpose of and need for the proposed Project, identifies the goals and objectives for the proposed Project, and provides a detailed description of each phase of the proposed remediation, including: mobilization; limited demolition of existing on-site buildings and aboveground storage tank (AST) removal; excavation, import/export, and backfilling; demolition of remaining on-site buildings, and demobilization of post-remediation equipment.

Chapter 3: Environmental Checklist presents the environmental analysis for each issue area identified in Appendix G, *CEQA Environmental Checklist* of the CEQA Guidelines and determines whether the proposed Project would result in no impact, a less than significant impact, a less than significant impact with mitigation incorporated, or a potentially significant impact. As

described further in Chapter 3, *Environmental Checklist*, with the implementation of all required mitigation measures, the proposed Project would not result in any potentially significant and unavoidable impacts.

Chapter 4: References lists the references used in preparation of this IS/MND.

Chapter 5: List of Preparers identifies San Francisco Bay RWQCB, Pennzoil-Quaker State Company, doing business as (dba) SOPUS Products (SOPUS), and Wood Environment & Infrastructure Solutions, Inc. (Wood) staff involved in the preparation of the IS/MND.

2.0 PROJECT DESCRIPTION

1. Project Title:

Shell Alameda Distribution Center Remediation Project

2. Lead Agency Name and Address

San Francisco Bay RWQCB
Groundwater Protection Division
1515 Clay Street, Suite 1400
Oakland, CA 94612

3. Contact Persons and Phone Number

Alyx Karpowicz, P.G., San Francisco Bay RWQCB: (510) 622-2427

4. Project Location

The proposed Shell Alameda Distribution Center Remediation Project is located at 2015 Grand Street within the northeastern portion of Alameda Island in the City of Alameda, Alameda County, California (see Figure 2-1). The Project is located approximately 400 feet southwest of the Oakland inner harbor and approximately 600 feet southeast of the Fortmann Basin. The Project site consists of 4.1 acres including Assessor Parcel Number (APN) 72-381-1 (3.4 acres) and APN 72-381-2 (0.74 acre) (see Figure 2-2).

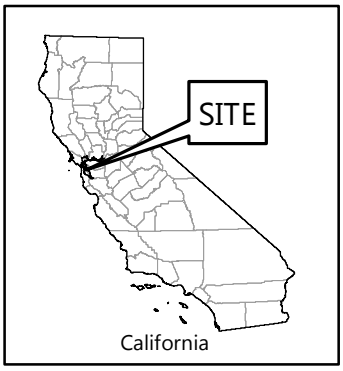
Regional access to the City of Alameda is provided by Interstate 880 (I-880) through Oakland, which is the nearest freeway to the Project site. Local access to the Project site is provided via State Route (SR-) 61 through the Webster-Posey Tubes, Park Street Bridge, Miller Sweeny Bridge/Fruitvale Bridge, and the High Street Bridge, which each connect Alameda Island and the City of Oakland.

5. Existing Operations

Pennzoil-Quaker State Company dba SOPUS Products (SOPUS) has owned and operated the Project site since 1951 as a blending, packaging, and distribution center for bulk and packaged petroleum-based lubricant products (i.e., motor oil). SOPUS ceased blending and packaging operations in 1995 and currently only distributes bulk and pre-packaged industrial lubricants. The northeastern portion of the Project site consists of the main administrative and warehouse building, three additional connected warehouses, storage yard, loading docks, and maintenance building and covered carport (see Photograph 1; see Figure 2-3).

Photograph 1. *View from Grand Street of the entrance to the main warehouse and administrative building of the Shell Alameda Distribution Center*

Street map from ESRI, 2007. Aerial image from NAIP, 2018.



N

0 5,000 Feet

REGIONAL VICINITY MAP
Initial Study/Mitigated Negative Declaration
Shell Alameda Distribution Center Remediation Project
2015 Grand Street
Alameda, California

wood.	By: KLU	Prj. No. 8620192890.09
	Date: 04/07/2020	Figure **2-1**

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Explanation

- Designated Truck Routes
- Business Park
- Low-Density Residential
- Medium-Density Residential
- Neighborhood Business
- Community Commercial
- Office
- Mixed Use
- General Industry
- Commercial Recreation
- Parks & Public Open Space
- Public/Institutional/School
- Federal Facilities

N

0 1,000 Feet

NAIP Aerial, Orthorectified, dated 2018.

PROJECT VICINITY MAP
Initial Study/Mitigated Negative Declaration
Shell Alameda Distribution Center Remediation Project
2015 Grand Street
Alameda, California

wood.

By: KLU
Date: 04/20/2020
Prj. No. 8620192890.09
Figure **2-2**

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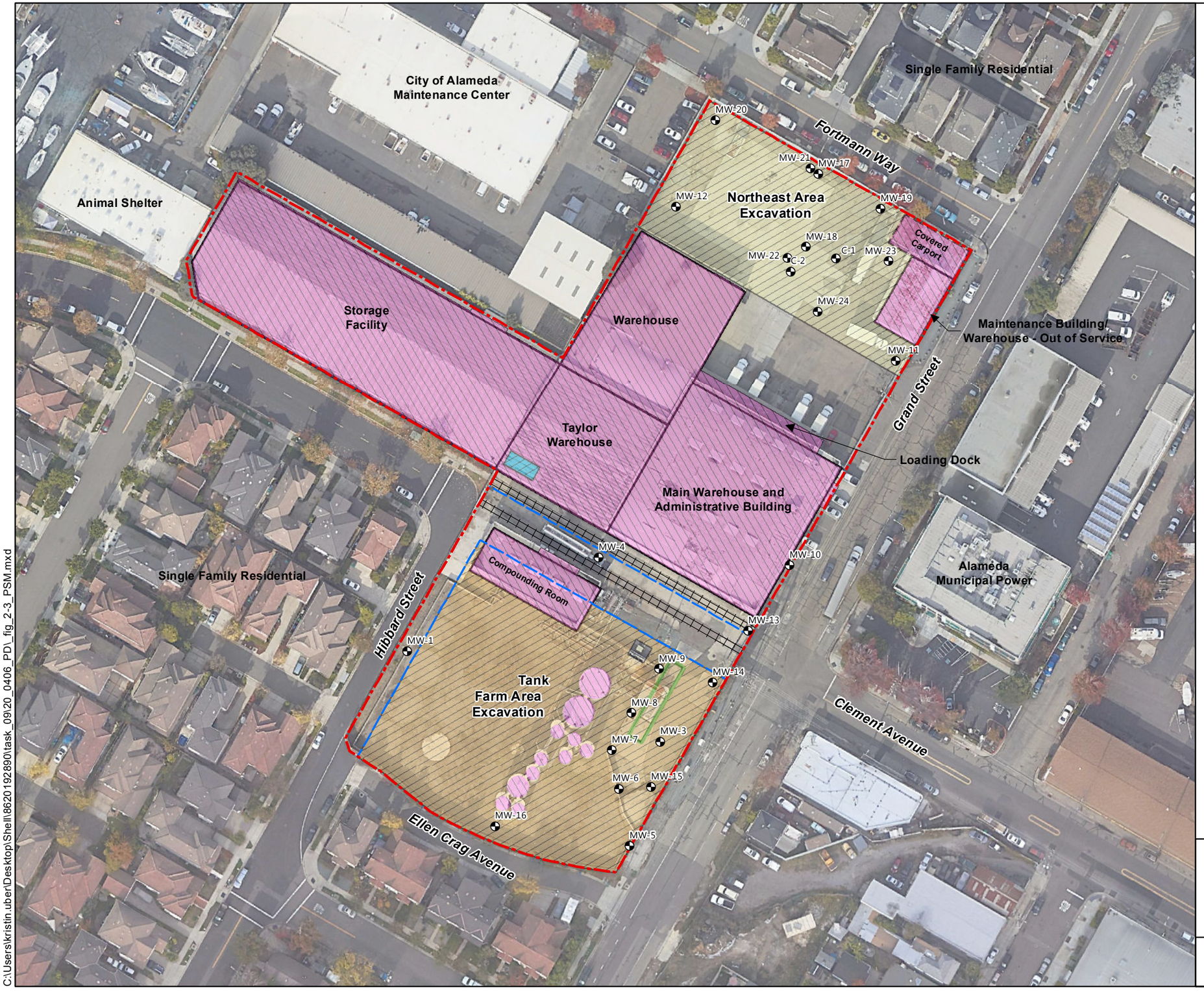

Explanation

- Groundwater monitoring well
- Railroad Tracks
- Approximate future street boundary
- Truck scale (to be excavated)
- Excavate to 3-foot depth
- Excavate to 6-foot depth
- Former UST area and washrack (~100CY excavation allowance)
- Demolition area
- Approximate Site Boundary

Abbreviations:
COC chemical of concern
ESL Environmental Screening Level

Notes:
1. Excavation extents in the Former Tank farm Area exclude areas of anticipated future construction of Hibbard Street and Clement Avenue. Above-ground structures and hardscape (including the railroad tracks) in these areas will be demolished and removed. Above- and below-ground piping associated with the Compounding Room will be removed, cleaned, and recycled.
2. Cleanup goals for site COCs are recommended to be based on residential direct-exposure risk ESLs for soil, and residential risk pathway for soil gas in areas of the site to be redeveloped for residential use. Cleanup goals for site COCs are recommended to be based on construction worker direct-exposure risk ESLs for soil.

N

0 40 80 Feet

Background image ©Google Earth, dated October 2018.

PROJECT SITE MAP
Initial Study/Mitigated Negative Declaration
Shell Alameda Distribution Center Remediation Project
2015 Grand Street
Alameda, California

wood.

By: KLU	Prj. No. 8620192890.09
Date: 04/20/2020	Figure 2-3

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Former gasoline and diesel underground storage tanks (USTs) and a dispenser island were located in the central portion of the storage yard and removed in 1985. Two steel USTs were located within one warehouse, referred to as the Taylor Warehouse, and removed in 1996. No USTs remain at the Project site (Conestoga-Rovers & Associates [CRA] 2015).

The southwestern portion of the Project site contains a compounding building, piping infrastructure, 11 remaining ASTs, truck and rail loading area/scale, and abandoned rail lines that extend along a vacated portion of Clement Avenue (see Photograph 2; see Figure 2-3). Small excavations were performed in 2002 that removed approximately 410 cubic yards (cy) of impacted soil in selected areas near the tank farm, in addition to 22 smaller excavations around the ASTs within the tank farm. The excavation depths ranged from 4 to 6 inches below ground surface (bgs) (Arcadis G&M, Inc. [ARCADIS] 2003).

Photograph 2. *View from the Ellen Crag Avenue and Grand Street intersection of the remaining 11 ASTs within the tank farm situated in the southwestern portion of the Project site. The truck scale and main warehouse are visible in the background.*

The tank farm originally contained 48 ASTs, 37 of which were removed in 2013, leaving 11 remaining active ASTs. Of the original 48 ASTs, 44 of them contained petroleum base oils, lubricant additives and finished lubricant products. Four contained collected rainwater. The remaining 11 ASTs currently contain finished lubricant products and have a combined capacity of 315,137 gallons: one 14,137-gallon AST; two 15,000-gallon ASTs; five 20,000-gallon ASTs; one 51,000-gallon AST; and two 60,000-gallon ASTs. The ASTs measure 10 feet to 24 feet in diameter up to 30 feet in height. They are surrounded by a 4-foot-high concrete secondary containment retaining wall, except for the portion of the wall adjacent to the compounding building. The ground surface in the southwestern portion of the Project site within the retaining wall around the tank farm is covered with gravel on top of 3 to 4 feet of fill. Approximately 0.75 feet of concrete and 3 to 4 feet of fill cover the majority of the remaining areas of the southwestern portion of the Project site. The north and south sides of the Project site are separated by a large warehouse building. Outdoor security lighting is located throughout the Project site.

Table 2-1 presents the approximate square footage of the facilities within the Project site.

Table 2-1. Site Characteristics

Site Feature	Approximate Area	
	Square Feet	**Acres**
Project site	178,596	4.1
Mobilization/Staging Area[1]	39,000	0.8
Demolition Area (buildings only)	68,100	1.5
Excavation Area[2]	88,000	2.0
Structures to be Demolished[3]	**Square Feet**	**Acres**
Administrative Office Building (along Grand Street)	7,000	0.16
Main Warehouse	15,300	0.35
Lower Warehouse ("Taylor Warehouse")	10,600	0.26
Concrete Pad (associated with former Laboratory)	3,000	0.07
North Warehouse	7,800	0.18
Storage Facility	17,000	0.39
Compounding Building	5,000	0.11
Maintenance Shop (includes covered carport)	2,400	0.06
Tank Farm	**Quantity**	
AST Area	11	
Loading Dock	2,500 SF Ramp/Rail	

Source: Wood 2020.

Notes:

SF – square foot

[1] – Mobilization area consists of the parking area north of the two warehouse structures and Fortmann Way.

[2] – Excavation area consists of 31,500 SF in the northeast portion of the Project site and the 56,500-SF former tank farm area.

[3] – Building sizes are based on the 2014 Asbestos and Lead Paint Survey Report prepared by ERM-West, Inc. (ERM).

Former USTs containing gasoline and diesel fuel contributed to shallow soil and subsequent groundwater contamination in the northeastern portion of the Project site. Accidental product spills associated with leaking and overfilling ASTs also contributed to shallow soil contamination and groundwater impacts in the tank farm area in the southwestern portion of the Project site. While small scale excavations removed impacted soil within the vicinity of the tank farm in 2002, soil contamination and groundwater consisting of total petroleum hydrocarbons (TPH) as gas, diesel, and motor oil (TPHg, TPHd, TPHmo); and benzene, toluene, ethylbenzene, and xylenes (BTEX) remain throughout the Project site within the shallow soils approximately 2 to 4 feet bgs (Consulting Engineers 1985; ARCADIS 2005; CRS 2015). Limited groundwater contamination consisting of TPHg, TPHd, TPHmo; and BTEX is present due to the high groundwater levels in the vicinity that range from approximately 1 to 4 feet bgs. Additionally, numerous groundwater monitoring wells were previously installed throughout the Project site but have since been destroyed at the start of June 2020.

The entire Project site originally consisted of marshlands that were later filled with a mixture of man-made refuse, bay mud, sand dredged from San Francisco Bay, and imported fill material.

The area in the vicinity of the Project site is underlain by fat clay that ranges in thickness from a few inches to 95 feet (U.S. Geological Survey [USGS] 1959).

6. Land Use and Zoning

The Project site is designated for "Specified Mixed Use" (MU-6) in the 2016 City of Alameda General Plan (City of Alameda 2016). This land use designation covers the northern waterfront between Grand Street to Sherman Street. Permitted land uses include residential, commercial, and office and retail uses. Areas to the east of the Project site are designated as "Specified Mixed Use" (MU-4) and "Medium Density Residential." Permitted land uses in the MU-4 district include residential, office, and industry uses. Areas to the south of the Project site are designated as " Medium Density Residential." The Project site is zoned as "R-4 Neighborhood Residential" within the "Planned Development" Combining District (R-4-PD) pursuant to the City of Alameda Zoning Map and Ordinance (City of Alameda 2019a).

7. Surrounding Land Uses and Setting

The Project site is bound by residential housing to the southwest and northeast (which appears to have been constructed in 2011 based on a review of aerial photographs), commercial properties to the northwest (including an animal shelter and City of Alameda maintenance service center), and light industrial/commercial properties to the southeast (construction supply, Alameda Municipal Power offices) (see Photograph 3). Fortmann, Grand, and Alameda Marinas are located north of the Project site, beyond residential housing and commercial and light industrial properties.

Photograph 3. *View of surrounding residential housing along Clement Avenue. The residential housing is located to the southwest and northeast of the Project site.*

The nearest sensitive receptors consist of single-family residences situated approximately 50 feet to the north, south, and west of the Project site. There are no schools, day cares, or hospitals located within a 0.25-mile radius of the Project site, and no drinking water or irrigation wells within a 0.50-mile radius of the Project site.

8. Project Background

The Project site is regulated under the San Francisco Bay RWQCB Groundwater Protection Division, Aboveground Petroleum Storage Tank program. On December 16, 1998, the San Francisco Bay RWQCB issued Site Cleanup Requirements Order (Order) No. 98-121 due to soil and subsequent groundwater contamination at the Project site (San Francisco Bay RWQCB 1998). The Order included a Categorical Exemption from CEQA, but did not consider source removal activities, such as soil excavation. The Order also did not establish cleanup levels for on-site soil and groundwater contamination; therefore, a Remedial Action Plan (RAP) describes proposed contamination source removal activities.

Previous Investigations

Environmental investigations at the Project site date to 1981 when test borings were drilled near the original ASTs in the southwestern portion of the Project site to determine whether there was soil contamination. Numerous site investigations have occurred over the past 40 years. The previous environmental investigations and remediation activities are summarized below:

- **1985 Gasoline Leak:** In March 1985, petroleum constituents were detected in a pit for the installation of an oil-water separator adjacent to the maintenance building in the northeastern portion of the Project site. The petroleum constituents were concentrated in a layer approximately 18-inches thick at a depth between 2 and 5 feet bgs. The petroleum constituents were analyzed and found to be gasoline. Both the diesel and gasoline UST systems were tested, but only the diesel system was shown as leaking, and the constituents were analyzed and found to be gasoline. Both the diesel and gasoline systems were emptied pending further investigation. In June 1985, two monitoring wells were installed to assess soil and groundwater conditions. The highest gasoline constituent concentrations were detected at approximately 4 to 5 feet bgs and decreased with depth. Diesel was not detected in the soil and groundwater samples collected. Investigation results are summarized in the *September 3, 1985 Phase I Groundwater Quality Investigation Report* prepared by Cooper Engineers. Both the gasoline and diesel USTs and all associated product piping were removed during October 1985.
- **March 1990 Spill:** Approximately 3,000 gallons of a nonvolatile, hydro-finished petroleum lubricant oil was spilled after a tank was overfilled. The spill was cleaned up by removing free oil from the bermed area and approximately 11,200 gallons of a waste oil/water mixture was removed for recycling during the cleanup activities. Subsequent soil sampling was completed and TPH concentration in soil ranged from 2,200 to 32,000 milligrams per kilogram (mg/kg). These activities are summarized in a June 14, 1990 correspondence prepared by SOPUS.
- **1995 Investigation:** During July 1995, several monitoring wells and soil borings were drilled within the tank farm area. TPH-extractable (motor oil range hydrocarbons, or TPHmo) was detected at concentrations exceeding 1,000 mg/kg only in certain soil samples, including a boring that was drilled in the area of the 1990 spill incident. With the exception of one xylene detection, benzene, toluene, and ethylbenzene were not detected in any soil samples. TPHmo was detected in the tank farm monitoring wells at concentrations ranging from 600 to 1,800 micrograms per liter (µg/L). Results of the investigation are summarized in the *October 20, 1995 Site Investigation and Groundwater Monitoring Report* prepared by PRC Environmental Management, Inc. (PRC Inc.).
- **1996 Investigation:** In May 1996, five monitoring wells were installed southeast of the tank farm area. TPHmo were detected in soil samples collected at concentrations ranging from 10 to 740 mg/kg. Polycyclic aromatic hydrocarbons (PAHs) were not detected in any soil samples. Pumping was performed from extraction wells installed in 1990 and it was determined that the water in the extraction wells was a result of residual surface water runoff, (not groundwater) and contained approximately 0.25 inch of oil product.

Investigation activities are summarized in the *July 10, 1996 Phase II Groundwater Monitoring System Installation Report* prepared by PRC Inc.

- **1996 UST Removal:** In 1996, two steel tanks were removed from the Taylor Warehouse, adjacent and northeast of the tank farm area. The tanks contained virgin automatic transmission fluid and virgin motor oil and were classified as flow-through process tanks used as transfer basins from a filling line. The removed tanks were in excellent condition with no signs of leaking. Soil and groundwater samples collected from the base of the tank excavation contained 4,500 mg/kg total recoverable petroleum hydrocarbon (TRPH) and a water sample contained 170,000 µg/L TRPH. Analyses concluded that contamination originated from the adjacent tank farm as the tanks were in good condition upon removal. These activities are summarized in the *February 11, 1997 Tank Removal Summary Report* prepared by PRC Inc.
- **1998 Supplemental Investigation Report:** During September 1998, Harding Lawson Associates (HLA) drilled five soil borings northeast of the tank farm area and three soil borings within the Taylor Warehouse. Near surface samples were also collected from stained areas within the tank farm. Results of the investigation are summarized in the *December 10, 1998 Supplemental Investigation Report* prepared by HLA.
- **1998 Site Cleanup Requirements Order 98-121:** San Francisco Bay RWQCB issued the cleanup order for the Project site on December 16, 1998.
- **1999 Separate Phase Hydrocarbon (SPH) Detections:** On April 12, 1999 a dark brown liquid was observed in a monitoring well. An absorbent sock was placed in the well and replaced several times, as the socks showed oil. A summary of these detections is included in the *July 28, 1999 Second Quarter 1999 Monitoring Report* prepared by HLA.
- **2000 Investigation:** In August 2000, HLA prepared a report that recommended shallow excavation in three areas of the Project site. Innovative and Creative Environmental Solutions (ICES) drilled soil borings and collected soil and groundwater samples; the results are summarized in the *January 8, 2001 Limited Site Investigation Report* prepared by HLA.
- **2002 Excavation:** In 2002, ARCADIS excavated approximately 410 cy of soil from the tank farm area. Excavation depths ranged from 6 inches to 4 feet bgs. These activities are summarized in the *January 31, 2003 Revised Soil Excavation Report* prepared by ARCADIS.
- **2003 Phase I Environmental Site Investigation:** ATC Associates Inc. prepared an *April 8, 2003 Phase I Environmental Site Assessment (ESA)*. According to the Phase I ESA, the Encinal Marina property, located at 2051 Grand Street, approximately 160 feet north-northeast of the Project site, has the potential to have an adverse environmental impact on the Project site. The Encinal Marina property had a past release to groundwater of petroleum products (gasoline) that was not defined.
- **2003 Investigation:** During June 2003, ATC Associates, Inc. (ATC) drilled borings to collect soil and grab groundwater samples. The highest dissolved petroleum constituents

were detected in the groundwater sample collected near the storage yard near the maintenance building, which contained 3,800 µg/L TPH as TPHg, 1,200 µg/L benzene, and 2,200 µg/L tertiary butyl alcohol (TBA). Results of the investigation are summarized in the *Limited Phase II ESA* prepared by ATC.

- **2004/2005 Investigations:** In 2004 ARCADIS drilled soil borings, and in 2005 installed three monitoring wells at the Project site. The investigation concentrated on the northeastern portion of the Project site. ARCADIS also conducted a study to evaluate the influence of tidal fluctuations from the San Francisco Bay, and reviewed records for nearby properties for any potential off-site sources. The analytical results indicated that most of the contamination within the Project site was located between the maintenance building and the former gasoline and diesel USTs. The extent of contamination was defined to non-detect results to the east, south, and west perimeters of the investigation area. Results from the tidal study indicated that, although tidal fluctuations of the San Francisco Bay affect groundwater elevations, the magnitude of the effects are minimal and not enough to affect the direction of groundwater flow. Several off-site sources were also identified and are discussed in the *December 23, 2005 Benzene Subsurface Investigation Report* prepared by ARCADIS.
- **2013 AST Removal:** In 2013, 37 ASTs were removed from the tank farm area, leaving the remaining 11 active ASTs. No indication of soil contamination was observed during the AST removal activities.
- **2014 Conceptual Site Model and Work Plan:** In 2014, CRA evaluated site contamination in four areas of concern in the Project site: the former UST area in the northern portion, Taylor Warehouse, Clement Avenue area between the tank farm and Taylor Warehouse, and tank farm area. CRA compared constituent concentrations in the soil to the San Francisco Bay RWQCB Environmental Screening Levels (ESLs) and the State Water Board Low-Threat UST Case Closure Policy (LTCP). The LTCP sets screening levels for benzene, ethylbenzene, naphthalene, and PAHs, as these constituents are considered the primary risk-driving compounds at petroleum-impacted sites. CRA compared historical TPH results to the applicable ESLs in addition to comparisons to the LTCP screening levels. In the former UST area, TPH and benzene was undefined in soil samples. In the Taylor Warehouse, TPH remaining in the soil in the vicinity of the former USTs was limited in extent. In the Clement Avenue area, none of the TPH concentrations detected in the soil exceeded the construction worker direct exposure ESL, but TPH concentrations exceed commercial direct exposure ESL in some soil samples. One soil sample also exceeded the Tier 1 ESL. Naphthalene and PAHs in the soil did not exceed commercial limits in the LTCP and no benzene or ethylbenzene was detected in the soil. In the tank farm area, TPH was defined in the southeast, south, northeast, and northwest. TPH concentrations were near or below applicable ESLs in perimeter groundwater wells (CRA 2015).
- **2014 Asbestos and Lead Paint Survey Report:** ERM performed a comprehensive asbestos survey and lead paint sampling at the Project site. Asbestos-containing material (ACM) was identified in the administrative office building, main warehouse, Taylor warehouse, former laboratory (now a concrete building pad), north warehouse, storage

facility, and compounding building. Lead-based paint (LBP) was identified in the administrative office building, and Taylor warehouse. Lead-containing paint (LCP) was identified in the administrative office building, main warehouse, Taylor warehouse, storage facility, and the compounding building.

- **2015 Site Investigation Report – Former UST Area:** CRA conducted a well survey and drilled soil borings in the former UST area to confirm TPH, benzene, and ethylbenzene concentrations and to delineate the contaminants of concern (COCs) in soil and groundwater north and northeast of the former UST area. COCs in the former UST area defined in soil and groundwater and did not pose a threat to current on-site commercial occupants and off-site residential occupants.
- **2018 Closure Request:** On behalf of SOPUS, AECOM (2018) indicated the Project site meets the requirements for low threat closure, and in 2018 recommended full site closure. As the Project site is mostly capped with concrete, asphalt, and existing infrastructure and locations where soil exceeded LTCP screening levels for direct contact are limited, a Soil Management Plan (SMP) was proposed to address future site excavations that would allow for removal and proper handling of soil currently beneath hard cap or existing infrastructure.
- **2019 Northeast Area Investigation Report:** The northeast area investigation was completed by Wood (Wood 2019) and included an evaluation of COCs in soil borings, groundwater monitoring wells, and six soil vapor probes. TPHs were detected in all soil borings and exceeded one or more of the Tier 1 ESLs. With the exception of one soil boring, these exceedances were limited to the samples collected at 2 feet bgs, but one sample collected at 4 feet bgs exceeded the Tier ESL for TPHg. TPHg was present in all six gas samples and exceeded the Tier 1 ESL. TPHg, TPHd, and TPHmo were also detected in all five groundwater samples, except for one monitoring well. Several volatile organic compounds (VOCs) were detected in soil, gas, and groundwater samples, with some results exceeding the respective Tier 1 ESLs. In general, VOC results for soil samples correlated with the TPH results for soil, with Tier 1 ESL exceedances primarily occurring in samples collected at 2 or 4 feet bgs. VOCs were also detected in gas samples with results for benzene, ethylbenzene, 1-2-dichloroethane, and tetrachloroethene exceeding Tier 1 ESLs in one or more samples. The results for BTEX compounds and naphthalene in groundwater also exceeded their respective Tier 1 ESLs. Additional information is summarized in the *Northeast Area Investigation Report* (Wood 2019).

In summary, based on the recent site investigations TPH and BTEX compounds are present in shallow soil and groundwater in the northeastern portion of the Project site, and TPH compounds are present in the area around the former USTs in the Taylor Warehouse and in the soils in the vicinity of the tank farm in the southwestern portion of the Project site. These investigations were used to direct removal of COCs identified at the Project site during prior remediation activities and to develop the RAP.

Project Goals and Objectives

The primary remedial action objectives of the RAP and proposed demolition and soil removal activities for the Project site are summarized below:

- Demolition and removal of existing on-site buildings, aboveground features, and hardscape (asphalt and concrete) within excavation extents;
- Excavation and removal of contaminated soil impacted with COCs in the maintenance yard, former UST area, wash area in the Taylor Warehouse, and tank farm; and
- Confirmation that the extent of excavation within the Project site and to the anticipated depths to groundwater have adequately removed source area COC impacts in soil to proposed ESL cleanup goals.

9. Proposed Project

The proposed Project would involve the demolition of existing pavement, buildings, and other infrastructure on the Project site, destruction of existing groundwater monitoring wells, soil excavation and offsite disposal, and backfill with clean fill. The San Francisco Bay RWQCB issued Site Cleanup Requirements Order No. 98-121 for the Project site, which included a categorical exemption from CEQA, but did not consider source removal activities such as soil excavation that are part of the proposed Project.

Prior to remediation activities, soil test pits were excavated across the Project site to determine groundwater depths and infiltration rates, and to conduct waste profiling according to a Sampling and Analysis Plan (SAP) developed for the Project site. Soil test pitting and waste profiling were conducted to inform the design and sequencing of the remedial excavation and on-site dewatering, if required.

Once soil test pitting and waste profiling are completed, construction activities associated with remediation of the contaminated soil would consist of: mobilization and staging of construction equipment; demolition and removal of existing on-site pavement, buildings, and other infrastructure (e.g., ASTs); excavation and removal of contaminated soil, dewatering during excavation, import of clean backfill, and compaction and re-grading to pre-excavation elevations; and demobilization (see Figure 2-3). The proposed Project activities would occur in the following five phases:

- **Phase 1:** Mobilization;
- **Phase 2:** Limited demolition of existing pavement, buildings, and other infrastructure;
- **Phase 3:** Excavation, dewatering, backfilling and compaction, and grading;
- **Phase 4:** Demolition of remaining on-site buildings and warehouses; and
- **Phase 5:** Demobilization of post-remediation equipment.

Construction activities would involve: the operation of heavy equipment; vehicle parking, and construction equipment and material storage; and heavy haul truck traffic along Grand Street, Clement Avenue, and SR-61. These construction phases and activities support the cleanup objectives and strategy summarized in the proposed RAP and support site closure.

