Jacobs

Green Power Microgrid Project

Initial Study/Negative Declaration

Draft

November 2023

Prepared for
Port of Oakland

PORT OF OAKLAND

Contents

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Figures

ACRONYMS AND ABBREVIATIONS

Acronym	Definition
µg/m^3	micrograms per cubic meter
µg/L	micrograms per liter
2020 CTP	2020 Alameda Countywide Transportation Plan
AB	Assembly Bill
ACDEH	Alameda County Department of Environmental Health
ACTC	Alameda County Transportation Commission
AMEC	AMEC Geomatrix, Inc.
ATCM	Airborne Toxic Control Measure
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BCDC	San Francisco Bay Conservation and Development Commission
BESS	Battery Energy Storage System
BMP	best management practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standard
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CARE	Community Air Risk Evaluation
CCR	California Code of Regulation
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFR	Code of Federal Regulation
CGP	Construction General Permit
CH_4	methane

Acronym	Definition
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalent
CTC	California Transportation Commission
deed restriction	Environmental Covenant and Environmental Restriction on the Union Pacific Roundhouse Property
DOSP	Downtown Oakland Specific Plan
DPM	diesel particulate matter
EBMUD	East Bay Municipal Utility District
ECAP	Equitable Climate Action Plan
EIR	Environmental Impact Report
ESL	Environmental Screening Level
EV	electric vehicle
FAST	Fixing America's Surface Transportation
FHWA	Federal Highway Administration
GHG	greenhouse gas
HMTA	Hazardous Materials Transportation Act
I	Interstate
IBC	International Building Code
IEPR	Integrated Energy Policy Report
IS/ND	Initial Study/Negative Declaration
lb/day	pounds per day
LF	linear feet
MS4s	Small Municipal Separate Storm Sewer System
MTC	Metropolitan Transportation Commission
MW	megawatt
n.d.	no date
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standard
NFI	Notice of Federal Interest

Acronym	Definition
NHPA	National Historic Preservation Act
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
O_3	Ozone
OPR	Office of Planning and Research
OSCAR	Open Space Conservation and Recreation
PG&E	Pacific Gas and Electric Company
Plan	Seaport Air Quality 2020 and Beyond Plan – The Pathway to Zero Emissions
PM	particulate matter
$PM_{2.5}$	particulate matter with aerodynamic diameter equal to or less than 2.5 micrometers
PM_{10}	particulate matter with aerodynamic diameter equal to or less than 10 micrometers
Port	Port of Oakland
ppm	parts per million
PRC	Public Resources Code
Proposed Project	Green Power Microgrid Project
R&M	R&M Environmental and Infrastructure Engineering, Inc.
RMP	Risk Management Plan
ROG	reactive organic gas
SB	Senate Bill
Scoping Plan	2022 Scoping Plan for Achieving Carbon Neutrality
SCS	Sustainable Communities Strategy
SF	square feet
SF_6	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SIP	state implementation plan
SLIC	Spills, Leaks, Investigations, and Cleanups
SMP	Site Management Plan
SO_2	sulfur dioxide
SO_x	Sulfur oxide

Acronym	Definition
SPH	separate-phase petroleum hydrocarbon
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCEP	Trade Corridor Enhancement Program
TPH	total petroleum hydrocarbon
UFC	Uniform Fire Code
UP	Union Pacific
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
VMT	vehicle miles traveled
VOC	volatile organic compound
w	watts
w/SF	watts per square feet
YBM	Young Bay Mud
ZE	zero emission

1 INTRODUCTION

The Port of Oakland (Port) has prepared this Draft Initial Study with Negative Declaration (IS/ND), which examines the potential environmental impacts of the alternatives being considered for the proposed Green Power Microgrid Project (Proposed Project) located within the Port's complex along the City of Oakland's San Francisco Bay waterfront in Alameda County, California (refer to Figure 1-1 at the end of this section). Key roads serving the Port include Maritime Street, Middle Harbor Road, 7th Street, West Grand Avenue, Adeline Street, Interstate (I) 880, and I-80.