SOPUS proposes cleanup goals for the northeastern portion of the Project site that correspond with residential direct-exposure ESLs for soil. Soil containing residential direct-exposure exceedances of TPHg and TPHd, and BTEX would be removed from the northwestern portion of the Project site to approximately 6 feet bgs. SOPUS proposes cleanup goals for the Clement Avenue thoroughfare and Hibbard Street expansion portions of the Project site based on construction worker direct-exposure soil ESLs. Soil that exceeds construction worker direct-exposure ESLs of TPHd would be removed from the portion of Project site near Clement Avenue and Hibbard Street. SOPUS proposes cleanup goals for the southwestern portion of the Project site (comprising the tank farm) that correspond with residential direct-exposure ESLs for soil. Soil that exceeds residential direct-exposure ESLs of TPHg and TPHmo would be removed from the southwestern portion of the Project site to approximately 3 feet bgs.

What are Environmental Screening Levels? *ESLs are non-regulatory and conservative screening levels for evaluating cleanup requirements at sites with contaminated soil and groundwater. They are established by the San Francisco Bay RWQCB and are intended to expedite the identification and evaluation of potential environmental concerns at contaminated sites. They address a range of media (e.g., soil, groundwater, soil gas, and indoor air) and a range of concerns (e.g., impacts to drinking water, vapor intrusion, impacts to aquatic habitat). In 2019, the San Francisco Bay RWQCB updated the ESLs (RWQCB 2019).*

The proposed cleanup goals for soil are listed below in Table 2-2.

Table 2-2. Proposed Soil Cleanup Goals

Chemical of Concern	Residential Soil Cleanup Goal (mg/kg)	Basis for Residential Cleanup Goal	Construction Soil Cleanup Goal (mg/kg)	Basis for Construction Cleanup Goal
Benzene	0.33	Direct Exposure, Cancer Risk	33	Direct Exposure
Toluene	1,100	Direct Exposure, Non-Cancer Risk	4,700	Direct Exposure
Ethylbenzene	5.9	Direct Exposure, Cancer Risk	540	Direct Exposure
Xylenes	580	Direct Exposure, Non-Cancer Risk	2,400	Direct Exposure
TPHg	430	Direct Exposure, Non-Cancer Risk	1,800	Direct Exposure
TPHd	260	Direct Exposure, Non-Cancer Risk	1,100	Direct Exposure
TPHmo	12,000	Direct Exposure, Non-Cancer Risk	54,000	Direct Exposure

Source: Wood 2020 (see Appendix D).

Mobilization

The first Project phase would involve mobilization and staging of demolition/construction equipment and materials. All equipment and materials would be delivered and staged within the

concrete slab and asphalt parking area within the northeastern portion of the Project site near existing loading docks. These materials are expected to be delivered to the Project site within 1 month prior to the initiation of demolition activities. The construction contractor would store equipment and construction workers would park vehicles and trucks near the existing site buildings. Construction access to the Project site would be provided at the entrance along Grand Street.

Consistent with the requirements of the Well Destruction Work Plan, all Project site groundwater monitoring wells were destroyed in June 2020 prior to mobilization. During mobilization, the construction limits of work for the entire northeastern portion of the Project site would be fenced and closed beyond existing fencing prior to mobilization. Signage would be installed along the Project site perimeter to maintain site security. The limits of construction work would include the parking spaces located along Grand Street and Fortmann Way to limit disturbances to vehicles, bicyclists, and pedestrians. Mobilization would require a total of six construction workers for construction equipment staging, traffic control, and health and safety oversight. Table 2-3 lists the types and amount of equipment that is expected to be staged at the Project site during mobilization and used during the demolition and excavation activities.

Table 2-3. Construction Equipment

Construction Equipment	Units	Duration (weeks)
Operated Dump Truck (with flatbed trailers)	2	3
Torch and Acetylene Tanks	2	3
60-Foot Articulating Boom Lift	1	2
Excavator Sheer Attachment	1	3
Excavator Hydraulic Hammer	1	3
815 Compactor	1	2
Mobile Concrete Crushing/Screen Unit	1	2
18,000-lb Excavator	1	2
85,000-lb Excavator	2	10
4-CY Loader	1	7
Motor Grader	1	2
12K Reach Forklift	1	1
D6 Dozer	1	1
Skip Loader	1	2
Track Skid Steer	1	3
4,000-gallon Water Truck	1	10
2,000-gallon Water Truck	1	3
Pick-Up Truck	2	10
185 CFM Air Compressor	1	3
Pressure Washer	2	4
21,000-gallon Frac Tank	2	10

Source: Draft Equipment List; Innovative Construction Solutions (ICS) 2020

Limited Demolition of Existing On-Site Buildings and AST Removal

The second Project phase would involve the removal and demolition of the maintenance building and carport located within the northeastern portion of the Project site. Once this portion of the Project site is cleared of vegetation and debris, the maintenance building and covered carport would be removed, including the surrounding asphalt pavement (see Figure 2-3). All Project site sub-slab Vapor Pins™ would be destroyed when asphalt pavement is removed, per the Well Destruction Work Plan. The demolition sequence would involve a top-down technique that first removes roofing, followed by the structure and foundation. Debris and construction waste would be temporarily stockpiled near the loading docks prior to removal. All demolition and construction waste would be removed and handled according to the requirements of a Waste Management and Transportation Plan (WMTP). The WMTP would summarize procedures for managing waste during the proposed demolition and excavation activities, including ensuring the proposed Project meets the City's diversion rate of 77 percent.

Once demolition in the northeastern portion of the Project site is complete, the compounding building and the remaining 11 active ASTs in the southwestern portion of the Project site would be removed. The compounding building would be demolished first, but a portion of the building's outer perimeter concrete wall would remain to reduce dust and noise generation during the removal of the ASTs. Once the 11 ASTs would be cleaned and removed from the Project site, the outer perimeter concrete wall of the compounding building would be removed using an excavator, grapple, and concrete pulverizing equipment.

The ASTs would be hydraulically isolated from the existing distribution facility and devices would be inserted at the drain valves that service the ASTs to stop the flow of liquids. Next, the ASTs would be cleaned and a frac tank would be used to store cleaning liquids and sludge from the ASTs. A water truck would be required to rinse the ASTs prior to removal. Each AST would then be removed using cranes, an excavator, dry vacuum truck, and backhoe. Dump trucks and flatbed trailers would be used to remove and securely transfer each AST off site for disposal. The liquids within the ASTs would be removed using an air pump and transferred to the other storage frac tank. The liquids in the frac tanks would be pumped into vacuum trucks that would transport the tank liquids to an off-site and SOPUS-approved local Treatment, Storage, and Disposal Facility (TSDF) for final disposal (i.e., Crosby and Overton transfer station).

The demolition and removal activities during this phase would require 5 to 10 construction workers. Construction equipment would demolish buildings and heavy haul trucks would remove demolition debris and building waste over a 1-month period. Heavy dump trucks and other construction vehicles would limit travel to designated truck routes, such as Clement Avenue and Park Street within the City of Alameda (refer to Figure 2-2). Table 2-4 describes the duration of each construction phase and the corresponding heavy haul truck trips associated with project construction equipment staging, limited demolition, excavation and soil removal, and final demolition.

Table 2-4. Daily Truck Trip Generation by Construction Activity

Construction Phase	Duration	# Worker Commute Trips (/day)[1, 2]	# Off-Haul Trips (/day)[3]	# Import Trips (/day)	Total Trips (/day)
Mobilization	2 weeks	6	0	12	18
Limited Demolition and AST Removal	1 month	10	50	5	65
Excavation, Export/Import, Grading	2 months	12	16	16	44
Demolition of Remaining On-site Buildings	1 month	15	13	0	28
Demobilization of Post-Remediation Equipment	1 week	6	6	0	12

Sources: ICS 2020a; Wood 2020.

Notes:

[1] Expressed in round trips; one trip equals one vehicle going to and leaving form the Project site. Assumes each worker arrives in their personal vehicle each day and generates one inbound trip during the morning peak hour and one outbound trip during the evening peak hour. Average commute distances are anticipated to consist of 40 mile round trips within the Bay Area.

[2] Assumes each average daily trip is associated with excavation off-haul and import. The debris sorting and disposal facility is assumed to be the Keller Canyon Landfill in Pittsburgh (approximately 35 miles to the northeast).

[3] Assumes an additional 5 trips would be required to off-haul approximately 20,000 gallons of residual water and oily water associated with the clean-out of the ASTs and piping. Residual water and oily water would be exported in a 5,000-gallon vac truck to either a transfer station in Richmond or Rio Vista, California.

Consistent with the City of Alameda Noise Ordinance (Article II – Nosie Regulations), construction activities would occur Monday through Friday between the hours of 7:00 a.m. to 7:00 p.m.. Construction is not proposed on the weekends. Demolition activities that may generate higher noise levels would be scheduled during mid-day hours to minimize disruption to nearby residences.

Excavation, Dewatering, Backfilling and Compaction, and Grading

The third Project phase would involve excavation of contaminated soil. Excavation, backfilling, compaction, and grading operations would be completed in accordance with the City of Alameda Grading Permit. Heavy equipment would be utilized for the excavation of contaminated soil and backfilling and compaction with clean soil. This equipment would likely include track mounted excavators, front end loaders, compaction equipment, breaker hammer equipment (possibly vibratory to remove concrete slabs and asphalt areas), and trucks (end dump trucks and possibly transfer dumps) for soil disposal. Up to 11,400 banked cubic yards (bcy) of soil may be excavated (6,500 bcy in the northeast area and 4,900 bcy in the tank farm area). Excavated soil and debris would be removed, sorted, and handled according to the requirements of the WMTP and SAP, which would describe the soil investigation to pre-profile soil for disposal, the procedures required to sample and analyze soil for direct burial at the landfill (if required), and the procedures required to verify the backfill material meets the criteria for clean soil import.

The extent of excavation at the Project site would be focused in three locations: the tank farm area, northeast area, and the former wash area in the Taylor Warehouse (see Figure 2-3). The entire excavation area includes approximately 2 acres (approximately 49 percent) of the 4.1-acre

Project site. Approximately 11,400 bcy of clean fill would be imported to the Project site to backfill the remedial excavations. Backfilling would use a loader, dozer, excavator, vibratory compactor, and water truck.

The excavation activities would begin in the tank farm area and then proceed to the northeast area. Proposed excavation in the former tank farm area excludes the vacated portion of Clement Avenue, a portion of Hibbard Street, and the railroad tracks, where proposed construction would occur along Clement Avenue between Hibbard Street and Grand Street. The tank farm area would include up to 3 feet of soil excavation based on cleanup goals for the Project site COCs. This would result in a total of approximately 4,900 bcy of soil excavation. However, preliminary soil sampling at the bottom of the 3-foot excavation depth would determine whether excavation below 3 feet bgs would be required. Excavation is not expected to extend deeper than 5 feet bgs (anticipated depth of groundwater). Off-site hauling of the contaminated soil and import of fill material would require approximately 460 heavy haul truck trips and the equivalent of 460 import trips of clean fill deliveries over a 2-month construction period. Average tandem axel commercial dump trucks hold between 12 to 14 cy of soil.[1]

Excavation activities would then proceed with the excavation of approximately 100 bcy of soil and fill within the former UST and wash area in the Taylor Warehouse. Removal of the contaminated fill would require approximately 8 additional heavy haul truck trips and the equivalent of 8 heavy haul truck trips for the import of clean fill deliveries for a total of 16 heavy haul truck trips over the same 2-month period.

Once excavation is complete within the former wash area, excavation would occur within the northeast portion of the Project site. The excavation extent in the northeastern area excludes the loading dock area, as there is no indication the extent of contamination extends into this area. The northeastern excavation area would include up to 6 feet of soil excavation (up to anticipated depth of groundwater) for a total of approximately 6,500 bcy of soil. Soil confirmation sampling at the base of the 6-foot excavation depth would confirm the concentrations of COCs left in place. Off-hauling the contaminated soil would require approximately 483 heavy haul truck trips and the equivalent of 483 import trips of clean fill deliveries over the same 2-month construction period for the other two excavation areas, for a total of 966 heavy haul truck trips.

Excavation activities would require a total of 10 construction workers, including 6 construction workers for excavation and backfilling, and approximately 4 additional construction workers for traffic control, street sweeping and maintenance, as well as health and safety oversight. Excavation equipment would include excavators equipped with a bucket attachment, rubber-tired loaders, and semi-end dump trucks for hauling contaminated soil off site and importing clean soil for backfilling. If dewatering is required during excavation, water would be pumped from the excavation into a tank with secondary containment. Water removed during excavation would be treated onsite (if necessary) and discharged into the EBMUD sanitary sewer. If treated

[1] Heavy haul truck trips were estimated by ICS in March 2020. Tandem axel dump trucks with an average capacity of 12 cy per load would off-haul contaminated soil and demolition debris, and import clean backfill. The tank farm would require a total of 920 trips (460 export/460 import). The UST and wash area in the Taylor Warehouse would require a total of 16 heavy haul truck trips (8 export/8 import). The northeast excavation area would require a total of 966 heavy haul truck trips (483 export/483 import). These heavy haul truck trips would occur over a 2-month period.

groundwater is tested and found to contain concentrations in excess of the EBMUD discharge limits, it would be disposed at an off-site, SOPUS-approved, local TSDF as non-hazardous waste.

Demolition of Remaining On-Site Buildings and Warehouses

The final Project phase involves the demolition of the administrative building and three warehouses, and storage facility located within the central portion of the Project site. Prior to demolition, all ACM-containing buildings, and buildings and structures that contain LBP would be abated. Small building and concrete pad demolition would likely be conducted using excavators equipped with a breaking hammer and pulverizers to demolish concrete and break it up into smaller more manageable pieces. This would allow building components to be broken into smaller pieces that are safer to remove and reduce fugitive dust generation. Based on the approximate square footage of the existing buildings on site (i.e., 68,100 square feet), over 5,500 tons of construction debris is anticipated to be stockpiled and removed from the Project site.[2]

Construction waste would be temporarily stockpiled within the staging area near the loading docks in the northeastern portion of the Project site and designated non-hazardous or hazardous waste depending on the waste type, building, or Project site origin. The staging area would store construction equipment near the former maintenance building and carport. The construction waste would then be transferred to a sorting location. Based on the size and construction of the existing on-site buildings, off-site hauling of the demolition construction waste would require approximately 392 heavy haul truck trips over a 1 month period, or approximately 13 trips per day during the demolition phase (refer to Table 2-5).

Table 2-5. Estimated Loads of Construction Waste from On-Site Building Demolition

Demolition of Remaining On-Site Buildings	Truck Loads of Debris
Debris	85
Recycled Metals	52
Recycled Concrete	207
Recycled Asphalt	42
Universal Waste, ACM, Other	6
Total	392

Source: ICS 2020b

At the sorting station, debris material associated with building demolition would be sorted by type to meet disposal requirements (e.g., concrete, ACM, LBP-containing materials, miscellaneous metal) and placed into dump trucks and next hauled off-site for recycling or disposal at a permitted landfill in accordance with federal, state, and local regulations. Clean demolition debris would be disposed of at a Class III landfill (permitted to accept nonhazardous waste), such as Zanker Road Landfill in San Jose, California. Soils to be excavated have been pre-profiled and determined to be considered non-hazardous waste and therefore would be disposed of in a Class III landfill. Hazardous demolition debris would be disposed of at a Class I landfill (permitted to accept hazardous waste). Disposal of hazardous material would depend on the waste type. ACM waste would be disposed of at either the Altamont Landfill in Livermore,

[2] Assumes average building demolition yields 155 pounds of waste per square foot.

California or the Hay Road Landfill in Vacaville, California. LBP and LCP waste would be disposed of at either the Clean Harbors Landfill in Buttonwillow, California or the US Ecology Landfill in Beatty, Nevada. Concrete and asphalt would be recycled at Argent Materials, Inc. in Oakland, California, and metal materials would be recycled at Schnitzer Steel in Oakland, California (ICS 2020b).

Truckloads of impacted and contaminated waste and soil would be accompanied by a completed and signed waste hauler record or waste manifest indicating the generator information, site address, and location of disposal.

Demobilization of Post-Remediation Equipment

Upon completion of demolition, excavation, and backfilling activities, the entire Project site would be cleared of equipment, regraded, and restored with a final layer of clean fill soil. Construction crews would demobilize the Project site over a 1-week period by removing construction equipment. The Project site would then be fenced, screened, and temporarily closed.

A deed restriction and Land Use Covenant (LUC) would be put in place on the northeast parcel that requires the installation of an active vapor intrusion mitigation system (VIMS) as part of the construction of future buildings at the Project site. The LUC would occur after a lot line adjustment is approved by the City of Alameda. With the implementation of a deed restriction on the two Project parcels, and LUC on the northeast parcel and the installation of a VIMS, no post-excavation soil vapor monitoring would be required.

Post-excavation groundwater monitoring would be dependent on groundwater concentrations observed during excavation dewatering but is not anticipated. No plans to reinstall the abandoned groundwater monitoring wells currently exist.

10. Construction Schedule

Proposed Project construction is anticipated to begin in fall 2020, last approximately 5 to 6 months, and be complete by early 2021. Approximately 5 to 10 construction workers would work during project construction. All construction activities would occur between 7:00 a.m. and 7:00 p.m., Monday through Friday, consistent with the City of Alameda Municipal Code Chapter 4-10 – *Noise Control*. Construction is not proposed on the weekends.

The precise construction schedule depends on the timing of project approvals and would potentially be subject to delay. However, planned demolition of above ground structures and hardscape within excavation extents, and soil removal activities would be implemented concurrent with and following closure of the Pennzoil Quaker-State Alameda Distribution Center, currently planned for fall 2020. Demolition activities would also be completed in fall 2020 and remedial excavation would be completed by the end of 2020. A Demolition and Soil Removal Completion Report is anticipated to be submitted to the San Francisco Bay RWQCB in spring 2021.

11. Best Management Practices and Environmental Protection Measures

Construction BMPs, standard conditions and requirements of all permits that would be implemented during Project construction are discussed below. BMPs comprise regulatory

compliance measures that the San Francisco Bay RWQCB and the City of Alameda would implement and oversee during construction. These measures are different from "mitigation measures," which are defined as project specific requirements and necessary to reduce identified potentially significant and adverse environmental impacts to a less than significant level.

Best Management Practices

Air Quality. The contractor shall implement the following construction measures to minimize exhaust and fugitive dust emissions during the demolition and excavation phases:

- The contractor shall implement a Dust, Odor, and Vapor Control Monitoring Plan that specifies measures that shall be taken to reduce the generation of fugitive dust and vapors. The plan shall include monitoring to document dust and vapor concentrations during demolition and excavation activities. Monitoring shall be performed in accordance with federal, state, and local requirements, Bay Area Air Quality Management District (BAAQMD) rules and regulations, and a Stormwater Pollution and Prevention Plan (SWPPP).
- When ground disturbing activities (e.g., excavation) occur on pervious land surfaces, unpaved and exposed surfaces (e.g., parking areas, staging areas, soil piles, and graded areas) shall be watered two times per day.
- All haul trucks transporting demolition debris, soil, sand, or other loose material off-site shall be covered.
- During periods when ground disturbing activities (e.g., excavation, trenching, grading) occur on dry land, 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 shall be prohibited.
- All construction vehicles shall travel on designated truck haul routes. Vehicle speeds on adjacent neighborhood roads shall be limited to 15 miles per hour.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure CCR Title 13, Section 2485). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- The San Francisco Bay RWQCB shall direct the contractor to post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD phone number shall also be visible to ensure compliance with applicable regulations.

Debris and Waste Management. The contractor shall follow the requirements of an approved WMTP, and implement the following measures to prevent hazardous waste release and

minimize both building debris waste releases (ACMs, etc.) and fugitive dust emissions and vapors associated with contaminated soil that could be generated during demolition and excavation activities:

- Sort demolition waste in designated debris piles within a specified sorting location within the staging area near the existing loading docks.
- Follow protocols for on-site waste segregation, containerizing, temporary signage, and loading.
- Dispose of all removed demolition, excavation and subsurface debris and soil at a permitted disposal site that accepts non-hazardous and/or hazardous materials, as required.

Hazardous Materials Management. Potential hazardous materials may be present at the Project site including lead-based paint and asbestos within the existing buildings and soil contamination. The contractor shall abide by all federal and state regulations regarding the handling, processing, hauling, and disposal of such hazardous materials. The design plans and specifications shall include a WMTP and Project site-specific Health and Safety Plan (HASP), which shall include, but not be limited to the following:

- All construction equipment shall be decontaminated prior to mobilization to the Project site, according to the WMTP. All equipment that comes in contact with soil shall then be decontaminated prior to leaving the Project site. Dry contamination shall be used to decontaminate heavy equipment, by using brooms and brushes. A pressure washer, tire washing station, or other approved equipment may be brought on-site to support equipment decontamination.
- Certain construction materials may constitute hazardous material and shall be disposed according to permit conditions and applicable laws.
- Equipment and debris containing other hazardous materials, shall be tagged prior to removal for special handling to prevent an inadvertent discharge within the Project site, groundwater, or nearby San Francisco Bay waters.
- If hazardous materials are identified beyond hazards documented in previously prepared site investigations and surveys, a specialty abatement contractor shall be acquired to mitigate these issues in compliance with federal and state regulations prior to the general demolition of the warehouse buildings, maintenance building, and compounding building.
- Any hazardous materials brought to the Project site (e.g., diesel oil or paints), shall also be included in the HASP.
- All ASTs shall be cleaned and rinsed prior to removal.

Health and Safety Plan. A Project site-specific HASP shall be prepared to cover all construction and remediation activities related to site mobilization, demolition, excavation and soil removal, and demobilization of post-remediation equipment. The HASP shall outline the health the safety

procedures for remediation and shall be prepared in accordance with Occupational Safety and Health Administration (OSHA) Title 29 Code of Federal Regulation (CFR) Part 1910.120.

Geology and Soils. Temporary erosion and sediment control measures shall be installed throughout the Project site for work completed between October 1 and April 15 pursuant to the SWPPP.

Noise Abatement. Consistent with the City's Noise Ordinance, construction activities shall occur Monday through Friday between the hours of 7:00 a.m. to 7:00 p.m. Construction is not proposed on the weekends.

Public Communication and Outreach Plan. Public outreach shall be conducted prior to construction and proposed remediation activities according to a formal Public Communications and Outreach Plan. Outreach is intended to address community concerns and provide an opportunity for the public to comment on issues, such as permitting, site closure, noise, traffic control, dust control, and vapor control. Outreach materials shall include fact sheets, door hangers (if door-to-door outreach is conducted), and public meetings. Outreach communications shall also involve field support for the duration of the proposed Project to update residents on future activities and provide the community with points of contact during Project activities.

Traffic Controls. Prior to construction, notices shall be posted on site to notify residences and businesses and the public that temporary construction activities shall occur at the Project site. If construction activities are anticipated to displace on-street parking, the notice shall indicate the number of displaced parking spaces during construction, so residents and construction workers can plan accordingly. Access along the existing sidewalk on Fortmann Way shall be maintained during construction. A street flagger shall direct construction project truck traffic, if needed.

Additional traffic control measures required by the City of Alameda for truck traffic arriving and leaving the Project site shall be summarized in the WMTP. The plan shall include a list of designated routes permitted for trucks transporting waste and recyclable materials. The plan shall also describe how on-site traffic shall be managed and identify routes of entry and egress to the Project site, construction entrances, material and equipment staging areas, loading, and unloading areas, and parking areas.

Utilities. Underground Service Alert (USA) North shall be notified a minimum of 3 working days prior to the initiation of ground disturbing activities to mark all known utilities on the Project site. If utility lines are encountered at any point during excavation the construction crew shall cease the use of heavy equipment and hand dig until the utility if fully located. The USA North notification shall be kept current throughout the remediation activities.

12. Operations and Maintenance

The proposed Project involves primarily demolition and debris removal and contaminated soil excavation, therefore, there would be no operations and maintenance activities. Annual monitoring for up to 5 years may occur as required by permits and approvals, if necessary.

No future redevelopment or other operational use is considered as a part of the proposed Project. The potential impacts of any future development would be addressed when a specific development is proposed.

13. Other Public Agencies Approvals

The San Francisco Bay RWQCB is the Lead Agency under CEQA responsible for approving the proposed Project, RAP, and ensuring implementation of project conditions of approval. After San Francisco Bay RWQCB approvals (approval of the Project RAP, adoption of the IS/MND), the following state and local permits and approvals would potentially be required.

Table 2-6. Required Permit Approvals

Agency	Approval Required
State	
San Francisco Bay RWQCB	• RAP • Remedial Action Completion Certification/No Further Action Letter
	• National Pollution Discharge Elimination System (NPDES) Construction General Permit • SWPPP
	• Waste Discharge Permit
Local	
Alameda County	Environmental Health Department • Monitoring Well and Vapor Pin Destruction Permit • Public Works Agency/Water Resources Department
City of Alameda	• Demolition Permit • Grading Permit • Construction WMTP • Lot Line Adjustment
EBMUD	• Discharge Permit

Source: Wood 2020.

3.0 ENVIRONMENTAL CHECKLIST

This section describes the potential environmental impacts of the proposed Project consistent with Appendix G, *Environmental Checklist Form* of the CEQA Guidelines. A brief summary of the environmental setting and an impact analysis discussion follows each environmental issue identified in the checklist. The proposed Project includes mitigation measures to reduce potentially significant environmental impacts where necessary. The following designations are used:

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less than significant level.

Less Than Significant Impact: Any impact that would not be considered significant under CEQA relative to applicable City of Alameda thresholds.

No Impact: The proposed Project would not have any impact.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The proposed Project would result in potential environmental impacts to the following issue areas. Each of these impacts would be considered "Less Than Significant with Mitigation Incorporated" as indicated by the checklist.

☐ Aesthetics	☐ Agriculture and Forest Resources	☒ Air Quality
☐ Biological Resources	☒ Cultural Resources	☐ Energy
☐ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards / Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☒ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance
	☐ None	☒ None with Mitigation Incorporated

DETERMINATION (To be completed by the Lead Agency)

On the basis of this Initial Study:

☐ I find that the proposed Project will not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☒ I find that although the proposed project **COULD** have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because revisions in the proposed Project have been made by or agreed to by the Applicant. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT (EIR)** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **EIR** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature — Date: 9/3/2020

Alyx Harpowicz — Printed Name

Engineering Geologist — Title

San Francisco Bay RWQCB

Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project site falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "ND: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or ND (CEQA Guidelines Section 15063[c][3][D]). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

I. AESTHETICS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

Alameda Island is developed and urbanized; the majority of its natural open space areas is located on the former Naval Air Station Alameda on the northwestern portion of the island (approximately 3 miles from the Project site) and the Crab Cove area on the southern portion of the island (approximately 1.5 miles from the Project site). Alameda's proximity to the San Francisco Bay, Oakland Inner Harbor, Brooklyn Basin, and various other waterways, coupled with the relatively flat topography results in limited public views beyond those provided immediately adjacent to existing open spaces or along the coastline.

The City Design Element of the General Plan includes Guiding and Implementing Policies to protect and maintain views of the water and the Oakland-Alameda Estuary. Additionally, the Parks and Recreation, Shoreline Access, Schools and Cultural Facilities Element of the General Plan contains Guiding and Implementing Policies to maximize visual access to the shoreline and consider views from the water.

As previously described, the Project site is located at 2015 Grand Street within the northeastern portion of Alameda Island (refer to Figure 2-1). The Project site is located approximately 400 feet southwest of the Oakland inner harbor and approximately 600 feet southeast of the Fortmann Basin. Waterfront views of the Project site, however, are obstructed by the existing residential neighborhoods to the north as well as the commercial and light industrial properties to the

northwest of the Project site. The only limited view of the waterfront is provided to the north along Grand Street at the northeastern corner of the Project site (see Photograph 4).

The Project site is directly visible from the residences immediately southeast along Clement Avenue, Hibbard Street, and Ellen Crag Avenue, residences immediately north along Fortmann Way, and light industrial and commercial properties to the east and west. The Project site is also directly visible to motorists, bicyclists, and pedestrians traveling along the adjacent roadways and sidewalks.

Photograph 4. *Waterfront views of the Project site are limited to the view to the south along Grand Street at the northeastern corner of the Project site. All other views of the Project site are obscured by existing residential, commercial, and light industrial development.*

Minimal vegetation within the Project site is limited to four landscaped trees along Fortmann Way, and one large landscaped tree within the adjacent City of Alameda maintenance service center to the west.

Existing night-time lighting within the Project site includes exterior light fixtures associated with the existing buildings and limited security lighting directed toward the interior of the Project site. Other nearby light sources include exterior light fixtures and/or security lighting associated with the neighboring residential, commercial, and light industrial development, and streetlamps and vehicle headlights along the surrounding roadways. Distant light sources include ambient lighting related to Coast Guard Island and the City of Oakland to the north.

IMPACT ANALYSIS

a) Have a substantial adverse effect on a scenic vista?

Less than Significant Impact. "Scenic vistas" are defined as view corridors that capture the total field of vision from a specific viewpoint; they generally encompass a large geographic area for which the field of view can be quite wide and extend into the distance.

As previously described, waterfront views and views of the Oakland-Alameda Estuary of the Project site are obstructed by the existing residential development as well as the commercial and light industrial development to the northwest.

The proposed remediation activities at the Project site would involve: demolition, excavation, and backfilling; operation of heavy construction equipment; and heavy haul truck trips along designated truck routes, such as Clement Avenue and Park Street within the City of Alameda (refer to Figure 2-2). While construction fencing would line the Project site, larger heavy construction equipment (e.g., cranes and excavators) would be visible above the fence line from public locations immediately adjacent to the Project site. Nevertheless, views of the Project site and the proposed remediation activities from the waterfront would be obstructed by existing residential, commercial, and light industrial development. Following proposed Project soil remediation, existing buildings and other infrastructure would be removed from the Project site. The entire Project site would be cleared of equipment, regraded, and restored with a final layer of clean fill soil. No future redevelopment or other operational use is considered as a part of the

proposed Project that could otherwise affect scenic vistas (potential impacts of any future development would be addressed when a specific development is proposed).

Although short-term construction of the Project would be visible from adjacent development, roadway, and sidewalks, no scenic vistas within the vicinity of the Project site would be affected by the proposed Project. Therefore, implementation of the proposed Project would result in a less than significant impact to scenic vistas.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Less than Significant Impact. There are no designated State scenic highways or locally designated scenic corridors within or adjacent to the Project site. The nearest State scenic highway is I-580, which is located approximately 2.25 miles east of the Project site (California Department of Transportation [Caltrans] 2020). The nearest locally designated scenic thoroughfare is Webster Street, located approximately 1.5 miles west of the Project site (County of Alameda 1994). The Project site is not visible from either of these locations. The Project site is located within a developed and urbanized area and does not include rock outcroppings or street trees protected in the City by the Alameda Master Street Tree Plan (2010b) (see Section IV[e], *Biological Resources*). Additionally, none of the existing buildings on the Project site are historic (see Section V, *Cultural Resources*). Therefore, implementation of the proposed Project would have a less than significant impact on scenic resources within a State scenic highway or the surrounding vicinity.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. As described in Section 2.7, *Surrounding Land Uses and Setting,* the Project site is bound by residential developments to the southwest and northeast, commercial properties to the northwest (including an animal shelter and City of Alameda maintenance service center), and light industrial/commercial properties to the southeast (construction supply, Alameda Municipal Power offices). The Project site was recently rezoned to residential and the surrounding properties with views of the Project site are private property. Effects on private views are typically not considered under CEQA (Public Resources Code Section 21082.2). CEQA case law has established that only public views, not private views, need be analyzed under CEQA.[3] For example, this analysis considers public views from the adjacent

[3] In *Association for Protection etc. Values v. City of Ukiah (1991)* 2 Cal. App. 4th 720, the court determined that "*we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in Topanga Beach Renters Assn. v. Department of General Services (1976) 58 Cal. App. 3d 188, '[all] government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will adversely affect the environment of persons in general*."

roadways and sidewalks along Fortmann Way, Ellen Crag Avenue, Hibbard Street, Clement Avenue, and Grand Street.

Activities associated with the proposed Project would require heavy construction equipment use during the 5- to 6-month construction period. Temporary views of the Project site from adjacent public vantage points during this time would include construction fencing, construction staging and equipment laydown areas, demolition debris, excavations, stockpiled soils, and other construction materials. The Project site frontage along Ellen Crag Avenue, Hibbard Street, and Clement Avenue is approximately 850 feet. For the average pedestrian walking 2 miles per hour along one of the adjacent sidewalks, the construction site would be visible for less than 5 minutes. The Project site would be visible to motorists and bicyclists for an even shorter duration. As such, the proposed construction activities would constitute a temporary visual distraction typically associated with construction activities and equipment in previously developed and urbanized areas. Following the completion of the proposed remediation activities no above ground buildings, structures, or tanks on the Project site would remain. No redevelopment or other operational use is considered as a part of the proposed Project. The proposed Project would not conflict with the Guiding and Implementing Policies City Design Element of the General Plan or the Parks and Recreation, Shoreline Access, Schools and Cultural Facilities Element of the General Plan. Therefore, implementation of the proposed Project would have a less than significant impact on the visual character of the Project site and the surrounding area.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. As described in Section 2.10, *Construction Schedule,* construction activities would occur between 7:00 a.m. and 7:00 p.m., Monday through Friday, consistent with the City of Alameda Municipal Code Chapter 4-10 – *Noise Control*. Therefore, nighttime construction lighting would not be required. Any temporary security lighting would be directed downward and towards the Project site in order to limit any potential spillover on nearby residences. Security lighting would be comparable to existing sources of nighttime lighting that are already present in and around the Project site (e.g., exterior light fixtures on adjacent residential, commercial, and light industrial development, streetlamps, and vehicle headlights). The proposed Project construction-related impacts would not create any new sources of light or glare which would affect day or nighttime views in the area.

The proposed Project would result in the demolition of existing buildings and other structures on the Project site. No future redevelopment or other operational use is considered as a part of the proposed Project. Therefore, the proposed Project would generally reduce the operational sources of nighttime lighting at the Project site, resulting in beneficial impacts.

II. AGRICULTURE AND FOREST RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation (CDC) as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB). Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The Project site is located within a developed and urbanized area of the City, surrounded by residential, commercial, and light industrial development. No agricultural or forestry resources exist on the Project site or in the surrounding vicinity. The Project site has been operated by SOPUS as a distribution center for bulk and packaged petroleum-based lubricant products (motor oil) since 1951. As described in Section 2.6, *Land Use and Zoning*, the Project site is designated for "Specified Mixed Use" (MU-6) in the 2016 *City of Alameda General Plan* (City of Alameda 2016). Permitted land uses include residential, commercial, and office and retail uses. The areas surrounding the Project site are designated as "Specified Mixed Use" (MU-4) and "Medium Density Residential." Permitted land uses in the MU-4 district include residential, office,

and industry uses. No properties within the vicinity of the Project site are zoned for agricultural use (City of Alameda 2019a).

The Project site is mapped under the CDC's Farmland Mapping and Monitoring Program (FMMP) as "Urban and Built-Up land" (CDC 2016a). Additionally, the Project site is not under a Williamson Act Contract and does not contain any soils that support farmland of Statewide importance (CDC 2018a).

IMPACT ANALYSIS

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Project site is not mapped as prime, unique, or farmland of Statewide importance (CDC 2016a). Therefore, the proposed Project would not involve the conversion of farmland to non-agricultural use. No impact associated with the proposed remediation activities would occur.

b) Conflict with existing zoning for agricultural use or a Williamson Act Contract?

No Impact. The proposed Project is neither zoned for agricultural use nor under a Williamson Act Contract (CDC 2018a). Therefore, the proposed Project would not conflict with existing zoning for agricultural use or a Williamson Act Contract. No impact associated with the proposed remediation activities would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?

No Impact. The proposed Project site and the surrounding vicinity is neither zoned as forest land nor timberland. The proposed Project would not conflict with existing zoning and no impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As previously described, the Project site is located within a developed and urbanized area of the City, surrounded by residential, commercial, and light industrial development. The proposed Project would not result in the loss of forest land or convert forest land to a non-forest use and no impact would occur.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The proposed Project would not involve changes in the environment that could result in the conversion of farmland to non-agricultural use or conversion of forest to non-forest use. The proposed Project is limited to the remediation of a property zoned as "R-4

Neighborhood Residential" within the "Planned Development" Combining District (R-4-PD), which has been operated by SOPUS as a blending, packaging, and distribution center for petroleum-based lubricant products (motor oil) since 1951. No farmland or forest land use exist in the vicinity of the Project site. Therefore, no impact related to the conversion of farmland or forest land associated with the proposed Project would occur.

III. AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations.				
Are significance criteria established by the applicable air district available to rely on for significance determinations?		☒ Yes		☐ No
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

Air quality is affected by both the rate and location of pollutant emissions, and by meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollutant emissions and air quality.

The Project site is located in the San Francisco Bay Area Air Basin (SFBAAB or Basin), which includes all of the coastal counties of San Mateo, San Francisco, and Marin, and the inland counties of Santa Clara, Alameda, Contra Costa, and Napa. The Basin also includes the southern portions of Solano and Sonoma counties. Within the Basin, the Project site is located in what the BAAQMD considers the Northern Alameda and Western Contra Costa Counties region. Table 3-1 summarizes the air pollution monitoring results for 2018 for the Oakland-West monitoring station located in the Alameda and Western Contra Costa Counties region.

Table 3-1. Bay Area Air Pollution Summary – 2018: Oakland-West Monitoring Station

Monitoring Standard	Ozone (ppb)	Carbon Monoxide (ppm)	Nitrogen Dioxide (ppb)	Sulfur Dioxide (ppb)	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)
Max 1-Hr	63	3.6	76	11.9	--	--
National 1-Hr Days	--	0	0	0	--	--
California 1-Hr Days	0	0	0	--	--	--
Max 8-Hr	50	3.1	--	--	--	--
National 8-Hr Days	0	0	--	--	--	--
California 8-Hr Days	0	0	--	--	--	--
Max 24-Hr	--	--	--	2.5	--	169.2
National 24-Hr Days	--	--	--	--	--	14
California 24-Hr Days	--	--	--	0	--	--
Annual Average	--	--	12	--	--	--
3-Year Average	46	--	--	--	--	45

Source: BAAQMD 2018

Notes: ppb = parts per billion; ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter.

Table 3-2 shows the area designation status of County for each criteria pollutant for both National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). As presented in the table, the Bay Area is currently designated non-attainment for federal and state AAQS's for ozone (O_3), and designated non-attainment for the CAAQS for respirable particulate matter ten microns or less in diameter (PM_{10}) and fine particulate matter 2.5 microns or less in diameter ($PM_{2.5}$).

Table 3-2. Federal and State Attainment Status

Pollutants	Federal Classification	State Classification
Ozone (O_3)	Non-attainment	Non-attainment
Particulate Matter (PM_{10})	Unclassified	Non-attainment
Fine Particulate Matter ($PM_{2.5}$)	Unclassified/Attainment	Non-attainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO_2)	Attainment	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead (Pb)	Attainment	--
Sulfates ($SO_{X)}$	--	Attainment
Hydrogen Sulfide (H_sS)	Unclassified	Unclassified
Vinyl Chloride	--	--
Visibility Reducing Particulates	--	Unclassified

Source: BAAQMD 2020

Sensitive Receptors

Some people including individuals with respiratory illnesses or impaired lung function because of other illnesses, persons over 65 years of age, and children under 14 are particularly sensitive to certain pollutants. Facilities and structures where these sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses identified to be sensitive receptors by the BAAQMD (2011) in its *CEQA Air Quality Handbook* include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors may be at risk of being affected by air emissions released from the construction and operation of the proposed Project.

The nearest sensitive receptors to the proposed Project site with the highest potential to be impacted by the proposed Project include private residences located along Ellen Crag Avenue and Clement Avenue, as close as 50 feet away south and west of the Project site.

REGULATORY SETTING

Air quality in the U.S., is primarily characterized by ambient ground-level concentrations of seven specific pollutants identified by the U.S. Environmental Protection Agency (USEPA) to be of concern with respect to health and welfare of the public. These specific pollutants – known as "criteria air pollutants" – are pollutants for which the Federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal ambient concentration criteria are known as the NAAQS, and the state of California ambient concentration criteria are referred to as CAAQS. Federal criteria air pollutants include ground-level O_3, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead (Pb). Table 3-3 shows the CAAQS and NAAQS concentrations for the criteria air pollutants with the corresponding averaging times.

Table 3-3. Criteria Air Pollutant Standards

Pollutant	Averaging Period	California (CAAQS)	Federal (NAAQS)
Ozone (O_3)	1-Hour Average	0.09 ppm (180 µg/m^3)	--
	8-Hour Average	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)
Carbon Monoxide (CO)	1-Hour Average	20 ppm (23 µg/m^3)	35.0 ppm (40 mg/m^3)
	8-Hour Average	9.0 ppm (10 mg/m^3)	9.0 ppm (10 mg/m^3)
Nitrogen Dioxide (NO_2)	1-Hour Average	0.18 ppm (338 µg/m^3)	0.10 ppm (188 µg/m^3)
	Annual Arithmetic Mean	0.03 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)
Sulfur Dioxide (SO_2)	1-Hour Average	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)
	24-Hour Average	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)
	Annual Arithmetic Mean	--	0.030 ppm (80 µg/m^3)
Respirable Particulate Matter (PM_{10})	24-Hour Average	50 µg/m^3	150 µg/m^3
	Annual Arithmetic Mean	20 µg/m^3	--
Fine Particulate Matter ($PM_{2.5}$)	24-Hour Average	--	35 µg/m^3
	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3
Lead (Pb)	30-day Average	1.5 µg/m^3	--
	Calendar Quarter	--	1.5 µg/m^3
	Rolling 3-Month Average	--	0.15 µg/m^3
Sulfates	24-Hour Average	25 µg/m^3	No Federal Standards
Hydrogen Sulfide	1-Hour Average	0.03 ppm (42 µg/m^3)	
Vinyl Chloride	24-Hour Average	0.01 ppm (26 µg/m^3)	

Sources: USEPA 2016; CARB 2020.
Notes: ppm = parts per million; µg/m^3 = micrograms per cubic meter.

The proposed Project is located in the Basin that includes all of Napa, Contra Costa, Alameda, Santa Clara, San Mateo, San Francisco, and Marin Counties, the southern portion of Sonoma County, and the western portion of Solano County. The BAAQMD monitors and regulates the local air quality in the Basin through the implementation of the *Bay Area 2017 Clean Air Plan* (BAAQMD 2017a). The BAAQMD operates 32 air monitoring stations over the Basin's nine counties. The monitoring station closest to the Project site is located in San Francisco. The

station monitors O_3, nitrogen oxides (NO_x), CO, PM_{10}, and $PM_{2.5}$ (BAAQMD 2018). The BAAQMD identifies the Federal and State AAQS (NAAQS and CAAQS, respectively) as well as the Bay Area's attainment status for each relevant air pollutant. Areas that do not meet the NAAQS or CAAQS are known as nonattainment areas. The region is in nonattainment for the State standards for O_3, PM_{10}, and $PM_{2.5}$, and Federal standards for O_3 and $PM_{2.5}$. The Basin is in attainment or unclassified for all other criteria air pollutants (BAAQMD 2020).

The topography of the Basin features coastal mountain ranges, valleys, and bays. The air quality within the Basin is influenced by a wide range of emission sources, such as heavy vehicular traffic, industry, weather, and dense population centers within its cities. Sensitive receptors to air quality conditions within the vicinity of the Project site include the adjacent single-family residences along Fortmann Way, Ellen Crag Avenue, Hibbard Street, and Clement Avenue.

Emissions Thresholds for Regional Air Quality Impacts

Air quality impacts are assessed by comparing impacts to baseline air quality levels and applicable ambient air quality standards. Federal and State air quality standards have been established for criteria air pollutants. Standards are levels of air quality considered safe from a regulatory perspective, including an adequate margin of safety, to protect public health and welfare.

BAAQMD has developed criteria for determining whether emissions from a project are regionally significant. They are useful for estimating whether a project is likely to result in a violation of the ambient air quality standards. BAAQMD's significance thresholds are summarized in Table 3-4 for criteria pollutant emissions during construction activities and Project operation. A project is considered to have a regional air quality impact if emissions from its construction and/or operational activities exceed the corresponding significance thresholds.

Table 3-4. Emissions Thresholds for Significant Regional Impacts

Pollutant	Average Daily Construction Emissions (Pounds/Day)	Daily Operational Emissions (Pounds/Day)	
		Indirect	Stationary
Nitrogen Oxides (NO_x)	54	180	40
Reactive Organic Gases (ROG)	54	42	40
Respirable Particulate Matter (PM_{10})	82	82	15
Fine Particulate Matter ($PM_{2.5}$)	54	54	10
Ozone (O_3)	--	--	
Sulfur Oxides (Sox)	--	--	
Carbon Monoxide (CO)	None	125	
Lead	--	--	

Source: BAAQMD 2017b.

IMPACT ANALYSIS

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The Basin is currently designated as in nonattainment for Federal and State O_3, Federal and State $PM_{2.5}$, and State PM_{10} standards. The Basin is designated in attainment or is unclassified for all other criteria pollutants, and on January 9, 2013, the USEPA issued a final rule to determine that the Bay Area has attained the Federal 24-hour $PM_{2.5}$ standard, but must continue to be designated as nonattainment for the Federal $PM_{2.5}$ standard until the BAAQMD submits a redesignation request and a maintenance plan to the USEPA, and the USEPA approves the proposed redesignation.

Due to the nonattainment designations in the Bay Area, the BAAQMD periodically prepares air quality plans that provide emission reduction strategies to achieve attainment of the Federal and State standards, including control strategies to reduce air pollutant emissions via regulations, incentives, education, and agency partnerships. The most recent air quality plans were prepared in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). The latest Federal O_3 plan is the *2001 Ozone Attainment Plan*, adopted on October 24, 2001 and approved by the CARB on November 1, 2001, and submitted for approval to the USEPA on November 30, 2001 (BAAQMD 2001). The most recent State O_3 plan is the *2017 Clean Air Plan: Spare the Air, Cool the Climate*, adopted on April 19, 2017. The *2017 Clean Air Plan* provides a regional strategy to protect public health and protect the climate (BAAQMD 2017a). The 2017 plan also includes a wide range of control measures designed to decrease emissions of the air pollutants most harmful to Bay Area residents, such as particulate matter, O_3, and toxic air contaminants (TACs), and to reduce emission of greenhouse gases (GHGs) that are climate pollutants. While a plan for achieving the State PM_{10} standard is not required, the BAAQMD has also prioritized measures to reduce particulate matter in developing the control strategy for the *2017 Clean Air Plan* and this strategy provides the framework of the BAAQMD's particulate matter control program.

Adopted BAAQMD rules and regulations as well as the threshold of significance have been developed with the intent to ensure continued attainment or to work towards attainment of Federal and State standards, consistent with applicable air quality plans. The BAAQMD *California Environmental Quality Act Air Quality Guidelines* provide thresholds of significance for construction and operation-related activities (BAAQMD 2017b). If project emissions are less than the BAAQMD emission thresholds for reactive organic gases (ROG), NO_x, or PM_{10}, then emissions are considered to be less than significant and compliant with the measures in the applicable air quality plans. There are no operational activities associated with the proposed remediation and construction activities that would exceed the BAAQMD's emission thresholds (see Table 3-5 below). A quantitative analysis of emissions are described in further detail in Section III(b). Because the proposed Project would not exceed the BAAQMD's emission thresholds, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plans, such as the federal, *2001 Ozone Attainment Plan* and the *BAAQMD's 2017 Clean Air Plan*. Therefore, impacts associated with the proposed Project would be less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact with Mitigation Incorporated. As discussed above, the Basin is currently designated as nonattainment for Federal and State O_3, Federal and State $PM_{2.5}$, and the State PM_{10} standard. Short-term construction emissions would result from activities during demolition of existing pavements, buildings, and other structures; excavation and removal of contaminated soil; and backfilling. These emissions would be primarily from mobile on-road sources such as construction worker trips, equipment delivery trucks and heavy haul truck trips, and from mobile off-road sources (e.g., excavators, dozers, backhoes, cranes, water trucks, and other equipment).

Construction emissions from the Project's on-site and off-site activities were calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2 (BREEZE Software 2017). CalEEMod is a planning tool that provides a uniform platform to estimate potential emissions resulting from construction and operation activities of land use projects (California Air Pollution Control Officer's Association [CAPCOA] 2016). The model incorporates CARB's Emissions Factor (EMFAC2014) model for estimating on-road vehicle emissions; and emission factors and assumptions from the CARB's OFFROAD2011 model to estimate off-road construction equipment emissions. Model-predicted Project emissions are compared with applicable thresholds to assess regional air quality impacts. The construction equipment was based on the construction specifications listed in Table 2-3. The construction emissions results are based on a reasonably conservative approach for modelling and characterizing impacts, which assumes all construction equipment would be used during each phase for the duration of the proposed Project with the exception of the mobilization and demobilization phases. The Air Quality Assessment Technical Memorandum is included in Appendix A.

Maximum daily emissions of criteria pollutants associated with construction activities including earthwork, haul trucks, and construction worker commutes are provided in Table 3-5.

Table 3-5. Maximum Daily Unmitigated Regional Construction Emissions

Construction Activity	Maximum Emissions (lbs/day)				
	ROG	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	4	51	28	5	3
BAAQMD Significance Thresholds	*54*	*54*	*None*	*82*	*54*
Exceeds Threshold?	**No**	**No**	**N/A**	**No**	**No**
Estimated Annual Construction Emissions (ton/year)	<1	2	1	<1	<1

Source: Calculated by Wood with CalEEMod (Version 2016.3.2); see Appendix A.

According to the CalEEMod results, the proposed short-term Project construction emissions would be below the applicable pollutant's BAAQMD thresholds of significance. Therefore, the Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. The BAAQMD has also established Basic Construction Mitigation

Measures that should be implemented for all construction projects, regardless of whether emissions exceed the thresholds of construction. The following control measures would be implemented, as required by the BAAQMD's *California Environmental Quality Act Air Quality Guidelines* (2017b), during all construction activities at the site.

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. 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.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure CCR Title 13, Section 2485). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. A publicly visible sign shall be posted with telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

While the proposed Project would result in short-term construction and operation criteria pollutant emissions below the applicable thresholds of significance, the implementation of these BAAQMD Basic Construction Mitigation Measures and specific measures to reduce NO_x emissions related to off-road construction equipment would further minimize emission impacts, as shown in Table 3-6.

Table 3-6. Maximum Daily Mitigated Regional Construction Emissions

Construction Activity	Maximum Emissions (lbs/day)				
	ROG	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	1	22	30	4	2
BAAQMD Significance Thresholds	*54*	*54*	*None*	*82*	*54*
Exceeds Threshold?	**No**	**No**	**N/A**	**No**	**No**
Estimated Annual Construction Emissions (ton/year)	<1	2	1	<1	<1

Source: Calculated by Wood with CalEEMod (Version 2016.3.2); see Appendix A.

Past, present, and future development projects also contribute to the Bay Area's adverse air quality impacts on a cumulative basis, as air pollution is largely a cumulative impact and a single project is not sufficient in size to result in nonattainment. Instead, a project's individual emissions can contribute to existing cumulatively significant adverse air quality impacts. The thresholds of significance presented in Table 3-5 represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. If a project exceeds the BAAQMD's significance thresholds, the proposed Project's emissions would be cumulatively considerable, resulting in significant adverse cumulative air quality impacts to the region's existing air quality conditions. Given that construction and operation emissions would be below the applicable thresholds of significance and the proposed Project would implement the BAAQMD's Basic Construction Mitigation Measures, and specific measures to reduce NO_x emissions, the proposed Project would not result in a cumulatively considerable contribution to the region's existing air quality conditions. For these reasons, air quality impacts would be considered less than significant with mitigation incorporated and the proposed Project would not result in a cumulatively considerable net increase of any of the criteria pollutants for which the region is in non-attainment. However, because the NO_x emissions are close to the BAAQMD thresholds and due to the proximity of the Project site to sensitive receptors, Recommended Mitigation Measure AQ-1 would be implemented to reduce NO_x emissions associated with off-road construction equipment to the maximum extent practicable.

Mitigation Measure AQ-1: Off-Road Construction Equipment Meeting Tier 4 Final Emissions Standards

> All off-road diesel-powered construction equipment greater than 50 horsepower used for Project construction shall meet, at a minimum, Tier 4 Final off-road emissions standards. Construction contractors shall ensure that all off-road equipment meet the standards prior to deployment at the Project site and the Applicant shall demonstrate compliance with this measure to the RWQCB prior to the start of construction. The RWQCB shall monitor for continual compliance with these requirements throughout the course of construction.

Implementation of MM AQ-1 would further reduce criteria air pollutants associated with the proposed Project to less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. The proposed Project would be constructed in a residential neighborhood within close proximity to sensitive receptors. Sensitive land use receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. Sensitive receptors to air quality conditions within the Project vicinity include residents in nearby single-family residences located along Ellen Crag Avenue (40 feet away), Fortmann Way (55 feet away), and Clement Avenue (65 feet away). The proposed construction activities would also potentially expose sensitive receptors to other pollutant concentrations of concern, such as CO emissions and TAC emissions.

High levels of localized CO concentrations are typically expected where background levels are high, and traffic volumes and congestion levels are high. Emissions of CO are a potential pollutant of concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline. In other words, CO emissions are related to traffic levels. The BAAQMD has established screening criteria for localized CO emissions. A project would result in a less than significant impact related to localized CO emission concentrations if the following screening criteria are met:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans;
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

According to the Focused Construction-Related Traffic Impact Analysis (see Appendix E) as discussed in further detail in Section XVII, *Transportation*, implementation of the proposed Project would not result in any impacts related to transportation. The proposed Project would not interfere with the applicable congestion management program, regional transportation plan, or local congestion management agency plans. The maximum traffic volume that would occur during project construction (i.e., excavation phase) would be 65 heavy haul truck trips and construction worker trips per day. Project-related traffic would not increase traffic volumes at any affected intersection to more than 24,000 or 44,000 vehicles per hour. Therefore, the proposed Project would not result in levels of localized CO at surrounding intersections or generate localized concentrations of CO that would exceed standards.

For TAC emissions, BAAQMD recommends that any proposed Project that includes the siting of a new emission source or sensitive receptor assess impacts within 1,000 feet of the Project site (BAAQMD 2017a). While the proposed short-term, construction-related activities could result in the generation of TACs associated with off-road equipment exhaust emissions, the construction would be temporary and would occur over a relatively short duration. In summary, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations. Therefore, air quality impacts would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. The proposed Project's short-term, construction-related activities would potentially result in the generation of objectionable odors associated with off-road diesel equipment exhaust emissions. Although diesel fumes from construction equipment are sometimes found to be objectionable, construction would be temporary and activities for the proposed Project would be minimal. Construction equipment would operate intermittently throughout the course of a day, and would be restricted to daytime hours per City of Alameda Municipal Code Chapter 4-10 – *Noise Control*. All construction equipment and operation would

also comply with applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. These BAAQMD rules include Regulation 7, Odorous Substances; however, this rule does not become applicable until the Air Pollution Control Officer (APCO) receives ten or more odor complaints within a 90-day period. If Regulation 7 is activated, the APCO can place limitations on odorous substances and specific emissions from odorous compounds. Compliance with BAAQMD rules and regulations would further minimize air pollutant emissions, as well as any associated odors, thereby minimizing the impacts to nearby sensitive receptors. Therefore, potential odor potential environmental impacts associated with the proposed Project would be less than significant.

IV. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The Project site is located in the Bay Area-Delta Bioregion, which consists of a variety of natural communities including shoreline areas that range from the open waters of San Francisco Bay

and Delta to salt and brackish marshes, as well as upland habitats that include grassland, chaparral, and oak woodlands. The Project site is located approximately 400 feet south the north-central shoreline of Alameda Island and the Oakland-Alameda Estuary, which is part of the larger San Francisco Bay Estuary. The estuary is designated as a Western Hemisphere Shorebird Reserve Network (WHSRN) of international importance, with more than one million shorebirds using regional wetlands each winter (WHSRN 2019). Between 300,000 and 900,000 shorebirds pass through San Francisco Bay during spring and fall migration periods, more than 50 percent of the diving ducks in the Pacific Flyway winter in the shallow wetlands of the Bay, and several species breed in regional wetlands during the summer (Goals Project 1999).

The 4.1-acre Project site is entirely developed and bound by residential housing to the southwest and northeast, commercial properties to the northwest, and light industrial/commercial properties to the southeast.

Special-Status Species

For the purposes of this analysis, special-status species are defined as: any plant or wildlife species that have been listed as threatened or endangered by the U.S. Fish and Wildlife Service, National Marine Fisheries Service (NMFS), or California Department of Fish and Wildlife (CDFW); recognized as a CDFW species of special concern (SSC); or are included in the California Rare Plant Rank (CRPR) inventory that is maintained by the California Native Plant Society (CNPS). Special status plant and wildlife species with the potential to occur within the vicinity of the Project site were identified through a review of the California Natural Diversity Database (CNDDB). The CNNDB review identified five special-status species known to occur within 1-mile of the Project site: robust spine flower (*Chorizanthe robusta* var. *robusta*), which is federally listed as endangered; California tiger salamander (*Ambystoma californiense*); California black rail (*Laterallus jamaicensis coturniculus*); longfin smelt (*Spirinchus thaleichthys*), which are state-listed as threatened species; and adobe sanicle (*Sanicula maritima*) which is state-listed as rare.

Critical Habitat and Essential Fish Habitat

Federally designated critical habitats are areas considered essential for the conservation of a species listed as endangered or threatened under the Federal Endangered Species Act. Critical habitats are specific geographic areas that contain features essential for conservation of listed species and may require special management and protection. The waters of the San Francisco Bay, including those surrounding Alameda Island, are designated as critical habitat for green sturgeon and Central California Coast (CCC) Steelhead (NMFS 2016; NOAA 2020c). Waters of the San Francisco Bay are also designated as critical habitat for winter-run and spring-run Chinook salmon as well as the California Central Valley (CCV) steelhead (NMFS 2014; NOAA 2020c). Fishery Management Councils, and Federal agencies are required to cooperatively protect Essential Fish Habitat (EFH). No federally-designated critical habitat for terrestrial plants or wildlife is present within the Project site or the surrounding vicinity (U.S. Fish and Wildlife Service [USFWS] 2020a).

The waters to the north of the Project site are located within an EFH for commercially important fish species and are managed by three federal fisheries management plans (FMPs): 1) Pacific Groundfish FMP, 2) Coastal Pelagic FMP, and 3) Pacific Coastal Salmon FMP Pacific Fishery Management Council (PFMC 2016, 2019a, 2019b).

Habitat Areas of Particular Concern

The San Francisco Bay-Delta Bioregion is designated as a habitat areas of particular concern (HAPC) (National Oceanic and Atmospheric Administration [NOAA] 2006). HAPC are a subset of EFH; these areas are rare, particularly susceptible to human-induced degradation, especially ecologically important, and/or located in an environmentally stressed area. HAPCs in the San Francisco Bay-Delta region include estuaries and seagrass HAPCs. The inland extent of the estuary HAPC is the high water tidal level along the shoreline or the upriver extent of saltwater intrusion, defined as upstream and landward to where ocean-derived salts measure less than 0.5 parts per thousand (ppt) during the period of average annual low flow. The seaward extent is an imaginary line closing the mouth of a river, bay, or sound, and to the seaward limit of wetland shrubs, or trees occurring beyond the lines closing rivers, bays, or sounds. This HAPC also includes those estuary-influenced offshore areas of continuously diluted seawater. The seagrass HAPC includes those waters, substrate, and other biogenic features associated with eelgrass species (*Zostera* spp.), widgeon grass (*Ruppia maritima*), or surfgrass (*Phyllospadix* spp.) (NOAA 2020a, 2020b). The Project site is located approximately 400 feet from the shoreline of the Oakland-Alameda Estuary and therefore outside the inland extent of the San Francisco Bay-Delta Bioregion HAPC.