The Proposed Project consists of the following elements:

- Installing new electric vehicle (EV) chargers in support of maritime terminal yard, dockside, and transient EV use (thereby increasing the number of zero emission (ZE) vehicles that can be supported)
- Installing solar systems and supporting infrastructure for increased capacity for EVs, facilities, and other ZE equipment
- Installing battery storage systems to increase capacity for energy storage, charging vehicles during rolling blackouts or other electric grid power supply problems, and capacity expansion for EVs
- Upgrading substations for electric grid modernization (through load shifting and better demand management)

The Proposed Project sites, locations, sizes, and existing uses of the Proposed Project sites are listed in Table 1-1.

Table 1-1. Locations, Sizes, and Existing Uses of the Proposed Project Sites

Proposed Project Site	Location	Size (acre)	Existing Use
Harbor Facilities	651 Maritime Street, Oakland, CA 94607	9.38	maintenance facility serving Seaport
Roundhouse	1195 Middle Harbor Road, Oakland, CA 94607	13.92	parking area for Class 8 trucks, containerized and bulk cargo transloading, and short-term container storage
CenterPoint	1300 Maritime Street, Oakland, CA 94607	29.48	warehouse/transload facility leased to/operated by PCC Logistics
Cool Port	575 Maritime Street, Oakland, CA 94607	22.58	cold storage warehouse/transload facility served by rail leased to/operated by Cool Port/Lineage Logistics
Eagle Rock Facility	1499 Maritime Street, Oakland, CA 94607	17.20	container storage

Proposed Project Site	Location	Size (acre)	Existing Use
Oakland International Container Terminal (Stevedoring Services of America) – Terminal Operator	1717 and 2505 Middle Harbor Road, Oakland, CA 94607	135.14	marine terminal
Trapac – Terminal Operator	2800 7th Street, Oakland, CA 94607	2.36	marine terminal
Everport Terminal Operator	5190 7th Street, Oakland, CA 94607	0.57	marine terminal
Joint Intermodal Terminal (Burlington Northern Santa Fe Operator)	333 Maritime Street, Oakland, CA 94607	0.31	intermodal terminal
Maritime Street	555 Maritime Street, Oakland, CA 94607	0.94	container storage
Embarcadero West/Market Street (Brush Street)	205 Brush Street, Oakland, CA 94607	0.60	vacant, parking area

The Proposed Project would help improve freight efficiency, reduce freight emissions, and provide additional charging capacity for ZE vehicles while reducing associated air quality impacts. The Proposed Project would also help the region and State achieve ZE goals by upgrading electrical infrastructure to increase capacity needed to accommodate the electrification of Port terminals, facilities, and maritime terminal yard equipment (Port of Oakland, 2022).

The Proposed Project would provide up to 283 EV chargers for trucks and heavy-duty equipment at up to 11 locations at the Port, increasing the number of ZE vehicles that can be supported. The Proposed Project would also install solar systems and supporting infrastructure for increased capacity for EVs, facilities, and other ZE equipment, as well as battery systems to increase storage capacity for energy storage, charging vehicles during rolling blackouts or other electric grid power supply problems, and capacity expansion for EVs. Lastly, the Proposed Project would upgrade up to 11 substations for electric grid modernization in support of the Port's ongoing transition to ZE, accommodation of future ZE vehicle needs, and Port electrical distribution resiliency. Excess electricity generated at the Port could potentially be made available to nearby local communities in the event of power supply disruptions, rolling blackouts, and mandatory shutoffs (and thereby support the local community). Excess renewable energy generated and stored could potentially also be made available to vessels, including cargo ships, non-container vessels, and vessels in the federal defense fleet that are berthed at the Port. The Proposed Project could also increase the Port's capacity to support grid-connected refrigerated containers.

The Port is the lead agency for the Proposed Project under the California Environmental Quality Act (CEQA). This document explains the Proposed Project, what alternatives have been considered for the Proposed Project, how the existing environment could be affected by the Proposed Project, and the potential impacts of each of the alternatives.

1.1 PURPOSE OF AN INITIAL STUDY

CEQA was enacted in 1970 for the purpose of providing decision makers and the public with information regarding environmental effects of proposed projects, identifying means of avoiding environmental damage, and disclosing to the public the reasons behind a project's approval even if it leads to environmental damage. The Port has determined that the Proposed Project is subject to CEQA, and no exemptions apply. Therefore, preparation of an Initial Study is required.