Sensitive Natural Communities

Within San Francisco Bay, there are many marine communities and habitats that can be considered particularly sensitive to disturbance or possess unique or special ecological value (California State Coastal Conservancy et al. 2010a). Additionally, certain waters of the U.S. may be recognized "special aquatic sites," including sanctuaries and refuges, mudflats, wetlands, vegetated shallows, eelgrass and oyster beds, and coral reefs due to their unique ecological values. Within San Francisco Bay, the two sensitive natural communities that are routinely afforded special attention are eelgrass and native oyster beds. Eelgrass beds are found in the Oakland-Alameda Estuary approximately 2 miles northwest of the Project site, adjacent to the northern edge of Alameda Point, and in small patches on the south side of Alameda Island near the southeastern terminus of the breakwater (California State Coastal Conservancy et al. 2010b). Additionally, a long-term monitoring site for native oysters is located at the southern shore of Alameda Island.

Wetlands and Other Waters of the United States

The proposed Project is located several hundred feet from the Oakland-Alameda Estuary shoreline. The Oakland-Alameda Estuary and San Francisco Bay are considered navigable waters of the U.S.; therefore, they are "jurisdictional" waters regulated by the U.S. Army Corps of Engineers (USACE) under Section 10 of the Rivers and Harbors Act up to mean high water and Section 404 of the Clean Water Act (CWA) up to the high tide line (U.S. Department of Homeland Security 2017).

USACE is the responsible agency for regulating wetlands under Section 404 of the CWA. The Oakland-Alameda Estuary waters are also regulated by the San Francisco Bay RWQCB as Waters of the State and by the San Francisco Bay Conservation and Development Commission (BCDC), which has jurisdiction over all areas of San Francisco Bay that are subject to tidal action, as well

as a shoreline band that extends inland 100 feet from the high tide line. "Other waters of the U.S." refer to those hydric features that are regulated by the CWA but are not wetlands (33 CFR §328.4). Other waters are *"those waters that are subject to the ebb and flow of the tide and or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce"* (33 CFR Part 329). This includes the navigable waters of San Francisco Bay and the Alameda Estuary.

Wildlife Movement Corridors

Wildlife movement corridors are considered an important ecological resource by CDFW and USFWS and under CEQA. While the Project site itself would not constitute a wildlife corridor, it is situated within a larger corridor of Central San Francisco Bay. Nearby environmentally sensitive fragments, including Martin Luther King Jr. Regional Shoreline and the Don Edwards San Francisco Bay National Wildlife Refuge to the south, Crown State Beach on Alameda Island, and Brooks Island to the north. These areas provide high-quality habitat which could support fish and bird species that may travel around or through the Project site and vicinity when moving between these habitat islands (MarineGeo 2020).

IMPACT ANALYSIS

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

No Impact. Proposed Project implementation would not result in adverse effects of any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. As previously described, the CNNDB review identified five special-status species with the potential to occur within a 1-mile radius of the Project site: robust spine flower, California tiger salamander, California black rail, longfin smelt, and the adobe sanicle. However, the Project site is an industrial facility that has been developed since 1951 and does not provide suitable habitat for these species due to the lack of on-site vegetation. Given the developed nature of the Project site and the surrounding vicinity, the likelihood for any sensitive or special status species to occur is considered very low. Therefore, the proposed Project would have no adverse impacts on any sensitive or special status species or habitats and would not conflict with any regional plans, policies, or regulations impacts to special status species.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

No Impact. As previously described, the Project site industrial facility has been developed since 1951 and does not include riparian habitat or sensitive natural communities. Therefore, the proposed Project would have no impact to riparian habitat or other sensitive natural communities.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The Oakland-Alameda Estuary and San Francisco Bay are considered navigable waters of the U.S.; therefore, they are "jurisdictional" waters regulated by USACE (USFWS 2020b). However, the Project site is located several hundred feet from the estuary shoreline. Therefore, the proposed Project would have no impact to State protected or federally protected wetlands.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. The Project site is located within the Pacific Flyway along the eastern shoreline of San Francisco Bay. The waters of the Bay, including the Oakland-Alameda Estuary, provide valuable stopover habitat for migratory birds (MarineGeo 2020). The proposed Project site, however, is almost entirely paved and developed with buildings and is not within a major migration or wildlife corridor. The proposed Project does not include tree removal that could eliminate roosting sites for migratory birds. Construction activities associated with the proposed Project would be temporary and would last for approximately 5 to 6 months. No future redevelopment or other operational use is considered as a part of the proposed Project. Therefore, no potential for long-term impacts to the movement of wildlife species or the use of wildlife nursery sites as a result of the proposed Project would result. The proposed Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors and would have no impact to biological resources.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. Street trees – including the landscaped trees along Fortmann Way – are protected in the City by the *Alameda Master Street Tree Plan* (2010b). The proposed Project would not involve tree removal. Therefore, the proposed Project would have no impact to local policies or ordinances protecting biological resources.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. Natural Community Conservation Plans (NCCPs) are State-sponsored programs endorsed by the Federal government to balance the needs of urban development and economic growth with species and habitat protection. NCCPs employ a multi-habitat and multi-species conservation planning approach, focusing on preserving the largest core habitat areas possible while protecting necessary habitat linkages and wildlife movement corridors that are necessary to maintain long-term biological and genetic diversity. The proposed Project is not located within an approved NCCP or Habitat Conservation Plan (HCP) area and is not located within a planning area for an adopted NCCP, HCP, or other approved local, regional, and State habitat

conservation plan. Therefore, the proposed Project would have no impact to biological resources.

V. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

ENVIRONMENTAL SETTING

The first Europeans to visit the eastern part of the San Francisco Bay area were the Spanish explorers Pedro Fages and Reverend Juan Crespi, who passed through in 1772. After Mexico won independence from Spain in 1821, large tracts of land in California were granted to military heroes and loyalists. The Alameda peninsula was part of the vast 44,880-acre Rancho San Antonio granted to Luis Peralta in 1820 by Governor Pablo Vicente de Solá, the last Spanish governor of California. The area of potential effect (APE) for the proposed Project originally consisted of marshlands that were later filled with a mixture of man-made refuse, bay mud, sand dredged from San Francisco Bay, and imported fill material. The existing facilities, including warehouses, maintenance building and covered carport, a compounding building, piping infrastructure, ASTs within a tank farm, truck and rail loading dock/scale, and abandoned rail lines have operated as a motor oil, blending, packaging, and distribution center since 1951. Two USTs were removed from the maintenance yard in 1985 and two USTs were removed from inside a portion of the warehouse referred to as the Taylor Warehouse in 1996. A total of 37 ASTs were removed from the tank farm in 2013.

IMPACT ANALYSIS

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. As defined in Section 15064.5 of the CEQA Guidelines, a historical resource is any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register of Historical Resources (CRHR), included in a local

register, or identified as significant in a historic resource survey are also considered historical resources under CEQA. No such resources are located within the proposed Project APE.

Direct impacts are those that cause substantial adverse physical change to a historical resource. Indirect impacts are those that cause substantial adverse change to the immediate surroundings of a historical resource such that the significance of a historical resource would be materially impaired. The cultural survey concluded that no historical resources have been recorded within the APE. The APE is not included on the list of Alameda Historical Monuments or the City of Alameda's Historic Building Study List, and the proposed Project does not require a Certificate of Approval, a special permit required to perform construction, alteration, or demolition work on historic structures based on the original construction date (i.e., construction after 1942). Therefore, the implementation of the proposed Project would have no impact on historical resources.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than Significant with Mitigation Incorporated. An archaeological literature review and records search was conducted at the California Historical Information System (CHRIS) Northwest Information Center (NWIC) at Sonoma State University in May 2020 for the proposed Project APE site and a 0.5-mile radius around the site (see Appendix B). Two previous investigations evaluated the southern portion of the APE; and 15 previous investigations extending 1 mile from the APE. Six recorded prehistoric and historic-period sites are recorded within 1 mile of the Project site, but none are within the proposed disturbance areas.

The motor oil distribution center was developed on the edge of the Oakland-Alameda Estuary. Historic, mid-19th century USGS topographic maps indicate that the Project site was within the estuary marshland prior to filling. This wetland would have been used by Native American populations for fishing and forging, rather than for settlement that occurred on upland topographic landforms. The Project site industrial facility has been developed since 1951, as the marshland was filled in with a mixture of man-made refuse, bay mud, and sand dredged from San Francisco Bay. Imported fill within the Project site has been mapped in thickness from 2 to 25 feet and bay mud ranges in thicknesses from a few inches to 95 feet (see Appendix D). It is reasonable to assume that development of the USTs and associated piping, structures, and paved surface treatments resulted in ground disturbances several feet deep.

As described above, the Project site would not have been a desirable location of Native American settlement, given its location within a wetland. These wetland soils were subsequently substantially disturbed during development of the motor oil storage facility in 1951 and again during UST removals in 1985 and 1996. Additional ground disturbance occurred again in 2013 during the removal of 37 ASTs. As a result, there is little potential for intact, potentially significant archaeological resources to occur within the Project site. Further, because the existing site was filled with imported fill, any cultural materials discovered are likely to have been redeposited and not in their original depositional location. Cultural materials that have been redeposited and are not in their original depositional location are not considered significant artifacts according to CEQA.

There is a remote possibility that unknown, isolated pockets of intact archaeological resources could be discovered during Project excavation activities, which could result in a potentially significant impact on cultural resources. Therefore, the implementation of mitigation that ensures assessment of any unexpected cultural resources by a qualified archaeologist is required to reduce potential impacts to less than significant.

Mitigation Measure CUL-1: Archaeological Resource Discovery Plan

Prior to the issuance of a grading permit, Project plans shall include a requirement indicating that if historic or cultural resources are encountered during site grading, excavation, or other work, all such work shall be temporarily halted immediately within 100 feet of the area of discovery and the contractor shall immediately notify the City of Alameda of the discovery. In such case, the Applicant shall retain the services of a Qualified Archaeologist (per the Secretary of the Interior's Standards and Guidelines) for the purpose of recording, evaluating, protecting, and curating the time-sensitive discovery as appropriate. The Qualified Archaeologist shall be required to submit to the City of Alameda for review and approval a report of the findings and method of curation or protection of the resources. Grading or site work within the vicinity of the discovery, as identified by the Qualified Archaeologist, shall not be allowed until the appropriate steps have taken place.

Implementation of MM CUL-1 would reduce potential impacts on cultural resources to less than significant.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant with Mitigation Incorporated. Because the Project site is unlikely to have been a Native American village site (See Section XVIII, *Tribal Cultural Resources*) and has experienced previous ground disturbance associated with the construction of the industrial motor oil storage facility, the potential for encountering unknown human remains during Project-related construction activities is considered remote.

Existing regulations require that if human remains or cultural items defined by the Health and Safety Code (HSC) Section 7050.5, are inadvertently discovered, all work in the vicinity of the find would cease and the County Coroner would be contacted immediately. If the remains are found to be Native American as defined by HSC, Section 7050.5, the coroner would contact the Native American Heritage Commission (NAHC) by telephone within 24 hours. The NAHC would immediately notify the person it believes to be the most likely descendant as stipulated by California Public Resources Code Section 5097.98. The most likely descendant(s) with the permission of the landowner or authorized representative, shall inspect the site of the discovered remains and recommend treatment regarding the remains and any associated grave goods. The most likely descendant would complete their inspection and make their recommendations within 48 hours of notification by the NAHC.

Any discovery of human remains would be treated in accordance with Public Resources Code Section 5097.98 and HSC Section 7050.5. Therefore, no further disturbance would occur until the Coroner has made findings as to the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98. Therefore, compliance with existing regulations and the

implementation of mitigation measures would reduce potential impacts on cultural resources to less than significant.

Mitigation Measure CUL-2: Human Remains

Pursuant to Public Resources Code Section 5097.98 and HSC Section, 7050.5, if human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the Alameda County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the NAHC who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. Additional work is not to take place in the immediate vicinity of the find, which shall be identified by the qualified archaeologist, until the identified appropriate actions have been implemented.

Implementation of MM CUL-2 would reduce potential impacts on cultural resources to less than significant.

VI. ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

In 2008, the City of Alameda adopted their Local Action Plan for Climate Protection, with the goal of reducing the City's GHG emissions to 25 percent below 2005 levels by 2020 (City of Alameda, 2019b). The City adopted the Climate Action and Resiliency Plan (CARP) in 2019 that expanded the focus of the City's climate program to include focus on climate resiliency and adapting to sea level rise, flooding and local hazards (City of Alameda 2019b). The CARP identifies strategies and actions to reduce GHG emissions and adapt to sea level rise and flooding. Since January 2020, Alameda Municipal Power (AMP), the not-for-profit energy supplier of the City has supplied 100 percent clean energy to all its customers. About 80 percent of AMP's power mix comes from eligible renewable sources including geothermal, biomass, hydroelectric, and wind power.

IMPACT ANALYSIS

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact. The proposed Project would involve the demolition of existing buildings and other infrastructure, excavation and removal of contaminated soil, and backfilling. Temporary consumption of energy resources would occur over the 5- to 6-month construction period and would primarily comprise temporary diesel and gasoline fuel consumption for construction worker commutes, heavy haul truck trips, and the operation of heavy construction equipment.

The transportation fuel required by construction workers traveling to and from the Project site would be dependent on the total number of construction worker trips estimated for the duration of the construction activities. The Statewide average fuel economy for all vehicle types (i.e., automobiles, trucks, and motorcycles) in the year 2020 was estimated at 18.78 miles per gallon (Caltrans 2008). This assessment assumes that the proposed Project would generate a total of 5,766 vehicle trips and each trip would be an average of 39 miles (see Section XVII[b], *Transportation*). Therefore, the proposed Project would generate a total of 224,874 vehicle miles traveled (VMT). Based on the average fuel economy of 18.78 miles per gallon, the proposed Project would result in the short-term consumption of 11,974 gallons of gasoline; this would be a negligible contribution to the Statewide transportation gasoline consumption (Energy Information Administration 2020).

CARB has adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other TACs. Compliance with these anti-idling and emissions regulations would result in increased efficiency of construction-related energy and minimize or eliminate wasteful and unnecessary consumption of energy.

Electricity would either be supplied by the local utility provider (e.g., AMP) or imported to the Project site by a private third party. Electricity used to provide temporary power for lighting and electronic equipment (e.g., computers, etc.) inside temporary construction trailers and for outdoor lighting when necessary for general construction activity would not result in a substantial increase in on-site electricity use. Temporary electricity use during construction would vary depending on lighting needs and the use of electric-powered equipment. Therefore, electricity use during construction would be considered negligible and less than significant.

No future redevelopment or other operational use is considered as a part of the proposed Project. Therefore, implementation of the proposed Project would not result in potentially long-term significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. Instead, the proposed Project would reduce long-term energy consumption at the Project site from existing levels through removal of existing structures and infrastructure. For these reasons, the energy use associated with the proposed Project would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The proposed Project would be required to comply with all applicable Federal and State energy requirements. The proposed Project would not generate significant GHG emissions (see Section VIII, *Greenhouse Gas Emissions*) and would not conflict with the City's adopted CARP. No redevelopment or other long-term operational use that would require energy

consumption are considered as a part of the proposed Project. Therefore, the proposed Project would not conflict with or obstruct an energy plan and there would be no impact on long-term energy demand.

VII. GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The description of the geologic setting for the Project site is based on existing reports and maps, including the City's General Plan as well as USGS and CDC mapping.

The proposed Project site is located in the western Coast Ranges geomorphic province of California. The Coast Ranges are northwest-trending mountain ranges, separated into a north and south by the San Francisco Bay. The San Francisco Bay is located within a broad depression created from an east-west expansion between the San Andreas and the Hayward fault systems.

As one of the most seismically active areas in the country, significant earthquakes have occurred in the San Francisco Bay Area. These earthquakes are generally believed to be triggered by crustal movement along a system of subparallel (i.e., nearly parallel) fault zones that trend in a northwesterly direction through the San Francisco Bay Area. The Working Group on California Earthquake Probabilities reports that there is a 72 percent probability of at least one earthquake of magnitude 6.7 or greater striking somewhere in the San Francisco Bay Area before 2043 (USGS 2016). The major active faults in the area are the Hayward, Rodgers Creek, San Andreas, San Gregorio, and Calaveras faults. The closest of these to the Project site are the Hayward fault, located approximately 4 miles to the east, the Calaveras fault located approximately 14 miles to the east, and the San Andreas fault, approximately 14.5 miles to the west (CDC 2015a). However, no active faults have been mapped through the Project site and the potential for surface faulting and ground rupture on the property is considered low.

In the City of Alameda, underlying soils are comprised of artificial fill, bay mud, and expansive soils, which make the area susceptible to secondary seismic hazards associated with earthquakes such as liquefaction, lateral spreading and cracking of the ground surface (City of Alameda 2017a). The Project site and surrounding area is generally flat and is not associated with a high risk of landslides.

IMPACT ANALYSIS

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

Less than Significant Impact. The Project site is not located within an Earthquake Fault Zone and no known active faults have been mapped through the Project site. Although fault rupture is not necessarily limited to areas that coincide with the mapped fault trace, the Project site is sufficiently far enough away from the nearest active fault (Hayward fault, approximately 4 miles distant) to be considered not at risk of fault rupture. For these reasons, potential impacts related to earthquake fault rupture would be less than significant.

ii) Strong seismic ground shaking?

Less than Significant Impact. As previously described, the Project site is located in one of the most seismically active regions in the country which is likely to experience at least one major earthquake (i.e., magnitude 6.7 or greater) within the next 30 years (USGS 2016). In the event of a major earthquake on any nearby faults, the Project site would experience strong to very strong ground shaking. Therefore, a limited potential remains for a large earthquake to induce strong

to very strong ground shaking at the Project site during the proposed remediation activities. Construction activities – including demolition, excavation and removal of contaminated soil, and backfilling – would comply with all applicable City demolition and grading permit conditions. All excavations, at a maximum depth of approximately 6 feet in some locations on the Project site, would include appropriate shorings (i.e., temporary supports) based on the stability of the excavation area to minimize the potential for collapse of an excavation during an earthquake. The proposed Project would involve the demolition of existing pavements, several buildings up to 70 years old, and other structures on the Project site. No redevelopment or other operational use is considered as a part of the proposed Project. The proposed Project would not include construction of structures or place people at risk of substantial effects from seismic ground shaking, such as risk of property damage, injury, or death. Therefore, while the Project site would be subject to strong ground shaking during future seismic events, impacts related to ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact. The Project site is located in a liquefication zone (CDC 2018b). Soils that are most susceptible to liquefaction are loose, saturated, fine-grained sands and non-plastic silts and clays that are generally located within 50 feet of the ground surface. Seismic shaking has the potential to liquefy the soil in areas that contain saturated granular sediments of a specific grain size. The loss of shear strength in low to moderate relative density areas, along with shallow groundwater, can create an environment in which soils take on a "liquid" quality. This process typically occurs in poorly packed alluvial deposits, artificial fill, and areas with a shallow water table.

As previously described, the Project site is located in a seismically active region that has the potential to experience seismic ground shaking, which could result in liquefaction. Construction activities – including demolition, excavation and removal of contaminated soil, and backfilling – would comply with all applicable demolition and grading permit conditions. All excavations up to a depth of approximately 6 feet would include appropriate shorings where necessary based on the stability of the excavation area to minimize the potential for collapse of an excavation during an earthquake. The proposed Project would involve the demolition of existing pavements, buildings, and other structures on the Project site. No redevelopment or other operational use is considered as a part of the proposed Project. The proposed Project would not include construction of structures or place people at risk of substantial effects from seismic ground shaking, such as risk of property damage, injury, or death. Therefore, while the Project site would be subject to strong ground shaking during future seismic events, impacts related to liquefaction would be less than significant.

iv) Landslides?

No Impact. The Project site is not located in a landslide zone or a liquefaction landslide overlay zone (CDC 2018b). The Project site and surrounding vicinity is located in a generally flat area ranging from approximately 10 feet to 13 feet above mean sea level (MSL). The proposed Project would result in excavations up to approximately 6 feet in some locations on the Project

site. Upon completion of demolition, excavation, and backfilling activities, the entire Project site would be cleared of equipment, regraded, and restored with a final layer of clean fill soil. Therefore, the proposed Project would have no impact related to landslide risks.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Project construction activities would involve the excavation of up to 11,400 bcy of soil. This soil would be replaced by new and clean fill imported to the Project site such that there would be no long-term loss of topsoil. Nevertheless, the potential for soil erosion would exist during construction, particularly after the demolition of existing pavements. Given that the proposed Project would involve the disturbance of more than 1 acre, coverage under the State Construction General Permit would be required. The Construction General Permit would require the preparation and implementation of a SWPPP with BMPs to control runoff from the construction areas. As described in Section 2.11, *Best Management Practices and Environmental Protection Measures*, temporary erosion and sediment control measures shall be installed throughout the Project site for work completed between October 1 and April 15. With compliance with the Construction General Permit and the implementation of a SWPPP and BMPs, temporary construction-related erosion impacts would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less than Significant Impact. Underlying soils in the City are composed of bay mud, artificial fill, and expansive soils that are at risk for liquefaction, lateral spreading, and cracking of the ground surface (City of Alameda 1991). The Project site was originally marshland that was subsequently filled in with a mixture of man-made refuse, bay mud, and sand dredged from San Francisco Bay. Imported fill ranges in thickness from 2 to 25 feet and bay muds range in thicknesses from a few inches to 95 feet (Project RAP, Appendix D). The Project site is currently developed with pavement, buildings, and other infrastructure that would be demolished and removed under the proposed Project. Short-term construction activities would occur over a 5- to 6-month period and would comply with all applicable City demolition and grading permit conditions. All excavations up to a maximum depth of approximately 6 feet would include appropriate shorings as necessary to minimize the potential for collapse of an excavation during an earthquake. Upon completion of demolition, excavation, and backfilling activities, the entire Project site would be cleared of equipment, regraded, and restored with a final layer of clean fill soil. The proposed Project would not expose people or structures to adverse risk of landslide, lateral spreading, subsidence, liquefaction or collapse. Therefore, the proposed Project's impacts related to unstable soil would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

Less than Significant Impact. Effects of expansive soils are typically associated with damage of foundations of aboveground structures. Surface structures with foundations constructed in expansive soils could experience expansion and contraction depending on the season and the

amount of surface water infiltration. This expansion and contraction would potentially exert enough pressure on a structure to result in cracking, settlement, and uplift. The Project site is currently developed with pavement, buildings, and other infrastructure which would be demolished and removed as part of the proposed Project. No redevelopment or other operational use is considered as a part of the proposed Project. Therefore, the proposed Project impacts related to expansive soils would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The proposed Project would involve demolition of existing pavement, buildings, and other structures, excavation and removal of contaminated soil, and backfilling. No redevelopment or other operational use is considered as a part of the proposed Project, and no septic tanks or alternative wastewater disposal facilities would be installed. Therefore, there would be no impact associated with soils that are incapable of supporting septic tanks.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact. Paleontological resources are the fossilized remains of plants and animals, including vertebrates, invertebrates, and fossils of microscopic plants and animals (microfossils). As described in the RAP (see Appendix D), the Project site was originally marshland that was subsequently filled in with a mixture of man-made refuse, bay mud, and sand dredged from San Francisco Bay. Imported fill ranges in thickness from 2 to 25 feet and bay muds range in thicknesses from a few inches to 95 feet. Imported fills have been mixed and reworked from native geologic materials and are not fossil-yielding. Alluvial bay muds are either recent (i.e., within the last 200 years) or Holocene-age (i.e., within the last 11,000 years), and are not associated with periods of fossil deposition.

A search of the University of California Museum of Paleontology (UCMP) database by both sediment age and location revealed few invertebrate fossils and no vertebrate fossils in similar geologic environments in Alameda County. Fourteen marine invertebrate fossils of Quaternary age (within the last 1.8 million years) were found in Oakland, three of which were found in or around Lake Merritt (UCMP 2017).

Marine invertebrate fossils recovered from Holocene-age sediments are not considered significant fossil resources because they are typically abundant in similar geologic deposits and they do not represent unique specimens that contribute substantially to scientific knowledge. Overall, there is a very low, if any, potential to encounter fossil resources at the Project site. Therefore, proposed Project excavations would have no impact on paleontological resources or unique geologic features.

VIII. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

Global climate change can be measured by changes in wind patterns, storms, precipitation, and temperature. Scientific consensus has identified human-related GHG emissions above natural levels is a significant contributor to global climate change. GHGs are substances that trap heat in the atmosphere and regulate the Earth's temperature, and include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ground level O_3, and fluorinated gases such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and halons. The potential impacts of climate change include severe weather patterns, flooding, reduced quality and availability of water, sea level rise, and beach erosion. Primary activities associated with GHG emissions include transportation, utilities (e.g., power generation and transport), industry, manufacturing, agriculture, and residential uses. End-use sector sources of GHG emissions in California are as follows: transportation (41 percent); industry (23 percent); electricity generation (16 percent); agriculture and forestry (8 percent); residential (7 percent); and commercial (5 percent) (CARB 2018).

Assembly Bill (AB) 32 is a California State Law that establishes a comprehensive program to reduce GHG emissions from all sources throughout the state. AB 32 requires CARB to develop regulations and market mechanisms to reduce California's GHG emissions to 1990 levels by 2020, representing a 25 percent reduction statewide, with mandatory caps beginning in 2012 for significant emissions sources.

GHG emissions contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, an individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution. As such, impacts related to emissions of GHG are inherently considered cumulative impacts. Estimated GHG emissions attributable to future development in the City of Alameda are primarily associated with increases of CO_2 and, to a lesser extent, other GHG pollutants, such as CH_4 and N_2O associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste.

GHG Emissions Threshold

At the regional level, the BAAQMD has proposed the following thresholds of significance for operational-related GHG emissions as of May 2017:

- For land use development projects, the threshold is compliance with a qualified GHG Reduction Strategy; or annual emissions less than 1,100 metric tons per year carbon dioxide equivalent (MT CO_2e/year) or 4.6 MT CO_2e/service population/year (residents + employees). Land use development projects include residential, commercial, industrial, and public land uses and facilities.
- For stationary-source projects, the threshold is 10,000 MT CO_2e/year. Stationary-source projects include land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate (BAAQMD 2017b).

If annual emissions of operational-related GHGs exceed these levels, the proposed Project would result in a cumulatively significant impact. The BAAQMD has not yet adopted a threshold of significance for construction-related GHG emissions. However, Section 8.2 of the BAAQMD *CEQA Air Quality Guidelines* recommends that the Lead Agency quantify and disclose GHG emissions that would occur during construction and make a determination of the significance of the construction-related GHG impacts in relation to meeting AB 32 GHG reduction goals, as required by Public Resources Code Section 21082.2 (BAAQMD 2017b). The Lead Agency is also encouraged to incorporate BMPs to reduce GHG emissions during construction as applicable. BMPs include but are not limited to: using alternative fueled (e.g., biodiesel, electric) construction vehicles/equipment of at least 15 percent of the fleet; using local building materials of at least 10 percent; and recycling or reusing at least 50 percent of construction waste or demolition materials (BAAQMD 2017b).

In 2008, the City of Alameda adopted the CARP that identifies strategies and actions to reduce GHG emissions. In 2019, the Alameda City Council adopted the updated CARP to address climate adaptation. The plan update identifies strategies to increase both the physical and social resilience of the community's transportation system to climate change impacts. It also focuses on reducing GHG emissions, increasing the quality in the City, and building resilience to climate change impacts like increased flooding.

IMPACT ANALYSIS

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. The primary source of proposed Project construction GHG emissions would be from mobile sources such as construction worker commutes and from heavy haul truck trips during excavation. Neither the City nor the BAAQMD has adopted a threshold of significance for construction-related GHG emissions. The BAAQMD operational, long-term GHG emission thresholds of significance for stationary source projects is more than 10,000 MT CO_2e/year. If a project generates GHG emissions above the threshold level, the project would be considered to generate significant GHG emissions and conflict with applicable GHG regulations. The proposed Project does not involve redevelopment or other long-term

operational use and would not exceed the local GHG emission threshold of significance. For these reasons, the proposed Project would represent a substantial reduction in GHG emissions at the Project site; GHG impacts would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. The BAAQMD *2017 Clean Air Plan* outlines the goals and objectives to reduce Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050, consistent with the GHG reduction targets adopted by the state of California. The *2017 Clean Air Plan* includes the following measures to reduce emissions from construction and farming equipment:

- Use various strategies to reduce emissions from construction and farming equipment (e.g., incentives for equipment upgrades and/or encourage the use of renewable electricity and fuels).
- Provide incentives for the early deployment of electric, Tier 3 and 4 off-road engines used in construction, freight, and farming equipment.
- Support field demonstrations of advanced technology for off-road engines and hybrid drive trains.
- Work with CARB, the California Energy Commission, and others to develop more fuel-efficient off-road engines and drive-trains; and
- Work with local communities, contractors, farmers, and developers to encourage the use of renewable electricity and renewable fuels, such as biodiesel from local crops and waste fats and oils, in applicable equipment.

CARB's AB 32 *Climate Change Scoping Plan* (2008) has several measures to reduce emissions from transportation fuels, which would indirectly reduce emissions from construction equipment. These include the Low Carbon Fuel Standard (LCFS), which would reduce GHG emissions by minimizing the full fuel-cycle carbon intensity of transportation fuels used in California. The *2017 Scoping Plan Update*, which builds upon the initial *2008 Climate Change Scoping Plan*, contains new strategies and recommendations to reduce GHG to reach the State's 2030 GHG emissions reduction target (CARB 2017). California's overall plan for climate adaptation is also summarized in the *Safeguarding California Plan: 2018 Update*. This plan provides policy guidance associated with climate risks in nine sectors in California and provides realistic sector-specific recommendations (California Natural Resources Agency 2018).

The various plans, policies, and regulations at the state and local level do not directly require the reduction of GHG emissions from construction equipment; however, emissions would be indirectly reduced through programs like the LCFS. Several rules adopted to reduce emissions of non-GHGs, such as CARB's In-Use Off-Road Diesel Vehicle Regulation (13 CCR Part 2449), could also reduce GHG emissions. Since the temporary construction equipment would operate in compliance with all applicable regulations for off-road equipment, the proposed Project would not conflict with any plan, policy, or regulation adopted for the purpose of reducing GHG emissions. For these reasons, the proposed Project would not conflict with an applicable plan,

policy or regulation adopted for the purpose of reducing GHG emissions and impacts would be less than significant.

IX. HAZARDS AND HAZARDOUS MATERIALS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The Project vicinity is characterized as a developed, urban area with predominantly residential, commercial, and industrial land uses. According to the State of California Department of Toxic Substances Control (DTSC) EnviroStor Database, compliant with Government Code Section 65962.5, the proposed Project site is not a hazardous waste and substances site. The nearest active hazardous waste clean-up site listed on the Cortese List is the former J.H. Baxter Facility, located approximately 0.7 miles east of the Project site at 2229 and Clement Avenue (DTSC 2020).

The Project site is however, included on the Cortese List as an "active" Cease and Desist Orders (CDOs) and Clean-up and Abatement Orders (CAOs), pursuant to Government Code Section 65962.5(c)(3) (State Water Resources Control Board [SWRCB] 2020b). The Project site is also listed as a cleanup program site on the California Water Board's GeoTracker database which tracks sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater (GeoTracker 2020). The Project site appears in the GeoTracker database as Pennzoil-Quaker State Alameda Specialty Plant (SL373281185), an open cleanup site that contains several COCs, including benzene, diesel, gasoline, metal, waste oil/motor oil, and xylene (Geotracker 2020).

Other known hazardous waste cleanup sites within 0.7 miles include the Grand Street Tank Farm (SLT2O00715) located at 2047 Grand Street, which is an open, but inactive cleanup site that contains benzene, diesel, gasoline, and TPH (Geotracker 2020). There are also other open and closed Leaking Underground Storage Tank (LUST) and Cleanup Program sites within a 0.5-mile radius of the Project site, including the Pennzoil Gas Station (Closed Case) at 2015 Grand Street, Grand Marina Village (Closed Case) at 2051 Grand Street, Weyerhaeuser Paper Company (Case Closed) at 1801 Hibbard, Whitmore's Auto Service (Open LUST Cleanup Site) at 1701 Buena Vista Avenue, and the City of Alameda Fire Station #3 (Closed Case) at 1703 Grand Street. The Project site has been owned and operated by SOPUS since 1951 as a distribution center for bulk and packaged petroleum-based lubricant products (motor oil). Since 1995, SOPUS ceased blending and packaging of petroleum-based lubricants and currently only blends bulk road base oil and industrial lubricants. The site formerly contained gasoline and diesel USTs in the site's storage yard; these USTs were removed in 1985. Two other USTs were located within the Taylor Warehouse and were removed in 1996 such that no USTs remain on the Project site. A total of 48 ASTs containing petroleum-based oil and lubricating oil additives or collected rainwater existed onsite, but 37 were removed in 2013. The remaining 11 active ASTs contain blended bulk road base oil and industrial lubricants.

Former USTs containing gasoline and diesel fuel contributed to shallow soil and subsequent groundwater contamination in the northeastern portion of the Project site. Accidental spills associated with leaking and overfilling ASTs with petroleum also contributed to shallow soil contamination and groundwater impacts in the tank farm area in the southwestern portion of the Project site. The accidental oil spills and leaks associated with USTs and ASTs continued to occur at the Project site and resulted in numerous site investigations over the past 40 years. A summary of previous environmental investigations and remediation activities is provided in Section 2.8, *Project Background*.

Despite previous remediation activities, impacted soil contamination and groundwater contaminated with TPHg, TPHd, TPHmo, and BTEX remain throughout the Project site within the shallow soil approximately 2 to 4 feet bgs (Consulting Engineers 1985; ARCADIS 2005; CRA 2015). Groundwater contamination consisting of TPHg, TPHd, TPHmo, and BTEX is present due to the high groundwater levels in the vicinity that ranges from approximately 1 to 4 feet bgs.

ESLs are non-regulatory and conservative screening levels established by the San Francisco Bay RWQCB for evaluating cleanup requirements at sites with contaminated soil and groundwater. A detailed explanation of ESLs is provided in Section 2.9, *Proposed Project*. ESLs are intended to expedite the identification and evaluation of potential environmental concerns at contaminated

sites. Soil samples collected at 4 feet bgs exceeded the Tier 1 ESL for TPHg. Soil analytical results also indicated that soil in the northeastern area of the Project site exceeded one or more of the Tier 1 TPH ESLs.

Several VOCs were detected in soil, sub-slab soil gas, and groundwater samples, with some results exceeding the respective Tier 1 ESLs. In general, VOC results for soil samples correlated with the TPH results for soil, with Tier 1 ELS exceedances primarily occurring in samples collected at 2 or 4 feet bgs. VOCs were also detected in sub-slab soil gas samples with results for benzene, ethylbenzene, 1-2-dichloroethane, and tetrachloroethene exceeding Tier 1 ESLs in one or more samples. The results for BTEX compounds and naphthalene in groundwater also exceeded their respective Tier 1 ESLs.

Previous investigations include a 2014 Asbestos and Lead Paint Survey Report which identified ACM in the administrative office building, main warehouse, lower warehouse, former laboratory (now a concrete building pad), north warehouse, storage facility, and compounding building (ERM West Inc. 2014). LBP was identified in the administrative office building, and lower warehouse, and LCP was identified in the administrative office building, main warehouse, lower warehouse, storage facility, and the compounding building (ERM West Inc. 2014).

The closest public school to the Project site is Love Elementary School located approximately 0.4 miles southeast of the Project site. The proposed Project site is not located in the vicinity of any private airstrip. The nearest airport to the Project vicinity is the Oakland International Airport (OAK), located approximately 5 miles to the southeast. The Project site is not located within the OAK Airport Influence Area (Alameda County Community Development Agency 2012).

The 2019 City of Alameda Emergency Operations Plan (EOP) is the foundation for disaster response and recovery operations for the City of Alameda. This plan establishes the emergency organization, specifies policies and general procedures, and provides for coordination of the responsibilities of the City of Alameda as a member of the Alameda County Operational Area with other member organizations in all phases of an emergency or disaster (City of Alameda 2019c).

The Project site is located in an entirely urbanized area outside of any fire hazard severity zones (FHSZ) (CAL FIRE 2008). The nearest wildlands and areas of potential wildfire risk are located approximately 6.5 mile to the east, where there is a local responsibility area (LRA) with a very high FHSZ (VHFHSZ) (CAL FIRE 2008).

IMPACT ANALYSIS

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. A hazardous material is defined as any material that due to its quantity, concentration, physical or chemical characteristics poses a significant present or potential hazard to human health or to the environment if released. Hazardous materials include, but are not limited to, inorganic and organic chemicals, solvents, mercury, lead, asbestos, paints, cleansers, or pesticides.

Construction activities of the proposed Project would involve excavation of up to 11,400 bcy of contaminated soil consisting of TPHg, TPHd, TPHmo, and BTEX within the shallow soils (approximately 2 to 4 feet bgs (Wood, 2020; Consulting Engineers 1985; ARCADIS 2005; CRA 2015). Soil excavations would be focused in three locations of the Project site: the tank farm in the southwest area of the Project site; the northeast area; and the former UST and wash area in the Taylor Warehouse.

Excavations in the southwest/tank farm area would include soils near Clement Avenue that exceed construction worker direct-exposure ESLs of TPHd, as well as soils that exceed residential direct-exposure ESLs of TPHg and TPHmo in the remainder of the tank farm area. The excavation extent in the former tank farm area excludes the vacated portion of Clement Avenue, a portion of Hibbard Street, and the railroad tracks, where proposed construction would occur along Clement Avenue between Hibbard Street and Grand Street. Excavations in the tank farm area would include up to 3 feet of soil excavation for a total of 4,900 bcy of soil removal. Preliminary soil sampling at the bottom of the 3-foot excavation depth would determine whether excavation below 3 feet bgs is required. Excavation is not expected to extend deeper than 5 feet bgs (anticipated groundwater depth).

Excavations in the former UST and wash area in the Taylor Warehouse would include approximately 100 bcy of soil removal. Excavations in the northeast area would include up to 6 feet of soil excavation (anticipated groundwater depth) for a total of 6,500 bcy of soil removal. Additional excavation below 6 feet bgs is not anticipated; soil sampling at the bottom of the 6-foot excavation depth would confirm the concentrations of COCs left in place. Excavations in the northeast area would remove soil containing residential direct-exposure exceedances of TPHg and TPHd, and BTEX. If dewatering is required during the excavation phase, water would be pumped to a secondary containment. Water removed during excavation would be treated onsite (if necessary) and discharged into EBMUD's sanitary sewer. If treated groundwater is tested and found to contain concentrations in excess of the EBMUD discharge limits, it would be disposed at an off-site, SOPUS-approved, local TSDF as non-hazardous waste.

The proposed Project would involve the demolition of on-site structures known to contain ACMs, LBPs, and LCPs; all on-site structures that contain ACMs, LBPs, and LCPs would be abated, as required, prior to any demolition activities. Demolition of concrete and asphalt materials may release fugitive dust emissions. The demolition phase of the proposed Project would also involve the removal of 11 active ASTs containing blended bulk road base oil and industrial lubricants. The liquids within the ASTs would be removed prior to demolition. Residual liquids within the ASTs would be pumped out, and the ASTs would be cleaned and rinsed. Liquids (i.e., decontamination water and residual oil) would be separated and then water would be disposed off-site at Instrat, a non-hazardous liquid waste treatment facility, in Rio Vista, California. Oils would be disposed of at the Crosby & Overton, Inc. transfer station in Richmond, California and then transferred to Long Beach, California. Dump trucks and flatbed trailers would be used to remove and securely transfer each AST off site for disposal.

All construction debris and excavated material would be sorted prior to removal/demolition. The City of Alameda is compliant with California Green Building Standards (or CalGreen), which requires that 65 percent of all debris hauled from a project must be recycled by a certified construction and demolition processor. Debris material associated with building demolition

would be sorted by type to meet disposal requirements (e.g., concrete, ACM, LBP-containing materials, miscellaneous metal) and placed into dump trucks and next hauled off-site for recycling or disposal at a permitted landfill in accordance with federal, state, and local regulations. Clean demolition debris would be disposed of at a Class III landfill (permitted to accept nonhazardous waste), such as Zanker Road Landfill in San Jose, California. Hazardous demolition debris would be disposed of at a Class I landfill (permitted to accept hazardous waste). Disposal of hazardous material would depend on the waste type. ACM waste would be disposed of at either the Altamont Landfill in Livermore, California or the Hay Road Landfill in Vacaville, California. LBP and LCP waste would be disposed of at either the Clean Harbors Landfill in Buttonwillow, California or the US Ecology Landfill in Beatty, Nevada. Concrete and asphalt would be recycled at Argent Materials, Inc. in Oakland, California, and metal materials would be recycled at Schnitzer Steel in Oakland, California (ICS 2020b).

These construction activities would require the use of heavy machinery, storage of fuel for machinery, and likely would result in dust emissions which could cause a temporary impact to the public or the environment. During remediation activities, construction workers could be exposed to hazardous materials such as fuels, oils, solvents, and other chemicals if these materials were accidentally spilled or released. Short-term soil exposure would potentially also affect construction workers due to the presence of the levels of TPHg, TPHd, TPHmo, and BTEX detected in soil and groundwater.

All construction activities would be required to comply with applicable policies, standards, and regulations in order to ensure there are no hazards related to the routine use, disposal, transport, or accidental release of hazardous materials (California OSHA requirements, CCR Title 8 and 22). All excavated and demolished material would be disposed in accordance with applicable codes and regulations. Disposal of these materials would not create a significant hazard to construction workers or the nearby community.

A WMTP and HASP would be developed prior to the start of construction in order to minimize potential impacts to construction workers and the public (see Section 2.11, *Best Management Practices and Environmental Protection Measures)*. The WMTP would require that standard Federal, State, and local construction measures are followed for hazardous materials and the removal of on-site debris. The WMTP would indicate the intended salvage and recycling facilities for all construction and demolition debris from the proposed Project. The WMTP would reduce potential impacts associated with hazardous materials during construction. The proposed Project would also implement measures to prevent hazardous waste releases, minimize both building debris waste releases (ACMs, LBPs, etc.), and reduce fugitive dust emissions and vapors associated with contaminated soil that could be generated during demolition and excavation activities. A HASP would outline the health the safety procedures for remediation and shall be prepared in accordance with OSHA Title 29 CFR §1910.120 (see Section 2.11, *Best Management Practices and Environmental Protection Measures)*.

Transportation of hazardous materials would be limited to the 5- to 6-month construction phase; following completion of construction, the Project site would be remediated and closed. No routine transport, use, or disposal of hazardous material would occur following completion of the proposed Project.

In summary, the proposed Project has the potential to temporarily expose construction workers due to the presence of TPHg, TPHd, TPHmo, and BTEX detected in soil and groundwater. Therefore, the implementation of a WMTP that incorporates waste management and site mitigation procedures would be required to reduce potential impacts. With the implementation of the BMPs and environmental protection measures – including the WMTP and HASP – potential hazardous material impacts associated with the proposed Project would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. Construction and operation activities would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The proposed Project would involve the use of some hazardous and flammable substances during the proposed remediation activities. These substances could include vehicle fuels and oils in the operation of heavy equipment for demolition of existing pavement, buildings, and other structures as well as the excavation and removal of contaminated soil and backfill with clean soil. Construction vehicles onsite would potentially require routine maintenance or repair that could involve the use of oil, diesel fuel, transmission fluid, solvents, or other materials. These materials would be used in small quantities, and when used in accordance with manufacturer specifications they would not pose a significant hazard to the public or environment.

Given the history of contaminated soil and groundwater at the Project site, the potential exists for construction workers to be exposed to these materials during remedial excavation, the handling of the ASTs, and/or hauling of soil during remediation activities associated with the proposed Project. Standard regulatory practices including compliance with OSHA regulations would be applied and construction workers would adhere to the approved WMTP and HASP (refer to Section IX[a]). Construction workers would be equipped with appropriate personal protective equipment (PPE). With the implementation of the BMPs and environmental protection measures including the WMTP, and HASP, potential hazardous materials impacts associated with the proposed Project would be less than significant.

Following completion of construction, the Project site would be closed and would not further involve the use of acutely hazardous materials or waste. For these reasons, no reasonably foreseeable upset or accident conditions that could release hazardous materials into the environment are anticipated to occur during construction or operation. Impacts on hazardous materials would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. The closest public school to the Project site is Love Elementary School, approximately 0.4 miles southeast of the Project site. Heavy construction equipment would generate criteria pollutant emissions. However, as described in Section III, *Air Quality*, construction emissions would not exceed BAAQMD thresholds and the levels generated are not

considered hazardous. While construction would involve the excavation and transport of demolition debris, contaminated soils, and new and clean fill, these materials would be transported and disposed in accordance with all applicable local, State, and Federal regulations. Compliance with BAAQMD fugitive dust requirements would minimize fugitive dust emissions during excavation activities. Any hazardous materials used during operations would consist of small amounts of common cleaning solutions that would be handled according to manufacturer specifications. As a result, impacts from the proposed Project on surrounding schools in regard to hazardous materials would be less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less than Significant Impact. Government Code Section 65962.5 requires the San Francisco Bay RWQCB to add to the Cortese list all cleanup and abatement orders and should include "active" cleanup projects. The proposed Project site is not an active hazardous waste site included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. According to the State of California DTSC EnviroStor Database (Cortese List), the nearest active hazardous waste clean-up site listed on the Cortese List is the former J.H. Baxter Facility, located approximately 0.7 miles east of the Project site at 2229 and Clement Avenue (DTSC 2020). The Project site, however, is included on the Cortese List as an "active" CDO and CAO, pursuant to Government Code Section 65962.5(c)(3) (SWRCB 2020b).

The Project site is also listed on the California Water Board's GeoTracker database which tracks sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. The site is listed as "Open – Assessment & Interim Remedial Action," which means an "interim" remedial action is occurring at the site and additional activities, such as site characterization, investigation, risk evaluation, and/or site conceptual model development are occurring (SWRCB 2020a). Potential contaminants on the Project site include benzene, diesel, gasoline, other metal, waste oil (motor, hydraulic, lubricating), and xylene (SWRCB 2020a).

During construction activities, contaminated soils would be excavated, removed, and disposed of at an approved disposal site in accordance with all regulations surrounding transport and disposal. The proposed Project would comply with all regulations pertaining to the handling and disposal of hazardous materials and would include the preparation of a Project-specific WMTP and HASP. With adherence to all applicable regulations and implementation of BMPs and environmental protection measures, potential hazardous materials impacts associated with the proposed Project would be less than significant. Following the completion of the proposed remediation activities, the San Francisco Bay RWQCB would consider the cleanup program case closed, and the Project would be removed from the SWRCB's list of open cleanup program sites and CDO and CAO list compiled pursuant to Government Code §65962.5.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The nearest airport to the Project site is the OAK, approximately 5 miles to the southeast. The Project site is not located within the OAK Airport Influence Area (AIA). As such, the proposed Project would not pose significant hazards for people residing or working in the area and there would be no safety hazard or excessive noise impacts.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. Throughout the 5- to 6-month duration of construction, Fortmann Way, Ellen Crag Avenue, Hibbard Street, Clement Avenue, and Grand Street would remain open to vehicle through traffic. Access to the nearby residential, commercial, and light industrial developments would be maintained throughout the duration of construction.

Four bridges and two tunnels provide access to Alameda Island. Evacuation routes involving one or more of these egress locations are designated and announced on an as-needed basis in response to specific emergencies (City of Alameda 2019d; County of Alameda 2012). While the proposed Project would result in additional construction worker commutes and heavy haul truck trips during construction, these trips would be negligible (i.e., up to a maximum of 65 trips per day) and temporary. No redevelopment or other operational use is considered as a part of the proposed Project. Therefore, following the completion of the proposed remediation activities, the proposed Project would not impair or physically interfere with an adopted emergency response plan, or a local, State, or Federal agency's emergency evacuation plan. For these reasons, impacts on adopted emergency response and emergency evacuation plans would be temporary and less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No Impact. The Project site is not located in an area susceptible to wildfires, as it is in an urban setting and lacks combustible native vegetation. The nearest wildlands and areas of potential wildfire risk are located approximately 6.5 miles to the east within a LRA with a VHFHSZ (CAL FIRE 2008). Therefore, no related project risk of loss, injury, or death involving wildfires or public hazards impacts would occur.

X. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	i) Result in substantial on- or offsite erosion or siltation;	☐	☐	☒	☐
	ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
	iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
	iv) Impede or redirect flood flows?	☐	☐	☒	☐
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The City of Alameda is located within the South Bay Basin, a sub-basin of the San Francisco Bay Basin. The San Francisco Bay Region covers 4,603 square miles and is characterized by its dominant feature, 1,100 square miles of the 1,600 square mile San Francisco Bay Estuary; this is the largest estuary on the west coast of the U.S., where fresh waters from California's Central Valley mix with the saline waters of the Pacific Ocean (The Region also includes coastal portions of Marin and San Mateo counties, from Tomales Bay in the north to Pescadero and Butano Creeks in the south). The San Francisco Bay Estuary conveys the waters of the Sacramento and San Joaquin rivers into the Pacific Ocean. The Bay system functions as the only drainage outlet for waters of the Central Valley. It also marks natural topographic separation between the northern and southern coastal mountain ranges.

The proposed Project is located within the North Alameda Watershed, a system of storm drains and underground culverts that drains the northern side of the island of Alameda into the

Oakland Estuary. The North Alameda Watershed has a drainage area of 3.4 square miles. The drainage area of the North Alameda Watershed is relatively flat; surface water is transported not by creeks but by a complex system of storm drains that empties into the estuary (Alameda County Flood Control & Water Conservation District 2017).

The North Alameda Watershed is under jurisdiction of the San Francisco Bay RWQCB. The San Francisco Bay RWQCB is responsible for the Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin, which regulates surface water and groundwater quality in the region and establishes water quality objectives to regulate pollution and control activities that can adversely affect aquatic systems (San Francisco Bay RWQCB 2017). The SWRCB and San Francisco Bay RWQCB issue NPDES permits to regulate specific pollutant discharges. Stormwater pollution discharges in the City are controlled through compliance with the San Francisco Bay Municipal Regional Stormwater NPDES Permit (MRP). The MRP is a comprehensive permit that issues waste discharge requirements related to construction sites, industrial sites, illegal discharges and illicit connections, new development, and operations throughout municipal separate storm sewer systems (MS4s) (San Francisco Bay RWQCB 2015). The RWQCB and MRP stipulate that construction activities disturbing one acre or more of soil are required to obtain individual NPDES permits for storm water discharges and implement a SWPPP for the site.

The Project site is located in the "Santa Clara Valley: East Bay Plain" groundwater basin. The Santa Clara Valley: East Bay Plain is a medium priority basin under the Sustainable Groundwater Management Act (SGMA). SGMA requires medium- and high-priority basins to develop groundwater sustainability agencies (GSAs), develop groundwater sustainability plans (GSPs) and manage groundwater for long-term sustainability. The City of Hayward acts as the GSA of the Santa Clara Valley: East Bay Basin (CDWR 2019). On November 6, 2017, the City of Hayward and EBMUD released a Notice of Intent to Develop a Groundwater Sustainability Plan (City of Hayward and EBMUD 2017) and as of August 2018, was accepting proposals for the development of a GSP (City of Hayward 2020). Currently, no GSP has been adopted for the Santa Clara Valley: East Bay Basin.

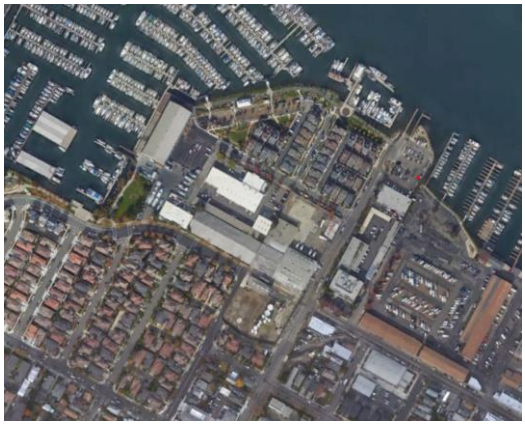
The City of Alameda is largely urbanized with a high proportion of impermeable surfaces such as roads, roofs, and parking lots, which results in significant runoff with limited ground infiltration. The City's storm drainage system includes 10 pump stations, 126 miles of pipelines, and 278 outfalls to the Bay and is managed by Alameda's Clean Water Program. Stormwater runoff is collected by the City's storm drainage system and diverted to the Bay. As a result, stormwater runoff is a leading cause of pollution in the Bay (City of Alameda 2020a). Common pollutants include chemical and bacterial contaminants such as fertilizer, pesticides, and animal waste as well as non-biodegradable products such as trash, plastics, cigarette butts, and other items (City of Alameda 2020a).

The Project site is located in a developed and urbanized area approximately 400 feet southwest of the Oakland inner harbor and approximately 600 feet southeast of the Fortmann Basin. The Project site is also located within a tsunami inundation zone (California Emergency Management Agency 2009), and is also partially located in a 0.2 percent annual chance flood hazard zone (floods with a 1 in 500 chance of occurring in a given year) as designated by the Federal Emergency Management Agency (FEMA) (FEMA 2020).

IMPACT ANALYSIS

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than Significant Impact. Project construction would take place approximately 400 feet southwest of the Oakland inner harbor and approximately 600 feet southeast of the Fortmann Basin (see Photograph 5). Construction would involve the demolition and removal of existing structures and 11 ASTs. Leaks and spills from ASTs and former USTs have resulted in on-site contamination in soil and groundwater. To remove contaminants, construction would include the excavation of up to 11,400 bcy of soil (6,500 bcy in the maintenance yard in the northeast and 4,900 bcy in the tank farm). Demolition and excavation activities create potential for pollution runoff of oils, fuels, heavy metals, sediment and other contaminants.



Photograph 5. *The Project site is located in an urbanized area and situated approximately 400 feet southeast of the inner Oakland Harbor. Construction activities would implement sediment and erosion controls to prevent potential runoff*

ASTs would be hydraulically isolated from the existing distribution facility to prevent risk of contaminant spill or leakage during AST removal, and devices would be inserted at the drain valves that service the ASTs to stop the flow of liquids. ASTs would then be cleaned prior to removal. Once removed, the liquid in the ASTs would be pumped and stored in frac tanks. Demolition, grading, excavation, and groundwater remediation activities would also create the potential for soil erosion that could temporarily affect water quality.

The proposed Project may be subject to the NPDES Construction General Permit requirements to prevent adverse impacts to water quality that would include preparation of a SWPPP and monitoring program. The SWPPP would include the implementation of erosion and sediment BMPs, monitoring, and reporting that would reduce surface and groundwater quality impacts. A NPDES Waste Discharge permit issued by the RWQCB may also be required. During extended storm events inspections would be conducted every 24 hour period to identify if additional control measures are needed. Due to proximity to the shoreline, materials, equipment and construction workers would be available for response in case of a spill. If dewatering is required during excavation, water would be treated onsite (if necessary and discharged into EBMUD's sanitary sewer). If treated groundwater is tested and found to contain concentrations in excess of the EBMUD discharge limits, it would be disposed at an off-site, SOPUS-approved, local TSDF as non-hazardous waste. Compliance with these measures would reduce potential construction water quality impacts to less than significant.

The proposed Project would also remove contaminated soil on the Project site, thereby reducing the potential for adverse impacts to water quality. Prior to completion of remediation activities, the Project site would also be stabilized, regraded, and restored with clean fill material, thereby

reducing any future water quality impacts. No new impervious surfaces would be created under the proposed Project.

With compliance with all permit conditions and the use of construction BMPs throughout the Project's duration, impacts to water quality standards or waste discharge requirements would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. Existing groundwater on the Project site has previously been contaminated with TPHg, TPHd, TPHmo, and BTEX from spills and leaks from ASTs and USTs. The proposed Project would apply an oxygen reducing compound directly to the contaminated groundwater during excavation of the maintenance yard in the northeast, to assist with enhanced biodegradation of VOCs. However, because contaminated water is considered unsuitable for use as drinking water this would not be a significant impact to groundwater quality.

Demolition of structures with subsurface foundations and excavation activities could intercept shallow groundwater and could require dewatering to lower groundwater levels. Depending on the nature of construction activities and given the shallow subsurface water levels, groundwater could flow into excavations that extend below the shallow groundwater table. Common practices employed to facilitate construction include either dewatering the excavation or shoring the sides of the excavation to reduce groundwater inflow. If dewatering is conducted, groundwater would be pumped out of the excavation area to the surface, treated onsite (if necessary) and then discharged to the sanitary sewer under an EMBUD discharge permit. Water extracted during dewatering could contain chemical contaminants from use of equipment or from ASTs and former USTs or could become sediment-laden from construction activities. In areas where dewatering would be implemented, the discharge could potentially contaminate the receiving waters depending on the quality of the groundwater, which would be a significant impact on groundwater quality. However, compliance with permit conditions as part of EBMUD's discharge permit and NPDES waste discharge permit issued by the RWQCB, if required, would minimize the water quality impact to the receiving waters to a less-than-significant level.

Excavation activities would also involve the removal and destruction of existing on-site groundwater monitoring wells. Post-excavation groundwater monitoring would be dependent on groundwater concentrations observed during excavation dewatering, but is not anticipated. Reinstallation of existing groundwater monitoring wells is not currently proposed.

Following completion of construction activities, the Project site would be closed and would not involve new structures or uses that would deplete groundwater supplies or interfere with groundwater recharge. The proposed Project would also remove impermeable surfaces as part as site demolition activities, which would create long-term benefits by increasing opportunity for groundwater recharge. Improved groundwater quality in comparison to existing conditions would also be a beneficial impact. Therefore, impacts to groundwater supplies and recharge would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces:

Less than Significant Impact. No streams or rivers transverse the Project site. The proposed Project would not entail any development or construction that would alter current drainage patterns at the Project site or redirect flood flows. The Project site is fully developed and largely covered in pavement and concrete. The proposed Project would involve demolition of existing structures, removal of impervious surfaces, excavation of contaminated soil, and site closure. The proposed Project would not involve construction of new drainage channels or features that would substantially alter existing drainage patterns of the site or area. Although construction activities would increase potential for erosion as described in Section VII(b), *Geology and Soils*, this would be due to ground disturbance during excavation activities and not due to alterations to drainage patterns. Implementation of erosion and sediment control measures described in Section VII(b), *Geology and Soils* and compliance with the requirements in the NPDES permit including implementation of a SWPPP would minimize the amount of runoff from the Project site and the potential for substantial erosion and siltation to a level below significance. The proposed Project would not increase impervious surface area on the site and therefore would not contribute additional surface runoff that could result in flooding, exceedance of the current capacity of stormwater drainage systems, or provide substantial additional sources of polluted runoff. Rather, the proposed Project would remove existing pavement on site and would potentially result in reduced surface runoff in the area. For these reasons, the proposed Project would have a less than significant impact on existing drainage patterns in the area.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant Impact. As described in Section VII, *Geology and Soils*, the City is located in one of the most seismically active regions in the country. The Working Group on California Earthquake Probabilities reports that a 72 percent probability of at least one earthquake of magnitude 6.7 or greater striking somewhere in the San Francisco Bay region before 2043 exists (USGS 2016). Ground shaking related to earthquakes can cause tsunami (or tidal waves) and seiches in the San Francisco Bay. The Project site is located within a tsunami inundation zone (California Emergency Management Agency 2009), and therefore is susceptible to tsunami or seiche inundation (see Image 1). The Project site is also partially located in a 0.2 percent annual probability (or once in 500 years) flood hazard zone as designated by FEMA (FEMA 2008).