An Initial Study is a preliminary analysis conducted by the lead agency, in consultation with other agencies (responsible or trustee agencies, as applicable), to determine whether there is substantial evidence that a project may have a significant effect on the environment. If the IS concludes that the project, with mitigation, may have a significant effect on the environment, an environmental impact report should be prepared; otherwise, the lead agency may adopt a negative declaration or mitigated negative declaration.

1.2 DOCUMENT ORGANIZATION

This Draft IS/ND is organized into seven sections as follows:

- **Section 1, Introduction:** Provides an overview of the Proposed Project and the CEQA environmental documentation process.
- **Section 2, Project Description:** Provides a description of the Proposed Project and design options, construction methods, and the Proposed Project's objectives.
- **Section 3, Environmental Checklist and Analysis:** Provides the lead agency determination and a detailed discussion of the environmental factors that would be potentially affected by the Proposed Project as indicated by an analysis based on the CEQA Guidelines Appendix G checklist.
- **Section 4, List of Preparers and Reviewers:** Provides the names and roles of the individuals who contributed to the development of this Draft IS/ND.
- **Section 5, Distribution List:** Provides a list of the individuals and entities to whom this Draft IS/ND would be delivered.
- **Section 6, References:** Provides information regarding the documents and other reference materials used during the preparation of this Draft IS/ND.

1.3 CALIFORNIA ENVIRONMENTAL QUALITY ACT PROCESS

To begin the CEQA process, the lead agency identifies a proposed project. The lead agency then prepares an initial study to identify the preliminary environmental impacts of the proposed project. This Draft IS/ND has been prepared in accordance with CEQA provisions to analyze the possible environmental impacts of the Proposed Project so that the public can take these impacts into account when considering action on the Proposed Project.

Per CEQA Section 15105, the Port will circulate this Draft IS/ND for review from November 3, 2023, to November 27, 2023. This Draft IS/ND will be made electronically available at the Port website (https://www.portofoakland.com/community/environmental-stewardship/publications/). In addition, this Draft IS/ND will be made physically available at the following location:

Port of Oakland
530 Water Street
Oakland, CA 94607

During the public review period, the general public and responsible and trustee agencies can submit comments on this Draft IS/ND to the Port. Comments can be submitted the following ways:

By email: Email comments to: jnovak@portoakland.com

By mail: Mail comments to:
Port of Oakland
530, Water Street
Oakland, CA 94607

Comments on this Draft IS/ND must be received by November 27, 2023, 5:00 P.M. Pacific Standard Time. The Port will consider the comments and will respond to the comments after the public review period.

After comments have been received from the general public and responsible and trustee agencies, the Port may do any of the following:

1. Grant environmental approval to the Proposed Project.
2. Conduct additional environmental studies.
3. Abandon the Proposed Project.

If the Proposed Project is granted environmental approval and funding is obtained, the Port could design and construct all or part of the Proposed Project.

Within 5 days of the Board of Port Commissioner's approval of the Final IS/ND, the Port will file a Notice of Determination with the County Clerk. The Notice of Determination will be posted by the County Clerk within 24 hours of receipt. This begins a 30-day statute of limitations on legal challenges to the approval under CEQA. During this time, the ability to challenge the approval in court may be limited to only those persons who objected to the approval of the Proposed Project and to issues that were presented to the lead agency by any person, either orally or in writing.

1.4 PROPOSED PROJECT INFORMATION SUMMARY

Proposed Project Title:

Green Power Microgrid Project

Lead Agency Name and Address:

Port of Oakland
530 Water Street
Oakland, CA 94607

Contact Person and Phone Number:

Jan Novak
Environmental Programs and Planning
Port of Oakland

530 Water Street
Oakland, CA 94607
Office number: 510-627-1176
Email: jnovak@portoakland.com

Proposed Project Location:

The Proposed Project is located within the Port's Seaport facility in Oakland, California. The addresses and Assessor's Parcel Numbers of the Proposed Project sites are listed in Table 1-2.

Table 1-2. Proposed Project Sites, Addresses, and Assessor's Parcel Numbers

Proposed Project Site	Address	Assessor's Parcel Number
Harbor Facilities	651 Maritime Street, Oakland, CA 94607	018 037500601
Roundhouse	1195 Middle Harbor Road, Oakland, CA 94607	018 039500803
CenterPoint	1300 Maritime Street, Oakland, CA 94607	018 050700108
Cool Port	575 Maritime Street, Oakland, CA 94607	018 037500601
Eagle Rock Facility	1499 Maritime Street, Oakland, CA 94607	018 032000102
Oakland International Container Terminal (Stevedoring Services of America) – Terminal Operator	1717 and 2505 Middle Harbor Road, Oakland, CA 94607	018 035500201
Trapac – Terminal Operator	2800 7th Street, Oakland, CA 94607	018 035500201
Everport Terminal Operator	5190 7th Street, Oakland, CA 94607	018 035000100
Joint Intermodal Terminal (Burlington Northern Santa Fe Operator)	333 Maritime Street, Oakland, CA 94607	018 037500601
Maritime Street	555 Maritime Street, Oakland, CA 94607	018 037500601
Embarcadero West/Market Street (Brush Street)	205 Brush Street, Oakland, CA 94607	001 011100503

Source: City of Oakland, 2023a

General Plan and Zoning Designations:

General Plan/Estuary Plan: General Industry and Transportation, Business Mix, Urban Park and Open Space (City of Oakland, 2023a)

Zoning: General Industrial, Heavy Industrial (City of Oakland, 2022a)

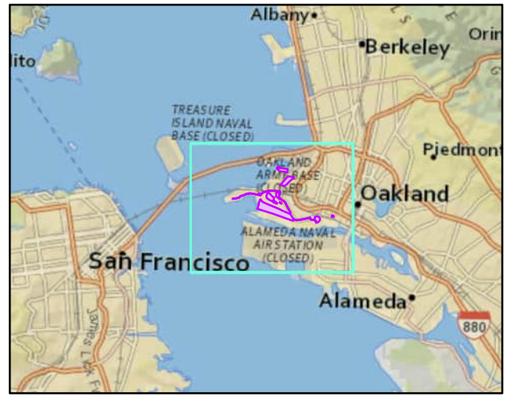
Project Description:

The Proposed Project would install new EV chargers in support of Port maritime terminal yard, dockside, and transient vehicle use (and thereby increase the number of ZE vehicles that can be supported), install solar system and supporting infrastructure for increased capacity for EVs, facilities, and other ZE

equipment, install battery systems to increase storage capacity for energy storage, charging vehicles during rolling blackouts or other electric grid power supply problems, and capacity expansion for EVs, and upgrade substations for electric grid modernization (through load shifting and better demand management).

Surrounding Land Uses and Setting:

The regional setting is characterized by the Port, regional transportation, railroad facilities, and the shoreline of the Oakland Estuary. At the Proposed Project's northern end, the shoreline is dominated by the Port's marine terminals. The Proposed Project site's immediate vicinity is characterized by industrial purposes associated with Port activities to include truck and vehicle parking, buildings and other industrial facilities, and container storage. The immediate area also includes public open space in the western portion of the Proposed Project area adjacent to San Francisco Bay. Commercial and light industrial facilities and I-880 are located to the north and east of the Proposed Project sites.



LEGEND

- Site Boundaries
- Excavate Trench
- Upgrade Substation

Source:
1. Imagery: National Geographic, Esri

N

0 2,000 4,000

Feet

Figure 1-1
Proposed Project Location
Map 1 of 12
Green Power Microgrid Project
Port of Oakland

\\DC1VS01\GISPROJ\P\PORT_OF_OAKLAND\GREEN_POWER_MICROGRID_PROJECT\MAPFILES\REPORT\2023\11_NOV\FIGURE1-1_SITE_LOCATION_OVERVIEW.MXD CARCHER 11/2/2023