The proposed Project would remove existing soil contamination during construction activities and would resolve with site closure. The proposed Project would not involve the construction of structures for human occupancy or introduce materials to the site that would risk release of pollutants in the event of site inundation. Therefore, no pollutant releases due to Project inundation associated with flood hazards, tsunamis, or seiches would occur and impacts on impacts related to the release of pollutants due to inundation would be less than significant.

Image 1. *The Project site is located is located within a tsunami inundation area, represented as the shaded area in the above image. Image source: CDC 2019b.*

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The RWQCB is responsible for the Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin, which establishes surface water and groundwater quality objectives to regulate pollution and control activities that can adversely affect aquatic systems (RWQCB 2017). Water quality objectives are achieved primarily through the establishment and enforcement of Waste Discharge Requirements for each wastewater discharger. State policy for water quality control in California is directed toward achieving the highest water quality consistent with maximum benefit to the people of the State. Therefore, all water resources must be protected from pollution and nuisance that may occur from waste discharges.

The City of Alameda is one of the 17 participating agencies in the Alameda Countywide Clean Water Program (ACCWP) (ACCWP 2010), which cooperatively complies with a municipal stormwater permit issued by the RWQCB. In the vicinity of the Project site, the ACCWP administers the stormwater program to meet the CWA requirements by controlling pollution in the local storm drain sewer systems. The ACCWP prepared the Stormwater Quality Management Plan in 2003 that was effective through June 2008 and continues to be in use until replaced. The plan provides a framework for protection and restoration of creeks and watersheds in Alameda County in part through effective and efficient implementation of appropriate control measures for pollutants. The Stormwater Quality Management Plan (SWMP) recommends tasks to implement source, site design, post-construction stormwater treatment and hydromodification controls (ACCWP 2003). Construction activities associated with the proposed Project would be subject to compliance with the ACCWP's SWMP.

Construction activities would also comply with all required permits including the RQWCB's Discharge NPDES Construction General Permit. The City of Hayward acts as the GSA of the Santa Clara Valley: East Bay Plain Subbasin (Basin No. 2-009.04). Currently, no GSP for the Santa Clara Valley East Basin has been adopted. Nonetheless, the proposed Project would implement BMPs such as sediment and erosion controls to prevent polluted discharge or runoff that would adversely affect water quality.

The proposed Project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. Implementation of the proposed Project would also result in net benefits to groundwater quality through the removal of contaminated soil, and potential groundwater remediation from excavation dewatering. For these reasons, the proposed Project would not conflict or obstruct a water quality control plan and would not result in groundwater impacts**.**

XI. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The proposed Project is located in a developed urban area in the City of Alameda. The Project site is designated as "Specified Mixed Use" (MU-6) and zoned as "R-4 Neighborhood Residential" within the "Planned Development" Combining District (R-4-PD) under the City's General Plan and Zoning Ordinance (City of Alameda 2016, 2019). Land uses in the vicinity of the Project site primarily consist of residential areas designated as either Mixed Use or Medium-Density Residential and zoned as "Neighborhood Residential District," "Garden Residential District," and "Mixed Use" (R-4, R-3, and M-X respectively). Other land uses in the vicinity include commercial and industrial development in areas zoned as "Mixed Use" (M-X), to the north and west, "Intermediate Industrial (Manufacturing) District" (M-1) and "General Industrial (Manufacturing) District" (M-2) to the east, or "Neighborhood Residential" within the "Planned Development" Combining District (R-4-PD) to the west.

The Project site is also located within the Northern Waterfront Planning Area. The Northern Waterfront General Plan Amendment was adopted in 2007 by the Alameda Planning Board and City Council to establish the overall planning and regulatory framework to guide redevelopment of the area. Guiding and implementing policies encourage mixed uses and the redevelopment and reuse of existing sites (City of Alameda 2007).

The Plan Bay Area, which sets forth the region's proposed Sustainable Communities Strategy, was formally adopted by the ABAG and the MTC in July 2013, and was updated on July 27, 2017 under Plan Bay Area 2040.[4] The Project site is located within Plan Bay Area's Northern Waterfront priority development area (PDA). This PDA includes the commercial, industrial, and residential properties along Alameda's northern shoreline extending from Sherman Street to

[4] An update to the *Plan Bay Area*, referred to as *Plan Bay Area 2050* is currently underway and is anticipated to be adopted in summer 2021 (ABAG and MTC 2019).

Tilden Way. Redevelopment in this PDA is envisioned as a series of mixed use, waterfront and transit-oriented neighborhoods that would provide a mix of jobs and transit oriented housing types for Alameda residents. The plans propose that a mix of uses be developed on former industrial and auto-oriented lands and emphasize the importance of a mix of uses and a diversity of housing types for all income and household types.

IMPACT ANALYSIS

a) Physically divide an established community?

No Impact. The proposed Project would include demolition of onsite existing pavement, buildings and other infrastructure. Construction activities including demolition, excavation and removal of contaminated soil, and backfilling would be temporary, lasting for a period of 5 to 6 months. No redevelopment or other operational use is considered as a part of the proposed Project. Therefore, implementation of the proposed Project would not result in development that could physically divide an established community and no impact on established communities would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed Project would not conflict with any applicable land use plan, policy, zoning ordinance, or regulation of an agency with jurisdiction over the proposed Project. Applicable land use plans include the Plan Bay Area and the City's Northern Waterfront General Plan Amendment and the Land Use Element of the City's General Plan. The proposed Project would include demolition of onsite existing pavement, buildings and other infrastructure on the Project site. Remedial construction activities including demolition, excavation and removal of contaminated soil, and backfilling would be temporary, lasting for a period of 5 to 6 months. No redevelopment or other operational use is considered as a part of the proposed Project. Therefore, implementation of the proposed Project would not conflict with any applicable land use plans, policies, or regulations and no impact on land use would occur.

XII. MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The proposed Project is located in a developed area comprised of commercial, industrial, and residential uses. State mineral resources mapping demonstrates that no mineral resource recovery sites have been established or considered in the vicinity of the proposed Project (CDC 2015b). No oil or gas wells are located on the Project site or within the surrounding vicinity. The nearest well to the Project area is located approximate 3 miles southwest and is plugged and dry (CDC 2019a).

IMPACT ANALYSIS

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The Project site has been developed since 1951. No known mineral resources are located on the site or in the area surrounding the Project. The nearest listed mine is the Leona Quarry, a closed quarry located approximately 5 miles away in the City of Oakland (CDC 2016b). As such, the proposed remediation activities, including excavation and backfilling would not cause a significant loss of mineral resources that would be of value to the region. Therefore, no Project impact related to mineral resources would occur.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. The proposed Project is not delineated as a locally important mineral resource recovery site in the General Plan or on any other land use plan. The City of Alameda does not identify mineral recovery sites in the Open Space and Conservation Element of its General Plan. Therefore, no Project impacts on mineral resources would occur.

XIII. NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☒	☐	☐
b) Generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☒	☐	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The impact analysis for the proposed Project is based on the Noise and Vibration Impact Analysis Technical Memorandum provided in Appendix C. This memorandum provides an overview of noise and ground-borne vibration metrics, calculations for noise attenuation with distance, and a summary of the potential impacts of noise and ground-borne vibration on people (e.g., thresholds for human annoyance). The Noise and Vibration Impact Analysis also describes the City of Alameda Municipal Code Chapter 4-10 – *Noise Control* including Subsection 4-10.7(e), which states the provisions listed in Section 4-10.4 shall not apply to noise sources associated with construction, provided that construction activities take place between the hours of 7:00 a.m. to 7:00 p.m. Monday through Fridays or 8:00 a.m. to 5:00 p.m. on Saturdays.

Transportation sources, such as automobiles, trucks, trains, and aircraft are the principal sources of noise in most urban environments. Noise levels can reach 80 A-weighted decibels (dBA) day-night average noise level (DNL) along major transportation corridors, while along arterial streets noise levels typically range from 65 to 70 dBA DNL.

The existing ambient noise environment within the Project site vicinity is dominated by vehicle traffic from surrounding local streets including Clement Avenue, Grand Street, and Fortmann Way. Adjacent land uses – including residential, commercial, and light industrial development – also contribute to the existing ambient noise environment (e.g., periodic back up beepers from delivery trucks, etc.). Secondary noise sources in the vicinity consist of distant traffic noise from SR-61, located approximately 0.6 miles south of the Project and I-880, located approximately 0.8 miles north of the Project. OAK is located approximately 5 miles to the southeast of the Project site. However, at this distance, OAK does not substantially influence the ambient noise level at the Project site and within the surrounding vicinity.

The most recently available ambient noise monitoring data in the vicinity of the Project site were collected in August 2017 during the preparation of the Alameda Marina Master Plan EIR. Short-term (i.e., 15-minute) noise monitoring was conducted at noise sensitive land uses surrounding the Alameda Marina Master Plan site, including 1627 Red Sails Lane, located approximately 110 feet north of the Project site (ESA 2017). The Daytime equivalent sound level (L_{eq}) at this location was 56 dBA (ESA 2017a). This Daytime L_{eq} is generally consistent with the noise levels expected along arterial streets (e.g., Clement Avenue and Grand Street). This Daytime L_{eq} is also consistent with the normally acceptable Community Noise Equivalent Level (CNEL) for residential land uses (i.e., up to 60 dBA CNEL) and the normally acceptable CNEL for office buildings, business commercial, and professional land uses (i.e., up to 70 dBA CNEL) as designated by the 2016 City of Alameda General Plan (City of Alameda 2017b, City of Alameda 2017c).

The Project site is generally bounded by residential neighborhoods to the northeast and southwest (which appear to have been constructed in 2011 based on a review of aerial photographs). Single-family residences are located approximately 55 feet northeast of the Project site across Fortmann Way and approximately 40 feet southwest of the Project site across Ellen Crag Avenue. Three marinas are also located in close proximity of the Project site. The Fortmann Marina is located approximately 400 feet northwest, the Grand Marina is located approximately, 600 feet north, and the Alameda Marina is located approximately 650 feet

northeast. These marinas may include house boats, which would also be considered noise-sensitive receptors.

There are no schools, libraries, churches, hospitals, or other noise-sensitive receptors located within a 0.25-mile radius of the Project site. The nearest public school is Love Elementary School, located approximately 0.4 miles southeast of the Project site. The nearest public library is the Alameda Free Library, located approximately 0.9 miles southeast of the Project site. The nearest church is First Baptist Church, located approximately 0.3 miles southwest of the Project site. The nearest hospital is Alameda Hospital, located approximately 0.9 miles south of the Project site.

City of Alameda Municipal Code (AMC) Chapter 4-10 – Noise Control

The City of Alameda regulates exterior noise levels and ground-borne vibration through its Noise Ordinance as codified in City of Alameda Municipal Code Chapter 4-10 – *Noise Control*.

Construction Exterior Noise

Section 4-10.4 contains maximum permissible sound levels for stationary sources in proximity of sensitive land uses (e.g., single- or multi-family residential, school, library, church, hospital) and commercial properties. The maximum permissible sound level is determined by the land use of the adjacent/nearby properties, time of day, and duration of noise. Section 4-10.4 – *Exterior Noise Standards* states it is unlawful for any person to operate any stationary source of sound at or adjacent to a single- or multi-family residence, school, library, church, or hospital, which causes the noise level when measured on the receiving land use to exceed:

1. A noise level of 55 dBA during the hours of 7:00 a.m. to 10:00 p.m. or 50 dBA during the hours of 10:00 p.m. to 7:00 a.m. for more than 30 minutes out of any one 1-hour time period;
2. A noise level of 60 dBA during the hours of 7:00 a.m. to 10:00 p.m. or 55 dBA during the hours of 10:00 p.m. to 7:00 a.m. for more than 15 minutes out of any one 1-hour time period;
3. A noise level of 65 dBA during the hours of 7:00 a.m. to 10:00 p.m. or 60 dBA during the hours of 10:00 p.m. to 7:00 a.m. for more than 5 minutes out of any one 1-hour time period;
4. A noise level of 70 dBA during the hours of 7:00 a.m. to 10:00 p.m. or 65 dBA during the hours of 10:00 p.m. to 7:00 a.m. for more than 1 minute out of any one 1-hour time; or
5. A noise level or 75 dBA during the hours of 7:00 a.m. to 10:00 p.m. or 70 dBA during the hours of 10:00 p.m. to 7:00 a.m. for any period of time.

Ground-borne Vibration

Subsection 4.10-5(b)(8) states that the operation of any device that creates a vibration which is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at 150 feet from the source if on a public space or public

right-of-way is prohibited. Vibration levels become perceptible to humans at 65 vibration decibels (VdB) (Federal Transit Administration [FTA] 2006a).

Construction Noise Exceptions

The City's Noise Ordinance also contains special provisions in Section 4-10.7 – *Special Provisions (Exceptions)*. Subsection 4-10.7(e) states the provisions listed in Section 4-10.4 shall not apply to noise sources associated with construction provided that construction activities take place between the hours of 7:00 a.m. to 7:00 p.m. Monday through Fridays or 8:00 a.m. to 5:00 p.m. on Saturdays. Notwithstanding the provisions of Subsection 4-10.7(e), no exceptions to the provisions shall apply to activities where equipment used for those activities, including mufflers, is not maintained in the condition for which it was designed or intended and thereby unnecessarily increases noise levels so as to cause a noise disturbance or exceed the standards set forth in Subsection 4-10.4, as stated by Subsection 4-10.4-7(h).

Further, prohibition of construction activities outside of standard construction hours does not apply to:

1. Construction that does not require a City-issued permit (e.g., minor renovations, landscaping, etc.);

2. Construction where the City Manager or his/her designee grants an exception upon a showing of significant financial hardship;

3. Emergency work to protect or restore safe conditions where immediate construction is required (e.g., following a flood event, etc.); or

4. Construction by any person on his/her principal place of residence or rental property.

IMPACT ANALYSIS

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

Less than Significant Impact with Mitigation Incorporated. The proposed remediation construction activities including demolition of existing pavement, buildings, and other structures, excavation and removal of contaminated soil, and backfilling would occur for a 5- to 6-month period. Construction activities would occur within the standard construction hours consistent with the City of Alameda Municipal Code (see Section 2.11, *Best Management Practices and Environmental Protection Measures*). No construction is proposed on weekends.

No redevelopment or other future operational use is considered as a part of the proposed Project. Therefore, no operational noise associated with the proposed Project would occur.

Construction Noise

Two types of temporary construction-related noise impacts would occur during Project construction activities: 1) on-site noise from heavy construction equipment used for demolition,

excavation, etc.; and 2) off-site noise from construction worker commutes and heavy haul truck trips.

Construction activities would be divided into five phases that would occur over a period of 5 to 6 months beginning in fall 2020 and ending in early 2021. The first phase would involve mobilization and staging of construction equipment and materials and would occur over a 2-week period. The second phase would involve limited demolition and AST removal and would occur over a 1-month period. Construction equipment used during this phase would include cranes, an excavator, a dry vacuum truck, backhoe, a frac tank, dump trucks and flatbed trailers. The third phase would occur over a 2-month period and involve excavation of contaminated soil, soil export and import, and backfill of excavated soil. Construction equipment used during this phase would include track mounted excavators, front end loaders, trucks (i.e., end dump trucks and possibly transfer dumps) for soil disposal, dozers, a vibratory compactor, and a water truck. The fourth phase would occur over a 1-month period and would involve demolition of remaining structures and would use breaking hammers, pulverizers, and dump trucks. The final phase, demobilization of post-remediation equipment would occur over the period of 1 week. In general, the loudest types of construction equipment to be used during the proposed construction activities would include dozers, cranes, front end loaders, excavators, vibratory compactors, dump trucks, hydraulic hammers, backhoes, air compressors, and forklifts (refer to Table 2-3). This construction equipment would most commonly be used during demolition and excavation activities.

Construction equipment would access the Project site by the Grand Street entrance. Heavy haul trucks and other construction vehicles would limit travel to designated truck routes, such as Clement Avenue and Park Street within the City of Alameda; these would avoid residential neighborhoods to the maximum extent feasible. As described in Table 2-4, the total trips to the Project site would range from 12 to 65 trips per day over the 5- to 6-month duration of construction activities. Noise levels associated with heavy haul trucks are commonly 81 dBA L_{max} at 50 feet from the centerline of a roadway (Hendriks 1985). Noise associated with heavy haul truck trips would act as single-event noise levels, and as the truck pass through the Project vicinity they would not occur at a frequency that would substantially impact average noise levels (e.g., CNEL) of the area. Although these construction worker trips and heavy haul truck trips would result in intermittent noise increases on local roads, they would not measurably affect short- or long-term ambient noise levels.

To determine noise levels associated with temporary, short-term construction activities (i.e., demolition, excavation, paving removal) and the corresponding noise levels that would be experienced at the nearest sensitive receptor(s), it is general industry practice to combine the two loudest pieces of equipment that would be operating simultaneously during a specific construction phase and then calculate the attenuation of the construction noise level based on the distance to the nearest noise-sensitive receptor(s) (FTA 2006b). Maximum construction equipment noise levels at the nearby noise-sensitive receptors during construction are shown in Table 3-7.

Table 3-7. Typical Noise Levels from Construction Equipment

Construction Equipment	Noise Level (dBA L_{max}[1] at 50 feet)
Crane	81
Excavator	81
Dry Vacuum	85
Backhoe	78
Frac Tank	85
Compactor	83
Loader	79
Dump Truck	76
60-Foot Articulating Boom Lift	75
Excavator Sheer Attachment	96
Mobile Concrete Crushing/Screen Unit	85
12K Reach Forklift	85
Track Skid Steer	85
4,000-gallon Water Truck	85
2,000-gallon Water Truck	85
Pressure Washer	85
Compressor	78
Grader	85
Hydraulic Hammer	90*
Dozer	82
Paver	77
Pick Up Truck	75
Torch and Acetylene Tanks	85
Vibratory Compactor	85

Source: Federal Highway Administration (FHWA) Roadway Construction Noise Model User's Guide 2017a.
Notes:
[1] L_{max} is the instantaneous maximum noise level for a specified period of time.
* Actual measured L_{max} at 50 feet not available. Value listed reflects noise levels stated in noise specifications.

The two loudest pieces of Project construction equipment (e.g., excavator sheer attachment and hydraulic hammer at 96 dBA and 90 dBA respectively) used during construction would reach 97 dBA at 50 feet from the construction activity (FHWA 2006). These noise levels would be generated during the use of demolition, excavation, and earth moving equipment during Phase 2, 3, and 4. Construction noise levels experienced by noise-sensitive receptors located 40 feet (Ellen Crag Avenue), 55 feet (Fortmann Way), and 65 feet (Clement Avenue) from the Project site would reasonably reach approximately 98 dBA, 97 dBA, and 95 dBA levels, respectively.

These exterior noise estimates for proposed construction activities are generally conservative in that they assume: 1) the two loudest pieces of equipment (i.e., sheer excavator attachments and

hydraulic hammers) would operate simultaneously for the duration of construction; and 2) construction equipment would operate immediately adjacent to the Project site boundary. Rather, construction equipment would only be operated when required for a particular activity. Therefore, the periods during which the two loudest pieces of equipment would operate simultaneously would be limited, both throughout the day and throughout the duration of construction activities. Construction activities and equipment would be dispersed throughout the 4.1-acre Project site, meaning only a limited amount of equipment can operate near a given location at a particular time. As previously described, doubling of distance from the receptor can reduce noise levels by 6 dBA to 7.5 dBA. While demolition and excavation activities occurring at the southeastern end of the Project site would potentially generate a noise level of 98 dBA at the residences along Ellen Crag Avenue, the construction activities at this location would be approximately 650 feet from residences along Fortmann Way where they would generate a noise level of 75 dBA. Therefore, while there may be peaks in construction noise when construction activities occur immediately adjacent to noise-sensitive receptors, these noise levels would not be sustained throughout the duration of construction.

The use of noise attenuating features, including equipment mufflers (reduces noise by approximately 8 dBA) and/or noise barrier walls (reduces noise by between 10 dBA and 15 dBA) could further reduce construction-related exterior noise levels on all sides of the Project site (FHWA 2017b). Implementing equipment mufflers and a noise barrier wall that would break the line-of-sight to the Project site, exterior noise levels would be reduced to approximately 80 dBA to 75 dBA. Typical building construction would also potentially reduce interior noise levels experienced by noise-sensitive receptors by approximately 10 dBA with windows and doors open, or by approximately 20 dBA to 25 dBA (and up to 30 dBA for more modern buildings) with windows and doors closed (FTA 2006b).

All construction activities would occur within the standard construction hours identified in Subsection 4-10.7(e) – *Special Provisions (Exceptions)* of the City's Noise Ordinance, which states that exterior noise and ground-borne vibration standards shall not apply to construction activities that take place between the hours of 7:00 a.m. to 7:00 p.m. Monday through Fridays ; construction is not proposed on weekends. Therefore, the proposed Project would be consistent with the City's Noise Ordinance and noise impacts would be less than significant.

Nevertheless, compared to the existing Daytime L_{eq} of 56 dBA, construction activities would result in an approximately 10 to 40 dBA increase in exterior noise levels, which would be perceived between two times and sixteen times as loud as ordinary conversation. This could result in subjective effects such as annoyance, nuisance, and dissatisfaction, as well as interference with speech activities. Therefore, due to proximity of the Project site to noise-sensitive receptors, Recommended Mitigation Measure NOI-1 would be implemented to reduce exterior noise levels to the maximum extent practicable.

Mitigation Measure NOI-1: Exterior Noise Level Reduction

Construction noise levels would vary depending on the construction phase, construction equipment type, duration, distance between noise source and noise-sensitive receptor(s), and the presence/absence of barriers between the noise source and noise-sensitive receptors. The

Applicant shall require the construction contractor to limit standard construction activities to minimize temporary increases in noise as follows:

- Ensure construction equipment and heavy haul trucks use the best available noise control techniques, including improved mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating barriers, curtains, and shields.
- Site stationary noise sources, such as air compressors, are as far from noise-sensitive receptors as possible (i.e., toward the center of the Project site) and ensure that they are muffled and enclosed within temporary sheds or incorporate insulation barriers, shields, or other measures to the extent feasible.
- Use impact equipment and machinery that is hydraulically or electrically powered to avoid noise associated with air compressors or pneumatically powered tools. If the use of pneumatically powered tools is necessary, an exhaust muffler shall be installed on the air compressor. Such a muffler can lower noise levels from the exhaust by up to 10 dBA. Similarly, the installation of external jackets on the tools can reduce noise levels by 5 dBA.
- Ensure electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, whenever feasible.
- Material stockpiles and mobile equipment, staging, and parking areas shall be located as far as possible from noise-sensitive receptors (i.e., towards the center of the Project site).
- Identify a public relations liaison that can be contacted with concerns regarding construction noise and ground-borne vibration. The liaison's contact information shall be clearly displayed at the Project site on posted signs informing the public of the construction schedule.
- Notify all adjacent landowners and occupants of the properties adjacent to the Project site of the anticipated construction schedule at least 2 weeks prior to ground disturbing activities.
- Actively monitor noise construction at the project boundary adjacent to sensitive noise receptors.

If noise levels, based on noise monitoring, exceed allowable levels, the following mitigation measure is also recommended:

- Construct a temporary solid noise barrier wall around the Project site boundaries along, Clement Avenue, Fortmann Way, and Ellen Crag Avenue during demolition, excavation, and earth moving activities. The noise barrier wall shall be designed to achieve the maximum sound attenuation feasible by breaking the line of site to the Project site and the adjacent noise-sensitive receptor(s). The design and placement of the noise barrier wall shall be reviewed and approved by the City's Community Development Director. Installation of a noise barrier wall would be expected to decrease construction-related noise levels by approximately 10 dBA to 15 dBA.

Implementation of MM NOI-1 would reduce potential impacts related to project construction noise to less than significant.

b) Generation of excessive ground-borne vibration or ground-borne noise levels?

Less than Significant Impact with Mitigation Incorporated. Project construction equipment would create ground-borne vibration, including as bulldozers, trucks, hydraulic hammers, and vibratory compactors. Because the proposed Project includes complete site demolition and excavation of soil at the northern and southern ends of the Project site, vibratory equipment would be operated at or in close proximity to the Project site's property boundary. As previously described, single-family residences surround the Project site at distances of 40 feet, 55 feet, and 65 feet. Table 3-8 summarizes levels of ground-borne vibration that would be experienced at these residential properties during construction.

Table 3-8. Ground-borne Vibration Levels and Nearby Sensitive Receptors

Construction Equipment	VdB Level at Distance			
	25 feet (reference distance)	Ellen Crag Avenue (40 feet)	Fortmann Way (55 feet)	Clement Avenue (65 feet)
Bulldozer	87	81	77	75
Water Truck	86	80	76	74
Hydraulic Hammer	87	81	77	75
Vibratory Compactor	94	88	84	82

Source: Wood Noise and Vibration Impact Analysis Technical Memorandum 2020; See Appendix C.

Ground-borne vibration generated by use of heavy construction equipment would exceed the FTA adopted standards associated with human annoyance for ground-borne vibration impacts for residential land use (72 VdB for frequent events, 75 VdB for occasional events, 80 VdB for infrequent events). Frequent ground-borne vibration associated with construction activities of the proposed Project would reach up to 88 VdB along Ellen Crag Avenue, 84 VdB along Fortmann Way, and 82 VdB along Clement Avenue. However, ground-borne vibration described in Table 3-5 would only be experienced when construction work involving this equipment would occur along the boundary of the Project site. Therefore, ground-borne vibration would only be experienced for a limited period throughout the entire 5- to 6-month construction period.

All construction activities would occur within the standard construction hours identified in Subsection 4-10.7(e) – *Special Provisions (Exceptions)* of the City's Noise Ordinance, which states that exterior noise and ground-borne vibration standards shall not apply to construction activities that take place between the hours of 7:00 a.m. to 7:00 p.m. Monday through Fridays; construction is not proposed on the weekends. Therefore, the proposed Project would be consistent with the City's Noise Ordinance and impacts would be less than significant.

Nevertheless, due to proximity of the Project site to noise-sensitive receptors, Recommended Mitigation Measure NOI-2 should be implemented to reduce ground-borne noise levels to the maximum extent practicable.

Mitigation Measure NOI-2: Ground-borne Vibration Reduction

Construction-related ground-borne vibration would exceed FTA thresholds for human annoyance. To reduce temporary impacts due to construction-related ground-borne vibration, the Applicant shall require the construction contractor to limit standard construction activities as follows:

- Permissible hours of operation of construction equipment that would cause nearby land uses to experience ground-borne vibration levels exceeding FTA criteria thresholds would be limited to 10:00 a.m. to 4:00 p.m. to avoid periods where residents are likely to be home.
- At least 2 weeks prior to the initiation of construction related activities, the Applicant shall prepare and distribute notices to affected residences within distances that would experience ground-borne vibration impacts above FTA criteria thresholds. At a minimum, the notices shall describe the overall construction schedule, advise residents of increased construction-related ground-borne vibration, and provide contract information for a liaison available to receive complaints associated with ground-borne vibration. The Applicant shall keep a log of complaints and shall address complaints, to the maximum extent practicable, in order to minimize disturbance of neighboring residents. The City shall ultimately be responsible for addressing any non-performance issues from the construction contractor.

Implementation of MM NOI-2 would reduce potential impacts related to project ground borne-borne vibration levels to less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed Project site is not located in the vicinity of any private airstrip. The nearest airport is the Oakland International Airport (OAK) approximately 5 miles southeast of the Project site. The Project site is not located within the OAK AIA (Alameda County Community Development Agency 2012). OAK does not contribute significantly to the noise environment of the Project site or surrounding vicinity. As such, the proposed Project would not expose construction workers to excessive noise levels related to a private airstrip or airport and the proposed Project would have no noise impact.

XIV. POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The City of Alameda has an estimated population of 78,338, as of July 1, 2018, representing a 6.1 percent population growth since April 2010 (U.S. Census Bureau 2020). In 2010, the City had approximately 6,956.2 persons per square mile and has an estimated 30,365 households with an average of 2.54 persons per household recorded between 2014 and 2018 (U.S. Census Bureau 2020).

The Project site is located in an urban, developed area. The surrounding vicinity is designated as "Specified Mixed Use" and "Medium Density Residential." Permitted land uses include residential, office, and industry uses.

IMPACT ANALYSIS

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The proposed Project would be limited to the remediation of the Project site including soil excavation, removal of existing buildings and structures, and infrastructure. The proposed Project would not construct new housing or businesses and would not extend roadways or other infrastructure that would potentially result in indirect population growth. Temporary construction employment opportunities provided by the proposed Project would be negligible and would not result in permanent relocation of construction workers. Therefore, the proposed Project would not directly induce population growth such that no impact to the local or regional population and housing would occur.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed Project would involve demolition of existing pavement, buildings, and other infrastructure; excavation and removal of contaminated soil; and backfilling, but would not involve demolition of any single-family homes or multi-family residential units. Therefore, no

construction of replacement housing would be needed and no impacts on population and housing would occur.

IV. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The Alameda Fire Department (AFD) provides fire protection and emergency medical services to the Project site. The AFD currently has four operating fire stations located throughout the City and 117 personnel (City of Alameda 2020b). Daily fire companies respond with four fire engines, two fire trucks, three ambulances, and one Division Chief vehicle (City of Alameda 2020c). These vehicles make up the daily complement assigned to the stations for response to fire calls. On a first alarm assignment for a structure fire, a response includes three engines, two trucks, one ambulance and the Division Chief vehicle. A minimum of 18 fire personnel are assigned to a first alarm incident. Currently, all engine companies and ambulances are staffed with at least one paramedic each, providing quick advanced life support (ALS) service to all parts of the City (City of Alameda 2020c). The closest fire station to the Project site is Station Number 3, at 1625 Buena Vista Avenue, approximately 700 feet south of the Project site, which would likely be the first to provide fire and emergency response services at the Project site. In 2019, Station No. 3 responded to 2,409 calls, 79 of which were fire calls, 1,780 of which were emergency medical service calls, and 550 of which were other calls (City of Alameda 2020d).

Police protection to the Project site would be provided by the Alameda Police Department (APD) that operates out of one station located at 1555 Oak Street, located approximately 0.85 miles southeast of the Project site. The APD currently has a total of 88 sworn officers and 33 nonsworn personnel and is organized into the Bureau of Operations and the Bureau of Services. Operations include the Patrol Division, Traffic Division and Investigations Division; Services include both Technical and Administrative services (City of Alameda 2020e). The 'PD's patrol is

based on a five-sector system. Seven days a week, 24 hours a day, officers are assigned to patrol the five sectors during which there are typically one to four officers assigned to each sector (City of Alameda 2020e).

The Alameda Unified School District (AUSD) is the primary school district that provides public school education to the neighborhoods adjacent to the Project site. AUSD operates a childhood development center, eight elementary schools, a Kindergarten through 8th grade school, two middle schools, a junior through senior high school, three other high schools, an Early College High School, and an adult continuation school (AUSD 2018). Approximately 11,260 students were enrolled in AUSD as of the 2018-2019 school year (Education Data Partnership 2020). The nearest public schools to the Project site are Franklin Elementary School and Love Elementary School, located approximately 0.5 miles south and southeast of the Project Site respectively.

The City has approximately 680 acres of parkland and open space. About 95 percent of Alameda residents live within 0.375-mile of a park, the maximum radius for effective service as indicated by studies in other cities (City of Alameda 1991). Further discussion on City parks is described in Section XVI, *Recreation*.

IMPACT ANALYSIS

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

No Impact. Construction activities associated with the proposed Project would be limited to demolition of existing pavement, buildings, and other structures, excavation and removal of contaminated soil, and backfilling. Construction worker commutes and heavy haul truck trips would result in a short-term increase in local traffic; however, a traffic control plan (TCP) would be prepared as part of the proposed Project's WMTP that would minimize congestion and traffic in the surrounding area so that emergency access is not affected.

No redevelopment or other future operational use is proposed. Therefore, the proposed Project construction would not increase the long-term demand for fire or police services and no new facilities would be required. Given that implementation of the proposed Project would not develop new single-family homes or multi-family residential units, no long-term increase in population would occur and no long-term increased need for schools or other public facilities (e.g., recreational facilities, parks, libraries, or other public services or facilities) that would potentially result in physical deterioration of existing facilities or the need for new or expanded facilities would result. As such, no Project impacts to related to public services would occur.

XVI. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The City's Parks and Recreation Department manages approximately 680 acres over 21 parks and open space areas. This includes 33.5 acres of open space, 532.3 acres of regional parks and recreational facilities, and over 100 acres of other parks, each of which are generally used year-round (City of Alameda 1991). There are approximately 2.2 acres of parkland for every 1,000 residents. The City of Alameda's General Plan does not state a specific goal of park acreage per 1,000 residents; however, most California cities strive for 3 to 6 acres of park per 1,000 residents (City of Alameda 1991). Approximately 95 percent of Alameda residents live within 0.375-mile of a park, the maximum radius for effective service as indicated by studies in other cities.

In addition to parks and open space, recreational facilities managed by the Alameda Parks and Recreation Department include gymnasiums, athletic and multi-purpose fields, event centers, a skate park, dog parks, a swim center, a teen center, and a senior center. Sport programs supported by the Alameda Parks and Recreation Department include an adult basketball league, an adult flag football league, an adult softball league, adult volleyball, an aquatic program, kayaking, and tennis.

Some Alameda recreation and parks facilities such as picnic areas, courts, recreation centers, sports facilities, and the Albert H. DeWitt Officer's Club, are available for rent or walk-up use. City parks also serve as locations for major community-wide events such as community band concerts, annual sandcastle and sculpture contests, Alameda Walks, and movie nights in the parks.

Regional recreational facilities include the City's municipal golf course and Crown Memorial Beach, a 2.5-mile beach, with sand dunes bordering a bicycle trail that provides recreational opportunities such as swimming, boating, fishing, board sports, and picnicking (East Bay Regional Park Districts 2020).

IMPACT ANALYSIS

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. Demand for park and recreation services are a result of an increase in population growth in the area through the development of new housing units or the generation of new jobs. The proposed Project does not involve new housing or jobs such that the proposed Project would not result in an increased demand on existing parks and recreational facilities. No physical deterioration of recreational facilities would occur or be accelerated. Therefore, no Project impact to recreation facilities would occur.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No Impact. The proposed Project would not include the development of, or require the construction of recreational facilities that would physically affect the environment. Therefore, no Project impact to recreational facilities would occur.

XVII. TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☐	☒
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The Alameda County Transportation Commission (Alameda CTC) serves as the Congestion Management Agency for Alameda County and is responsible for administering the state-mandated Congestion Management Program (CMP), a plan that describes the strategies to assess, monitor, and improve the performance of the County's multi-modal transportation system, address congestion, and protect the environment with strategies that reduce GHG emissions. Alameda CTC is also responsible for preparing the Countywide Transportation Plan (CTP), which establishes a long-range transportation vision for the County and informs the

Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS; *Plan Bay Area 2040*) prepared by the Alameda County Transportation Commission (ACTC) and ABAG.

Several regional and local multi-modal transit districts serve the Project vicinity. The Alameda-Contra Costa Transit District (AC Transit) oversees the County's public bus transit system, which includes express bus services to several nearby Bay Area Rapid Transit (BART) stations in Oakland. BART is a heavy rail-elevated, surface, and subway system that serves the Bay Area. The San Francisco Bay Ferry provides ferry service to San Francisco (Oracle Park Terminal) and Oakland (Oakland Terminal) at the Alameda Main Street Terminal on Alameda Island and Harbor Bay Terminal on Bay Farm Island. The City of Alameda operates the Alameda Loop Shuttle, which provides access to major shopping destinations and medical facilities on Alameda Island and Bay Farm Island.

The City of Alameda is responsible for planning and implementing improvements to the local roadways within its jurisdiction. Applicable programs and plans that are relevant to the Project site and vicinity include: the *Transportation Element of the City General Plan* (2009a); *Transportation Choice Plan* (2018); *Bicycle Plan Update* (2010); and the *Pedestrian Master Plan* (2009b). The City also has a designated truck route network, which allows truck traffic on a limited number of streets and only allows use on non-truck routes when it is necessary in order to reach a specific destination (City of Alameda 2009c).

According to *Plan Bay Area 2040,* the Bay Area is ranked as one of the most congested metropolitan areas in the nation. The Bay Area transportation planning agencies, including Alameda CTC, are addressing congestion by operating the existing roadways and transit networks more efficiently and by increasing non-auto travel mode share and reducing VMT through transit improvements, and active transportation modes, such as bicycling and walking. The City of Alameda supports a multi-modal transportation system and works to reduce the impact of vehicle trips on the community through various design and operational features, including a street classification system, modal network overlays, and designated truck routes.

The existing circulation system on Alameda Island is comprised of residential roads and streets and a state highway, SR-61. Regional access to Alameda Island is provided primarily by the interstate freeway system, which is accessible to and from the Project site via I-880. The main regional arterial of the local road network on the northern portion of Alameda Island is SR-61. The road network also consists of the Webster and Posey Tubes, Webster Street, Constitution Way, Park Street, Atlantic Avenue/Ralph Appezzato Memorial Parkway, Clement Avenue, Buena Vista Avenue, and Grand Street (refer to Figure 2) Project construction worker and heavy haul truck trips would primarily use the designated truck routes to access the Project site (see Figure 3-1). A description of each road and local street included as part of this network is provided below.

Marina Village Parkway
Constitution Way
Webster Street
(SR 61/SR 260)
Atlantic Avenue
Sherman Street
Oakland
Inner Harbor
880
Buena Vista Avenue
Clement Avenue
Grand Street
Central Avenue (SR 61)
Encinal Avenue (SR 61)
Park Street
Bridge
Miller-
Sweeney
Bridge
Park Street
Tilden Way
Broadway

Q:\3551 Planning\Shell ISMND 8620192890\MXD\ReportFigures\ISMND\Fig3-1 TruckRoutes.mxd

Explanation

- Site Boundary
- Designated Truck Route
- Proposed Truck Route

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

N

0 1,000 Feet

DESIGNATED AND PROPOSED TRUCK ROUTES
Initial Study/Mitigated Negative Declaration
Shell Alameda Distribution Center Remediation Project
2015 Grand Street
Alameda, California

wood.

By: CCN		Prj. No. 8620192890.09
Date: 07/08/2020		Figure **3-1**

Interstate 880

Interstate 880 is a major north/south interstate highway in the San Francisco Bay. It runs parallel to the San Francisco Bay from SR-17 in San Jose to I-80 and I-580 in Oakland and connects to Alameda Island at the Park Street Bridge and via the Webster and Posey Tubes. Annual average daily trips (Annual ADT) on I-880 near the Project site at the Oakland Embarcadero is approximately 225,000 Annual ADT and at the junction with Interstate 980 196,000 Annual ADT (Caltrans 2019).

State Route 61

SR-61 is an east/west regional arterial that bisects Alameda Island along Central Avenue, Encinal Avenue, Broadway, and Otis Drive before crossing the Bay Farm Island Bridge. SR-61 continues as Doolittle Drive past the Oakland International Airport and into San Leandro. SR-61 includes two travel lanes in each direction and sidewalks on both sides of the street; on-street parallel parking is allowed on both sides of the road. Annual ADT on the SR-61 between Broadway and Encinal Avenue is 12,300 vehicles (Caltrans 2019). SR-61 is a designated truck route (City of Alameda 2009c).

Webster and Posey Tubes

The Webster and Posey Tubes provide access between Alameda and Oakland via SR-260 and serve as the western connection between I-880. The Webster Tube serves southbound traffic from Oakland to Alameda, while the Posey Tube serves northbound traffic from Alameda to Oakland.

Webster Street

Webster Street is a north/south roadway identified as a regional arterial (City of Alameda 2009a). It extends between Central Avenue in the south and the City of Oakland in the north, traveling through the Webster and Posey Tubes. Webster Street provides two travel lanes in each direction. Sidewalks are provided on both sides of the street south of Willie Stargell Avenue, and parallel parking is allowed south of Atlantic Avenue. Webster Street connects the Project site to I-880 and downtown Oakland and is a major corridor in and out of Alameda.

Constitution Way

Constitution Way is a north/south regional arterial between the Webster and Posey Tubes in the north and Lincoln Avenue in the south. South of Lincoln Avenue, the road continues as 8th Street. Constitution Way provides two travel lanes in each direction, with left turn lanes at most intersections. Sidewalks are provided on both sides of the street, and on-street parking is prohibited.

Park Street

Park Street is a north/south regional arterial between the Park Street Bridge in the north and Shore Line Drive in the south. Park Street provides two travel lanes in each direction. North of San Jose Avenue, sidewalks are provided on both sides of the street, and parallel parking is allowed. The Park Street Bridge via Clement Avenue and Park Street connects the Project site with Oakland and I-880 and is a major corridor in and out of Alameda. Park Street is a designated truck route (City of Alameda 2009c).

Atlantic Avenue/Ralph Appezzato Memorial Parkway

Atlantic Avenue/Ralph Appezzato Memorial Parkway is an east/west regional arterial between Ferry Point in the west and Wind River Way in the east. South of Wind River Way, the road continues as Sherman Street. The segment between Main and Webster Streets is named Ralph Appezzato Memorial Parkway and continues as West Atlantic Avenue to the west. Atlantic Avenue provides two travel lanes in each direction west of Constitution Way and one travel lane in each direction east of Constitution Way. Atlantic Avenue includes sidewalks and Class II bikeways (bike lanes) on both sides of the street east of Constitution Way. West of Constitution Way, sidewalks are only provided on the north side of the street, and no bikeways are provided. On-street parking is prohibited along the entire street.

Clement Avenue

Clement Avenue is an east/west regional arterial along the northern Alameda waterfront between Grand Street in the west and Broadway in the east. The road intersects the Project site between Fortmann Way and Ellen Crag Avenue. Clement Avenue provides one travel lane in each direction, with sidewalks and on-street parallel parking on both sides of the street (see Photograph 7).

Photograph 7. *Within the vicinity of the Project site Clement Avenue is a two-lane roadway that ends in a "T"-shaped stop sign controlled intersection with Grand Street.*

Clement Avenue is currently being extended in phases between Grand Street and the eastern end of the planned Jean Sweeney Open Space Park at Atlantic Avenue, and would form an intersection at the boundary between Sherman Street and Atlantic Avenue to the west of the Project site. The Marina Cove and Marina Shores residential developments (situated to the west of the Project site) completed the extension between the Project site and Entrance Road at Encinal Terminals. A further extension between Entrance Road and Atlantic Avenue is planned for construction. Once the approximate 250-foot portion through the Project site to Grand Avenue and the westward extension through to Atlantic Avenue are completed, Clement Avenue would provide an alternate route for trucks and vehicles currently using Buena Vista Avenue to the south. Clement Street is a designated truck route (City of Alameda 2009c).

Buena Vista Avenue

Buena Vista Avenue is an east/west collector street between Poggi Street in the west and Northwood Drive in the east. The street is classified as a transitional arterial between Sherman and Grand Streets and as a local street east of Broadway and west of Webster Street (City of Alameda 2009a). Buena Vista Avenue continues in the west as Poggi Street. The street provides two travel lanes in each direction and left-turn lanes between Jay and Hibbard Streets and at the intersection with Broadway. Sidewalks are provided on both sides of the street, and on-street parallel parking is allowed along the entire roadway except between Sherman and Benton Streets. Buena Vista is a designated truck route (City of Alameda 2009c).

Grand Street

Grand Street is a north/south arterial between the Alameda Marina in the north and Shore Line Drive in the south. The street is classified as a local street north of Clement Avenue, and provides direct access to the Project site (see Photograph 8). Grand Street provides one travel lane in each direction. Sidewalks and Class II bicycle lanes are provided on both sides of the street, but on-street parallel parking is prohibited. Grand Street is not a designated truck route, but trucks would need to access Grand Street via Clement Street to reach the Project site.

Photograph 8. *The Project site entrance is located along the west side of Grand Street, beyond on-site parking available adjacent to the Administrative Building.*

Bicycling and Pedestrian Travel

Alameda's flat terrain and temperate climate make bicycling and walking a feasible mode of transportation around the island (City of Alameda 2009a). Bicycle access between downtown Oakland and the east side of Alameda Island is provided by a substandard, narrow, raised, and shared pedestrian walkway in the Posey Tube. Bicyclists can take AC Transit buses across the estuary via the Webster and Posey Tubes. Sidewalks along the Park Street and Fruitvale Avenue bridges on the east side of Alameda Island also provide bicycle access between Oakland and Alameda. Sidewalks are provided along both sides of most residential streets in the City and although sidewalks were not typically provided in former industrial areas near the Project site, new residential development in these areas include sidewalks. Within the Project vicinity, sidewalks are provided on both sides of Fortmann Way, both sides of Clement Avenue, the east side of Grand Street, the south side of Ellen Crag Avenue, and the west side of Hibbard Street.

Photograph 9. *A Class II (i.e., striped) bicycle lane is located adjacent to the Project site along Grand Street.*

There are Class I (i.e., bicycle path), Class II (i.e., striped bicycle lane), Class III (i.e., bike route), and Class IV (i.e., separated bikeways) in the City of Alameda (City of Alameda 2009b)(see Figure 3-2). A Class II bicycle lane is provided along Grand Street, directly adjacent to the eastern side of the Project site (see Photograph 9). The Grand Street bicycle lanes are provided on both sides of the entire length of the street. These bike facilities connect with other Class II bike lanes on Santa Clara Avenue and Central Avenue, which provide access to Webster Street and Park Street. The Grand Street bike lane also provides access to a Class I bike path along the northern and southern shoreline and Class III bike routes on Pacific Avenue and San Jose Avenue. The *City of*

Alameda Bicycle Master Plan proposes Class II bike lanes on Clement Street (adjacent to Project site) between Atlantic Avenue and Tilden Way (City of Alameda 2010a).

Public Transportation

Photograph 10. *The nearest AC Transit bus route to the Project site is Line 19 with a bus route stop along Buena Vista Avenue in between Grand Street and Minturn Street.*

AC Transit, BART, and San Francisco Bay Ferry provide public transit services in the Project vicinity. AC Transit provides fixed-route bus services in the City and throughout Alameda and Contra Costa counties, including several transit routes near the Project site along Buena Vista Avenue, Santa Clara Avenue, Park Street, and Fruitvale Avenue into Oakland via Lines 19, 20, 21, and 51A. The nearest AC Transit bus route to the project site is Line 19, which operates along Buena Vista Avenue with stops at Grand, Chestnut, and Willow Streets (see Photograph 10) (Alameda County Congestion Management Agency [ACCMA] 2015) (see Figure 3-3). This line provides access to downtown Oakland to the west and the Fruitvale BART station to the east. The nearest BART station to the Project site is the Fruitvale Station, which can be accessed by AC Transit Lines 19, 20, 21, and 51A. As previously mentioned, the San Francisco Bay Ferry provides ferry service to the Oracle Park Terminal and Oakland Terminal at the Alameda Main Street Terminal and Harbor Bay Terminal. The City of Alameda also operates the Alameda Loop Shuttle that provides access to major shopping destinations and medical facilities. While the Project site is accessible by public transit services, construction workers are expected to arrive at the Project site in personal vehicles.

Public Parking in the Project Vicinity

On-street parallel parking in the immediate Project vicinity is provided along Grand Street, Fortmann Way, both sides of the portion of Clement Avenue east of Grand Street, and the south side of the portion of Clement Avenue past Hibbard Street.

The traffic analysis is based on the conclusions of a focused construction-traffic impact analysis prepared by Wood for the proposed Project (see Appendix E). This analysis focused on project construction activities, which would temporarily increase traffic volumes on local and regional roads due to construction workers traveling to/from the Project site and trucks hauling equipment and import/export soil and backfill materials.

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Marina Village Parkway
Constitution Way
Webster Street (SR 61/SR 260)
Atlantic Avenue
Sherman Street
Buena Vista Avenue
Grand Street
Clement Avenue
Central Avenue (SR 61)
Encinal Avenue (SR 61)
Oakland Inner Harbor
880
Park Street Bridge
Miller-Sweeney Bridge
Park Street
Tilden Way
Broadway

Explanation

Site Boundary

Bike Routes

Class I
Class II
Class III

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

N

0 1,000 Feet

BICYCLE AMENITIES IN PROJECT VICINITY
Initial Study/Mitigated Negative Declaration
Shell Alameda Distribution Center Remediation Project
2015 Grand Street
Alameda, California

wood.

By: CCN
Date: 07/08/2020
Prj. No. 8620192890.09
Figure **3-2**

Oakland Inner Harbor

Line 314
Line 51A
Line 20
Line 31
Line 851
Line 631
Line 19
Line 21
Line 663
Line 801
Line 840
Line 40
Line 1
Line 62
Line 1R
Line 339
Line 39
Line 47
Line 655
Line 14

Webster Street (SR 61/SR 260)
Constitution Way
Village Parkway
Atlantic Avenue
Sherman Street
Buena Vista Avenue
Grand Street
Clement Avenue
Central Avenue (SR 61)
Encinal Avenue (SR 61)
Park Street
Tilden Way
Broadway

880

Park Street Bridge
Miller-Sweeney Bridge

B Fruitvale

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Explanation

- Site Boundary
- B BART Station
- BART Line
- AC Transit Route

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

N

0 1,000 Feet

PUBLIC TRANSIT IN PROJECT VICINITY
Initial Study/Mitigated Negative Declaration
Shell Alameda Distribution Center Remediation Project
2015 Grand Street
Alameda, California

wood.

By: CCN
Date: 07/08/2020
Prj. No. 8620192890.09
Figure 3-3

Senate Bill 743

Senate Bill (SB) 743 changes the way that transportation impacts are analyzed to better align local environmental review with statewide objectives to reduce greenhouse gas emissions, encourage infill mixed-use development in designated priority development areas, reduce regional sprawl development, and reduce VMT in California. VMT is a measure of the total number of miles driven to and from a development and its sometimes expressed as an average per trip or per person. Since the adoption of SB 743, new CEQA Guidelines Section 15064.3 subdivision (b) was adopted in December 2018 by the California Natural Resources Agency. The revisions to the CEQA Guidelines criteria related to determining the significance of transportation impacts are primarily focused on projects within transit priority areas, and shift the focus from driver delay to reduction in GHG emissions, creation of multi-modal networks, and promotion of a mix of land uses.

Recently adopted guidance from the State of California Governor's Office of Planning and Research (OPR) provides that a lead agency may elect to be governed by the provision of this section immediately. The provision becomes mandatory beginning on July 1, 2020, and the provisions of this section shall apply statewide. Alameda CTC has been the lead agency responsible for working with various partners and local jurisdictions to transition from the delay-based Level of Service (LOS) to the VMT metric under CEQA analysis (Alameda CTC 2020). Alameda CTC is developing VMT thresholds for per capita and per employee VMT at the County and Planning Area levels from the countywide transportation model, as well as proposing to follow Caltrans' guidance for the evaluation of all transportation projects (Alameda CTC 2020). As a result, the City of Alameda has been engaged in the process of VMT thresholds, but has not formally adopted updated transportation significance thresholds, or its transportation impact analysis procedures (Dong 2020).

Technical Advisory on Evaluating Transportation Impacts in CEQA

OPR released a technical advisory in December 2018 titled, *Technical Advisory on Evaluating Transportation Impacts in CEQA* on screening thresholds for small projects and evaluating transportation impacts. The technical advisory states, "[a]bsent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with an SCS or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact" (OPR 2018). The proposed Project would generate a maximum of 65 trips per day during demolition and excavation activities (i.e., up to 50 trips per day to haul excavated asphalt, concrete, soil, and other materials off-site; 5 trips to haul water associated with AST clean-out[5]; and up to 10 construction worker trips). The proposed remediation activities would therefore generate fewer trips than the OPR's threshold of 110 trips per day. Additionally, these trips would be temporary and would not continue following the completion of the proposed remediation activities.

[5] Approximately 20,000 gallons of residual oily water from cleaning out the ASTs and associated piping would be generated during excavation and removal activities. Using a 5,000-gallon vac truck an additional 5 trips would be needed to remove his residual oily water.

IMPACT ANALYSIS

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

No Impact. The proposed Project would involve the remediation of the existing Pennzoil-Quaker State Distribution Center; it does not involve changes to public transit routes, roads, bicycle, or pedestrian facilities, and there are no such programs, plans, or policies applicable to the proposed Project. Construction-related heavy haul truck trips and construction worker trips would be minor and would temporarily increase traffic volumes on local and regional roads due to construction workers traveling to/from the Project site and from trucks hauling equipment and materials, exporting excavated soil, and importing clean backfill material (Section XVI(b), *Transportation)*. Because this Project involves demolition and the removal of existing buildings and structures, only limited operation and maintenance activities would occur related to routine groundwater and/or soil vapor monitoring activities, if warranted, and these trips would result in infrequent and minimal vehicle trips. Therefore, the proposed Project would not conflict with programs, plans, ordinances, or policies in place that address the circulation system in the Project vicinity, and there would be no transportation impact.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), which pertains to analyzing transportation impacts based on vehicle miles traveled (VMT)?

Less than Significant Impact. Section 15064.3(b) of the CEQA Guidelines provides criteria for analyzing transportation impacts associated with land use and transportation projects based on VMT as a metric for measuring traffic congestion. This section of the CEQA Guidelines summarizes qualitative analysis methods such as the availability of transit and proximity to other destinations; it also states that a qualitative analysis of construction traffic would potentially be appropriate for many projects. Lead agencies are required to utilize VMT by July 1, 2020.

A focused construction-traffic impact analysis that evaluated the construction worker and heavy haul truck trips associated with remediation activities was prepared for the proposed Project (see Appendix E, Focused Construction-Related Traffic Analysis Memorandum). Traffic impacts from construction workers and construction-related vehicles would be considered potentially significant if the proposed Project would materially interfere with the area traffic flow and capacity of the street system, cause unsafe conditions, or introduce substantial truck and construction worker traffic (i.e., greater than 110 vehicle trips) through a residential area. The analysis also evaluates the potential construction impacts on traffic delays, reduction in lane capacities on local streets, parking availability, alterations of transit service, and impacts to pedestrian and bicycle circulation.

Construction worker trips and heavy truck traffic generated from equipment delivery and staging, demolition, and excavation trips would occur over the duration of the 5- to 6-month construction period. The Project's short-term construction impacts assumes a maximum crew size of up to 15 construction workers would travel to/from the Project site every day, resulting in the addition of up to 15 round trips to Alameda Island each day. This number of vehicle trips in

relation to average daily traffic on I-880 and into Alameda each day would not substantially affect traffic in the area (Caltrans 2019). The number of construction worker trips are derived based on similar remediation projects, based on the number of employees needed to operate construction equipment, and assumed to be the maximum needed during demolition of the on-site buildings. Construction worker trips assume each employee arrives in a separate vehicle each day and generates one inbound trip during the morning peak hour and one outbound trip during the evening peak hour. While these construction worker trip routes would potentially vary, they would all access the Project site via the Webster Street and Posey Tubes and Atlantic Avenue or the Park Street and Fruitvale Bridge and Clement Street; the analysis conservatively assumes that construction workers would not commute to the site via public transit or rideshare. Given this is a remediation project, no vendor trips are expected. The number of construction worker and heavy haul truck trips generated would also vary during construction phase depending on the activities involved, as described in Table 2-4.

The proposed Project would require the delivery of construction equipment during mobilization and removal of contaminated soil and other materials at the construction staging area. Equipment deliveries and haul trucks supporting construction activities and excavation at the proposed Project would access the Project site along designated truck routes by I-880 via Park Street Fruitvale Avenue Bridge to Clement Avenue to Grand Street. According to the City's General Plan and Municipal Code, Atlantic Avenue, Buena Vista Avenue, Park Street, and Clement Avenue are designated truck traffic routes (City of Alameda 2009c). Haul trucks and other heavy construction equipment would access the Project site via Grand Street.

The proposed Project would generate a total of 5,766 vehicle trips over the 5- to 6-month Project duration. Assuming the average trip length for both heavy haul truck trips and construction worker trips is 39 miles per trip, this totals 224,874 VMT (daily vehicle trips multiplied by the number of miles per trip), or approximately 2,810 VMT per day over a 4-month period.[6] The daily VMT would be 2,249 VMT/day with a 5-month construction and remediation schedule. The number of heavy haul truck trips is based on the dimensions of the proposed northeastern excavation area and the tank farm excavation area, and the average capacity of a haul truck (i.e., 12 to 16 cubic yards). Peak truck activity would occur at the Project site during the excavation phase when up to 65 daily construction worker trips and heavy haul truck trips would occur over a 2-month period. These heavy haul truck trips take into account the distance to the main off-site hauling destination, which is located approximately 35 to 40 miles northeast of the Project site in Livermore. Because the Proposed project would only generate 65 trips per day during peak construction activities, which is less than the 110 trips per day threshold identified by the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA,* these additional construction and heavy haul truck trips would not result in a measurable long-term impact on VMT. These trips would also be temporary and would not continue once proposed remediation activities are complete.

[6] Total VMT is estimated based on total trips per phase and duration shown in Table 2. For example, Phase 1 would generate 18 trips per day for 14 days, or 252 trips total. When taking into account the total trips per phase and duration for each phase this equals 5,766 vehicle trips over the life of the proposed Project. This estimate assumes construction work would occur 7 days/week; however, construction would not occur on weekends.

In combination with existing trips in the vicinity, the addition of 65 daily heavy haul truck trips would represent an increase of traffic on I-880 of less than 1 percent. The magnitude of this increase is also within the range of typical daily variation in traffic levels that can be expected on major roadways serving the Project site, and operating conditions on these roadways would remain similar to current conditions. The existing LOS for several of the surrounding intersections in the Project vicinity, including Webster Street/Atlantic Avenue, Constitution Way/Atlantic Avenue, Atlantic Avenue/Buena Vista Avenue, Grand Street/Buena Vista Avenue, and Grand Street/Clement Street is LOS B and LOS C (ESA 2017). The intersections with the highest delay (i.e., LOS C) are those that provide access to and from Oakland and I-880 on the approach to the Webster and Posey Tubes, Park Street Bridge, or High Street Bridge (ESA 2017). As a result, the construction-related Project traffic would not degrade the existing LOS at these surrounding intersections given the limited and temporary trip generation.

During construction, no local streets would be temporarily closed and the construction contractor would make its own arrangement for on-site storage of equipment and construction worker parking, if necessary. Construction contractor equipment and parking would occur within the Project site. Construction hours would be limited to Monday-Friday, 7:00 a.m. to 7:00 p.m.; construction is not proposed on the weekends. Work would be conducted to ensure construction activities would not interfere unnecessarily with the residential setting of the immediate vicinity. Therefore, the proposed Project would not impact on-street parking availability, public transit operations, or pedestrian or bicycle traffic.

Trip generation associated with Project operations would not occur on a daily basis. Post-remediation and maintenance activities at the Project site would be negligible and would require at most five annual trips of one vehicle per visit that would utilize existing on-site parking. These trips would also only occur if post-remediation groundwater monitoring and/or soil vapor monitoring are needed, neither of which are anticipated.

In summary, Project construction trips would generate. up to 65 trips per day that would not measurably contribute to intersection delays in the Project vicinity. The increase in vehicle trips would also be temporary, and relatively small compared to the Annual ADT on major roadways such that they would not significantly impact VMT or emergency access in the area. Hauling operations would be scheduled to occur during off-peak hours on the surrounding road network between 10:00 a.m. and 3:00 p.m., as outlined in the WMTP and TCP, thereby reducing impacts on the surrounding street network during morning and evening commutes (PM peak hour). For these reasons, the proposed Project would be consistent with CEQA Guidelines Section 15064.3(b), and transportation impacts would be less than significant

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed remediation Project involves demolition of existing pavement, buildings, and other structures, excavation and removal of contaminated soil, and backfilling. No changes to existing roads are proposed. Construction access to the Project site would be provided at the entrance along Grand Street. During construction, heavy haul trucks that enter and leave the Project site would potentially limit residences from entering and exiting the

immediate neighborhood. Given there are only 65 total trips anticipated during peak periods of construction activities (i.e., less than 1 truck every 10 minutes), the potential for vehicle queuing and related safety hazards would be minimal. Prior to construction, notices shall be posted on-site to notify residences and businesses and the public that temporary construction activities shall occur at the Project site (Section 2.11, *Best Management Practices and Environmental Protection Measures*). The TCP for the proposed Project shall describe how on-site traffic shall be managed and identify routes of entry and egress to the Project site, construction entrances, material and equipment staging areas, loading, and unloading areas, and parking areas. Therefore, the proposed Project would not substantially increase hazards due to a geometric design feature or incompatible uses such that no transportation impacts would occur**.**

d) Result in inadequate emergency access?

Less than Significant Impact. The Project site is currently used for industrial uses. The proposed Project involves site remediation activities including soil excavation and building demolition and removal. No changes to the existing street network would occur and the proposed Project would not introduce incompatible uses. While the majority of construction activities would be confined on-site, these short-term remediation activities would temporarily affect local traffic on Grand Street, Clement Street, and Atlantic Avenue during certain periods of the day, but would not result in traffic delays that could substantially increase emergency response times or reduce emergency vehicle access.

As discussed in Section XVI(b), *Transportation*, peak truck activity would occur at the Project site during the excavation phase when up to 65 trips would occur over a 2-month period. The short-term addition of 65 daily heavy haul truck trips would represent a less than one percent increase of traffic on I-880. The magnitude of this increase is also within the range of typical daily variation in traffic levels that occur on major roadways serving the Project site; operating conditions on these roadways would remain similar to current conditions. Minor traffic control and implementation of traffic control measures as outlined in the CTMP and WMTP would also ensure traffic flows and access along local streets are maintained. No streets would be temporarily or partially closed that could delay emergency access. For these reasons, Project construction would not result in inadequate emergency access and transportation impacts would be less than significant.

XVIII. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☒	☐	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

ENVIRONMENTAL SETTING

At the time of the initial European contact with the Native Americans of the San Francisco Bay area, Costanoans (from the Spanish costaños, or "coast people"), members of the Penutian linguistic family, inhabited the area from the Carquinez Strait and the northern tip of the San Francisco Peninsula to the region south of Monterey Bay and east to the Diablo Range (Levy 1978). These Native Americans called themselves Ohlone and entered the Bay Area approximately 1,500 years ago. They came from the Delta region and displaced earlier Hokan speakers. An estimated 7,000 to 10,000 Native Americans lived near San Francisco Bay by the time of European contact in the 18th century (Levy 1978).

The cultural history of the San Francisco Bay region can be divided into four broad cultural periods: the Paleoindian Period, the Early Period, the Middle Period, and the Late Period. The Early Period (8,000 – 500 B.C.) is notable for use of large, wide-stemmed and leaf-shaped projectile points, milling slabs, handstones, cut shell beads, and mortars and pestles (see Appendix B). The Middle Period (500 B.C. – A.D. 1050) is noted as the period when highly mobile groups of hunter-gatherers began to establish long-term base camps and the Late Period (A.D. 1050 – 1550) is noted as the period when the establishment of large, central villages and specialized activity sites occurred (see Appendix B).

A search of the NAHC's Sacred Lands File was requested on May 7, 2020 and conducted on (May 11, 2020) to determine the presence of any Native American tribal heritage resources within the APE and general vicinity (see Appendix B). The NAHC indicated that Native American tribal heritage sites are within the APE or vicinity. The NAHC identified eight Native American contacts, both tribes and bands, that would potentially have specific knowledge as to whether cultural resources are identified in the APE. Wood (in coordination with SOPUS and the San Francisco RWQCB) notified the following eight tribal organizations by mail on June 4, 2020 and June 5, 2020 of the opportunity for consultation pursuant to Public Resources Code Section 21074:

- Irenne Zwierlein, Chairperson, Amah Mutsun Tribal Band of Mission San Juan Bautista
- Tony Cerda, Chairperson, Costanoan Rumsen Carmel Tribe
- Merlene Sanchez, Chairperson, Guidiville Indian Rancheria

- Ann Marie Sayers, Chairperson, Indian Canyon Mutsun Band of Costanoan
- Monica Arellano, Muwekma Ohlone Indian Tribe of the SF Bay Area
- Katherine Perez, Chairperson, North Valley Yokuts Tribe
- Andrew Galvan, The Ohlone Indian Tribe
- Corrina Gould, Chairperson, The Confederated Villages of Lisjan.

Follow-up calls were made, and the original mailed letter was e-mailed to the Native American contacts on July 21, 2020. As of July 24, 2020, five of the contacted tribes have requested additional training, that onsite monitors be present during construction, or for information regarding tribal resources provided by notified tribal organizations in the area. The following list describes responses received as of July 24, 2020 from the contacted tribes:

- Ms. Michelle Zimmer (Amah Mutsun Tribal Band of Mission San Juan Bautista Communications Director) requested "cultural sensitivity training" for all construction personnel. Ms. Zimmer also requested that an archaeologist and a Native American be contacted to evaluate any cultural materials that are unexpectedly discovered during ground disturbances.
- Ms. Ann Marie Sayers (Indian Canyon Mutsun Band of Costanoan) requested archaeological and Native American monitoring during ground disturbances based on the proximity of a recorded prehistoric archaeological site to the APE.
- Ms. Katherine Perez (North Valley Yokuts Tribe) requested the letters by sent by electronic mail.
- Mr. Michael Derry (Guidiville Indian Rancheria Historian) requested that any cultural resources reports prepared for the proposed Project be provided to the Guidiville Indian Rancheria.
- Mr. Deja Gould (The Confederated Villages of Lisjan) requested that the letter be sent by electronic mail.

The Native American outreach results are also summarized in Appendix B.

IMPACT ANALYSIS

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

Less than Significant with Mitigation. The proposed Project would not cause substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the CRHR or in another local register. The NAHC's Sacred Lands File search response states

"the results were positive," indicating tribal resources are noted within the proposed Project site vicinity. Wood, on behalf of the San Francisco Bay RWQCB, received five responses including requests for additional training for onsite personnel or that onsite monitors be present during construction, and for information regarding tribal resources provided by notified tribal organizations in the area. Michelle Zimmer (Amah Mutsun Tribal Band of Mission San Juan Bautista Communications Director) requested "cultural sensitivity training" for all construction personnel. Ms. Zimmer also requested that an archaeologist and a Native American be contacted to evaluate any cultural materials that are unexpectedly discovered during ground disturbances. Ann Marie Sayers (Indian Canyon Mutsun Band of Costanoan) requested archaeological and Native American monitoring during ground disturbances based on the proximity of a recorded prehistoric archaeological site to the APE. Of the three other Native American contacts, one requested the cultural report and two others requested an electronic version of the consultation request letter.

While the probability of discovering tribal resources are considered remote due to the existing disturbed environment of the Project site, these requests would be accommodated. Impacts to any discovered tribal cultural resources would be less than significant with the implementation of Mitigation Measure TCR-1 and Mitigation Measure TCR-2

Mitigation Measure TCR-1: Worker Environmental Awareness Training

Prior to ground disturbing activities, an archaeological monitor, in coordination with a Native American monitor, shall conduct a Workers Environmental Awareness Program (WEAP) training for Construction Contractor staff to address sensitive cultural resource issues anticipated to be encountered at the Project site for review and approval by the City of Alameda.

The WEAP shall include information of the laws and regulations that protect cultural resources, the penalties for a disregard of those laws and regulations, what to do if cultural resources are unexpectedly uncovered during construction, and contact information for a Qualified Archaeologist (per Secretary of the Interior's Professional Qualification Standards). A Qualified Archaeologist shall be contacted in the case of unanticipated discoveries. The WEAP shall also include Project-specific information regarding the potential for and types of prehistoric and historic resources that may potentially be encountered. Construction Contractor staff shall complete WEAP training in order to conduct work activities at the Project site.

Mitigation Measure TCR-2: On-Call Archaeological and Native American Monitoring

A Qualified Archaeologist (per Secretary of the Interior's Professional Qualification Standards) and Native American monitor shall be retained for on-call services to perform all mitigation measures related to prehistoric and historic cultural and tribal cultural resources for ground disturbance activities beneath existing fill (e.g., below 3-4 feet in the northeast excavation area) within the proposed Project. A Qualified Archaeological Monitor and Native American representative shall be on-call and contacted if any archaeological or culturally sensitive materials are encountered during construction. If any such materials are encountered, the Construction Contractor shall immediately cease work in the vicinity of the find and the Qualified Archaeologist and Native American representative shall be consulted to determine the appropriate treatment of the discovery. If it is determined that the archaeological resources

qualify as historical resources under Public Resources Code Section 21084.1, Project-related impacts to such resources shall be avoided, if feasible. An attempt at impact avoidance shall be undertaken in consultation with the Qualified Archaeological Monitor. If avoidance is not feasible, the materials (i.e. deposits) shall be evaluated for their CRHR eligibility. If the materials are not eligible, a determination shall be made as to whether they qualify as a "unique archaeological resource" under requirements and definitions of CEQA Guidelines Section 15064.5 (c) and Public Resources Code Section 21083.2. If the evaluation determines that the material is neither a historical nor unique archaeological resource, the avoidance of potential impacts to the material is not necessary. If the material is eligible, impacts to the resource shall be mitigated. Mitigation may consist of excavating the archaeological material in accordance with a data recovery plan (CEQA Guidelines Section 15126.4[b][3][C]) developed in consultation with descendant community representatives; recording the resource; preparing a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility.

Public educational outreach may also be appropriate. Upon completion of the evaluation and, if necessary, the archaeologist shall prepare a draft report to document the methods and results of the investigation(s). The draft report shall be submitted to the San Francisco RWQCB, City of Alameda, and the NWIC.

Implementation of MM TCR-1 and TCR-2 would reduce potential impacts related to impacts on potential tribal cultural resources to less than significant.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than Significant Impact with Mitigation. The San Francisco Bay RWQCB has considered the significance of potential tribal cultural resources in the Project APE and vicinity to Native American Tribes. Based on the reasons summarized under Section XVIII, *Tribal Cultural Resources* (a) impacts on tribal resources would be less than significant with mitigation.

XIX. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future	☐	☐	☐	☒

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	development during normal, dry and multiple dry years?				
c)	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☒	☐
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

EBMUD is the potable water purveyor for Alameda and manages regional wastewater conveyance and treatment. EBMUD's service area extends into Contra Costa and Alameda counties, from Crockett in the north to San Lorenzo in the south, and from San Francisco Bay east to Walnut Creek. According to the EBMUD 2015 Urban Water Management Plan (UWMP), in 2015 EBMUD supplied water to approximately 1.4 million people in a service area that includes 20 cities and communities in Contra Costa and Alameda counties (EBMUD 2016). Approximately 90 percent of the EBMUD water supply originates from the Mokelumne River on the west slope of the Sierra Nevada and is stored at the Pardee Reservoir about 40 miles northeast of Stockton.

The Mokelumne River watershed is the major water source for EBMUD, with the source of water originating in the Sierra Nevada Mountains of eastern California. The watershed of this river collects snowmelt from the western slope of the Sierra Nevada in Alpine, Amador, and Calaveras counties. Water from the river is collected at the Pardee Dam and Reservoir, located 40 miles northeast of Stockton near the town of Jackson. A portion of the water stored in the Pardee Reservoir is conveyed to the EBMUD service area via the Mokelumne Aqueducts. The remainder of the water is released into the nearby Camanche Reservoir. EBMUD has water rights and contracts for up to 325 million gallons per day (mgd) from the Mokelumne River, but the precise amount of this entitlement available in any given year is dependent on a range of variables (EBMUD 2016)

Six water treatment plants are located within the EBMUD water supply and distribution system with a treatment capacity of more than 375 mgd. The City of Alameda is served by the Orinda Water Treatment Plant, which has a maximum capacity to treat 200 mgd (EBMUD 2020a). EBMUD's system storage generally allows it to continue serving its customers during dry-year events.

On April 24, 2012, EBMUD adopted the Water Supply Management Program 2040 Plan (WSMP). The WSMP is a program-level effort that estimates EBMUD's dry-year water supply needs through 2040 and anticipates 50 mgd of future supply to be provided by water conservation and recycling. The demand for water in EBMUD's service area is projected to increase to 247 mgd by 2040 under a 15-percent maximum customer rationing scenario (EBMUD 2012). EBMUD has developed mitigation and adaptation strategies to deal with the changing climate and its effects on water resources (EBMUD 2012).

EBMUD's 2015 UWMP was adopted by the EBMUD Board of Directors in July 2016, to assess current and projected water usage, water supply planning, water conservation, and recycling programs over a 20-year planning horizon. The UWMP sets minimum performance goals for water supply in the service area including reliability, flexibility, and the minimization of water rationing. Key components of the UWMP are water conservation and recycling. EBMUD implements numerous water conservation and recycling programs to reduce demand and develops projects to manage future water supply needs (EBMUD 2016). According to the UWMP, the projected water demand in 2015 for the district was 190 mgd and is anticipated to increase to 230 mgd in 2040, which is less than the 15-percent maximum customer rationing scenario for 2040 projected in the WSMP (EBMUD 2016). Further, EBMUD's water supply is adequate to meet existing and projected area-wide demand through 2040 under normal conditions and up to two years of drought. EBMUD's water demand projections account for anticipated future water demands within EBMUD's service boundaries and for variations in demand-attributed changes in development patterns (EBMUD 2016).

Stormwater and Sewer

The City of Alameda is responsible for the City's stormwater system and the sewer collection system. Wastewater generated from the Project site is currently collected by an existing network of private pipelines and pumps within the Project site. The City's collection system includes approximately 142 miles of City-owned sanitary sewers (136 miles of gravity pipes and 6 miles of force mains), approximately 3,129 manholes and other sewer structures, and 45 sewage pump stations (City of Alameda 2017c). Additionally, there are over 10 miles of pipelines and seven pump stations located in Alameda that are part of the EBMUD wastewater interceptor system, as well as over 14 miles of privately-owned sanitary sewers that are the responsibility of individual Homeowner Associations (City of Alameda 2017c). Wastewater generated in the City's collection system is conveyed to the EBMUD interceptor system and is treated at EBMUD's Main Wastewater Treatment Plant (MWWTP) located near the eastern terminus of the San Francisco-Oakland Bay Bridge.

The MWWTP provides secondary treatment for a maximum flow of 168 mgd, while primary treatment is provided for up to 320 mgd (EBMUD 2020b). Storage basins provide plant capacity for a short-term hydraulic peak of 415 mgd (EBMUD 2020b). On average, about 63 million gallons of wastewater is treated every day (EBMUD 2020b).

Solid Waste

Solid waste collection and hauling services are provided by Alameda County Industries. The City is compliant with the CalGreen , which requires that 65 percent of all waste generated by a

construction or demolition site be diverted from landfills either by reusing or recycling, and all new construction projects are required to implement a Waste Management Plan (City of Alameda 2020f). The City of Alameda delivers its solid waste to the Davis Street Resource Recovery Complex located in San Leandro, where it is sorted, and recyclable materials are recovered. Residual solid waste is disposed of at the Altamont Landfill, which accepts the following types of waste: ash, construction/demolition, contaminated soil, green materials, industrial, mixed municipal, other designated waste, tires, and shreds. This landfill has a maximum permitted capacity of 124.4 million cubic yards, a daily permitted capacity of 11,150 tons per day and, as of December 31, 2014, an estimated remaining capacity of 65.4 million cubic yards; this is anticipated to be reached by the current cease operation date of January 2025 (California Department of Recycling and Recovery [Ca Recycle] 2019). AB 939 is a California State Law that requires each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. The City has a waste diversion rate of 77 percent, well above AB 939 diversion goals (City of Alameda 2020f). Measure D of the Alameda County Source Reduction and Recycling Initiative Charter Amendment required the County to divert 75 percent of solid waste from the landfill by 2010.

Electric Power

SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This objective will increase the use of Renewables Portfolio Standard (RPS) eligible resources, including solar, wind, biomass, geothermal and others. SB 350 also requires the State to double statewide energy efficiency savings in electricity and natural gas end uses by 2030.

In 2018, SB 100 established that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by the end of 2045. SB 100 also creates new standards for the RPS, increasing required energy from renewable sources for both investor-owned utilities and publicly-owned utilities from 50 percent to 60 percent by the end of 2030. Incrementally, these energy providers must also have a renewable energy supply of 44 percent by the end of 2024, and 52 percent by the end of 2027. The updated RPS goals are considered achievable, since many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

Electric power services are provided by AMP. Since January 1, 2020, AMP has provided 100 percent clean energy to all customers through a combination of eligible renewable source and large hydroelectric sources. About 80 percent of AMP's power capacity comes from eligible renewable resources, including geothermal from the Geysers in Lake and Sonoma Counties; biomass (landfill gas) from Pittsburg, Butte, Santa Cruz, Richmond, and Half Moon Bay; small hydroelectric from Graeagle; and Tuolumne County Winds from the High Winds Project in Sonoma County (AMP 2020). An additional 20 percent of AMP's power capacity comes from large hydroelectric projects in California. AMP has achieved 100 percent clean energy decades ahead of California's goal of 100 percent clean power by 2045 and since 2011, AMP has exceeded the state's RPS that requires electric utilities to purchase a growing percentage of their electricity from renewable sources by 2030 (AMP 2020a). AMP delivers energy to homes and businesses through 178.1 miles of underground distribution lines, 6.8 miles of overhead

transmission lines, 86.1 pole miles of overhead distribution lines, and 1.9 circuit miles of underground transmission lines (Pacific Gas and Electric (PG&E) additionally provides the City's natural gas.

IMPACT ANALYSIS

a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. Construction workers during the 5- to 6-month project duration would generate a negligible amount of wastewater from using existing restroom facilities within the warehouse and/or portable toilets. the Portable toilets would be managed by a private company that would periodically dispose wastewater off-site in regulated facilities. Implementation of the proposed Project may involve dewatering activities. If dewatering is conducted, groundwater would be pumped out of the excavation area to the surface, treated onsite (if necessary) and then discharged to the sanitary sewer under an EMBUD discharge permit. Water extracted during dewatering could contain chemical contaminants from use of equipment or from ASTs and former USTs or could become sediment-laden from construction activities. In areas where dewatering would be implemented, the discharge could potentially contaminate the receiving waters depending on the quality of the groundwater, which would be a significant impact on groundwater quality. However, compliance with permit conditions as part of EBMUD's discharge permit and NPDES waste discharge permit issued by the RWQCB would minimize the water quality impact to the receiving waters to a less-than-significant level. If an NPDES permit is required, the proposed Project would also include the development of a SWPPP to minimize the potential construction-related impacts on existing stormwater drainage facilities in the Project vicinity (refer to Section X, *Hydrology and Water Quality*).

Existing groundwater monitoring wells would be removed prior to site mobilization. Any existing underground or overhead utilities inadvertently disturbed during Project construction would be reinstalled prior to completion; a separate removal plan permit would be required to remove on-site power poles and related electrical infrastructure. Following completion of construction, the proposed Project would be closed. The proposed Project would not include future operation that would require or result in the relocation or construction of new or expanded water, wastewater treatment, electric, natural gas, or telecommunication facilities. Therefore, project impacts on utilities would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact. Water demand during Project construction would include water used to rinse AST tanks prior to removal and ground surface watering during ground disturbing activities to prevent fugitive dust emissions. Water for construction activities would be provided to the Project site either by existing suppliers and drawn from water lines at the site, or water would be imported to the site via water trucks. Temporary 5- to 6-month construction-related water demand would be incremental compared to existing demand in EBMUD's service area. Following

implementation of the proposed Project, the site would be closed and would not require additional water service. According to EBMUD's Water Management Supply Plan, existing water supply is adequate to meet existing and projected area-wide demand through 2040. These projections account for reasonably foreseeable future development during normal conditions and up to two years of drought (EBMUD 2016). Therefore, no Project impacts on utilities would result.

c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

Less than Significant Impact. Construction workers would generate a negligible amount of wastewater from using existing restroom facilities within the warehouse and/or portable toilets that would be managed by a private company where the waste would be properly disposed offsite. The proposed Project would also not involve the construction of new housing or include any new development that would require solid waste disposal, or wastewater treatment. Wastewater generation from construction workers would not cause a measurable increase in wastewater flows to a point where the local sewer capacity and wastewater treatment plant is constrained. Following construction completion, the site would not contribute to existing wastewater systems. Therefore, the proposed Project would not exceed wastewater treatment capabilities, its contribution would be negligible, and no new or expanded wastewater treatment facilities would be required. Proposed Project impacts on wastewater utilities would be less than significant.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. Solid waste generated by the proposed Project would include debris generated from demolition of pavements (e.g., asphalt, rubble, or concrete), buildings, and other structures (e.g., ASTs). The amount of debris generated during construction activities would vary depending on the phase. However, daily heavy haul truck trips would reach up to 65 heavy haul truck trips a day during the Limited Demolition and AST Removal phase, which would occur over the period of 1 month (refer to Table 2-4). Assuming each off-haul trip would transport 14 tons, the standard amount of heavy-haul dump trucks, the proposed Project would generate a maximum of 631 tons of solid waste a day. Debris material associated with building demolition would be sorted on-site by type to meet disposal requirements (e.g. concrete, ACM, LBP, miscellaneous metal) and placed into dump trucks before being hauled off-site for recycling or disposal at a permitted landfill in accordance with federal, state, and local regulations. Clean demolition debris and excavated soils (which have been pre-profiled as non-hazardous) would be disposed of at a Class III landfill (permitted to accept nonhazardous waste), such as Zanker Road Landfill in San Jose, California which can process up to 2,500 tons of mixed debris a day (Zanker Landscape Materials 2020).

Hazardous demolition debris would be disposed of at a Class I landfill (permitted to accept hazardous waste). Disposal of hazardous material would depend on the waste type. ACM waste

would be disposed of at either the Altamont Landfill in Livermore, California which can accept up to 2,000 tons a day, or the Hay Road Landfill in Vacaville, California which can accept up to 2,400 tons per day (CalRecycle 2019). LBP and LCP waste would be disposed of at either the Clean Harbors Landfill in Buttonwillow, California or the U.S. Ecology Landfill in Beatty, Nevada. Concrete and asphalt would be recycled at Argent Materials, Inc. in Oakland, California, and metal materials would be recycled at Schnitzer Steel in Oakland, California (ICS 2020b).

Daily waste disposal would also not exceed 631 tons a day. Daily waste disposal amounts would be divided among receiving facilities depending on the waste material. The solid waste generated by the proposed Project during construction would not exceed any facility's daily total daily capacity. Following completion of construction, the proposed Project would be closed and would not generate solid waste. Therefore, Project impacts to landfills that serve the proposed Project would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. Disposal of waste materials would comply with all local, State, and Federal requirements for integrated waste management and solid waste disposal, and the proposed Project would be required to submit and adhere to a WMTP. Therefore, Project impacts related to solid waste would be less than significant.

XX. WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		☐ Yes		☒ No
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The Project site is located in an entirely urbanized area, outside of any FHSZ. The nearest potential wildfire risk area is located approximately 6.5 mile to the east, where there is a LRA with a VHFHSZ (Cal Fire 2008).

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a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. The proposed Project would not alter existing transportation patterns surrounding the Project site (refer to Section XVII(c), *Transportation*). Construction staging and equipment laydown areas would be confined within the Project site boundaries (i.e., outside of the public right-of-way). The limits of construction work would include the parking spaces located along Grand Street and Fortmann Way to limit disturbances to vehicles, bicyclists, and pedestrians. However, this extension would be temporary and would not impair or physically interfere with the circulation of surrounding roadways, including accessibility of emergency response vehicles (refer to Section IX[f], *Hazards and Hazardous Materials* and XVII[d], *Transportation*). Construction vehicles would not park on roadways and, thus, during construction, the proposed Project would not create a hazard, interrupt vehicle line-of-sight, or block emergency access.

Short-term remediation activities under the proposed Project would temporarily affect local traffic, but would not be expected to result in traffic delays that could substantially increase emergency response times or reduce emergency vehicle access. Minor traffic control and implementation of traffic control measures, as outlined in the WMTP and TCP, would also ensure traffic flows and access along local streets are maintained. Therefore, implementation of the proposed Project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan and Project impacts related to an emergency response plan or emergency evacuation plan would be less than significant**.**

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. The proposed Project would involve the demolition of existing pavements, buildings, and other structures, excavation and removal of contaminated soil, and backfilling with new and clean fill. No redevelopment or other operational use is considered as a part of the proposed Project. The Project site is not located in a FHSZ. The Project site and surrounding area is flat and not located near slopes or other factors that would exacerbate wildfire risk. Therefore, the proposed Project would have no impacts related to wildfire risks.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. The proposed Project would involve the demolition of existing pavement, buildings, and other structures, excavation and removal of contaminated soil, and backfilling with new and clean fill. No redevelopment or other operational use is considered as a part of the proposed Project. Therefore, the proposed Project would not require the installation or maintenance of infrastructure that may exacerbate fire risk and no impact would occur. The Project would have no impact to wildfire risks.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The proposed Project would involve the demolition of existing pavements, buildings, and other structures, excavation and removal of contaminated soil, and backfilling with new and clean fill. No redevelopment or other operational use is considered as a part of the proposed Project. Therefore, the proposed Project would not expose people or structures to significant risks, as a result of runoff, post-fire slope instability, or drainage changes, and no impact to post-fire slope instability or drainage changes would occur.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐

IMPACT ANALYSIS

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. Project implementation of the BMPs described in Section 2.11, *Best Management Practices and Environmental Protection Measures* (e.g., WMTP, TCP, HASP, Noise Abatement, etc.) as well as required mitigation measures (such as Mitigation Measure AQ-1 and Mitigation Measure NOI-1 and NOI-2) would ensure that no significant and unavoidable impacts would result. The San Francisco Bay RWQCB hereby finds that impacts related to degradation of the environment, biological resources, and cultural resources would be less than significant with the incorporation of Best Management Practices and Environmental Protection Measures and required mitigation measures.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than Significant with Mitigation Incorporated. Cumulative environmental impacts are multiple individual impacts that, when considered together, would be considerable or compound other environmental impacts. Individual impacts would potentially result from a single project or multiple separate projects that would potentially occur at the same place and point in time or at different locations, and over extended periods of time. The proposed Project would not result in individually limited or contribute to cumulatively considerable significant impacts. As discussed in Sections I through XX, all short-term environmental issues would result in either no impacts, less than significant impacts, or less than significant impacts with the incorporation of mitigation with the implementation of the proposed Project. Proposed Project construction would result in some short-term temporary impacts such as geology and soils, hazards and hazardous materials, increases in ambient noise levels, and additional construction worker and heavy haul truck trips. Hazardous material exposure to construction workers would be mitigated through the implementation of Project-specific BMPs and environmental protection measures included in the Project RAP, WMTP, and HASP. Noise impacts would also be temporary and less than significant and could be further reduced with the implementation of recommended mitigation measures. Construction impacts associated with additional construction worker trips and heavy haul truck trips would be minimized with the Project-specific WMTP and TCP. In summary, the Project's contribution to potential cumulative impacts related to these other issues would be less than cumulatively considerable. Therefore, Project impacts would be less than significant with the incorporation of mitigation measures.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant with Mitigation Incorporated. Based on the nature and scope of the proposed Project and the analysis of the proposed Project's impacts as summarized in Sections I through XX, no environmental effects have been identified in this IS that would cause substantial adverse effects, either directly or indirectly, on human beings. A variety of other potential effects during construction would occur including:

- Increase in NO_x emissions associated with off-road construction equipment (discussed in Section III, *Air Quality*);
- Adverse impacts to prehistoric cultural resources and potential unknown human remains (discussed in Section V, *Cultural Resources*);
- Exposure of construction workers to hazardous materials through transport, use, and disposal during demolition and excavation activities (discussed in Section IX, *Hazards and Hazardous Materials*);
- Exposure of nearby single-family and multi-family residences to increases in ambient noise levels and nuisances associated with construction-related noise (discussed in Section XIII, *Noise*);
- Impacts to emergency response routes during construction (discussed in Section IX, *Hazards and Hazardous Materials* and Section XVII, *Transportation*)
- Impacts that would cause substantial adverse change in the significance of a tribal cultural resources (discussed in Section XVIII, *Tribal Cultural Resources*).

These impacts would be temporary and intermittent during the 5- to 6-month Project duration, and all of these impacts would be less than significant based on compliance with applicable Federal, State, and local regulatory requirements and established impact thresholds, as well as the implementation of mitigation measures. While the proposed Project would involve the handling, transport, and disposal of hazardous material, it would not involve the use of hazardous materials (i.e., soil excavation materials, etc.) in a manner that poses unusual risks. Any hazardous impacts associated with exposure of construction workers to potential harmful contaminants in the soil (i.e., TPHg, TPHd, TPHmo, BTEX) during excavation would be minimized through the implementation of Project-specific BMPs and environmental protection measures that are part of the RAP. Based on the analysis in this IS, the San Francisco Bay RWQCB finds that direct and indirect impacts to human beings would be less than significant with mitigation incorporated.

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