LEGEND

- Site Boundary
- Excavate Trench

Source:
1. Imagery: ESRI, Maxar March 2021

N

0 50 100

Feet

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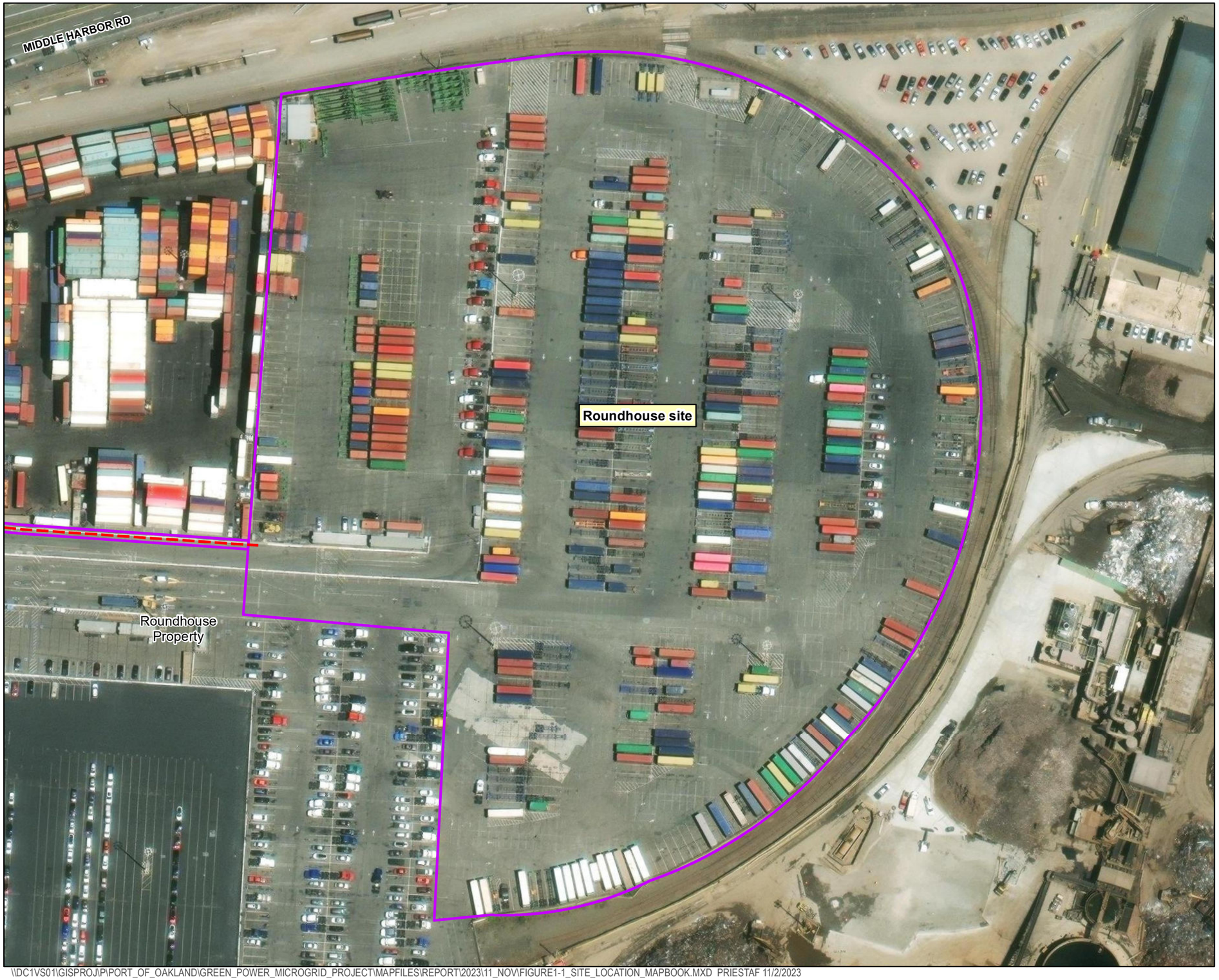
Figure 1-1
Proposed Project Location
Map 02 of 12
Harbor Facilities site
Green Power Microgrid Project
Port of Oakland



LEGEND

- Site Boundary
- Excavate Trench

Source:
1. Imagery: ESRI, Maxar March 2021

N

0 50 100

Feet

Figure 1-1
Proposed Project Location
Map 03 of 12
Roundhouse site
Green Power Microgrid Project
Port of Oakland

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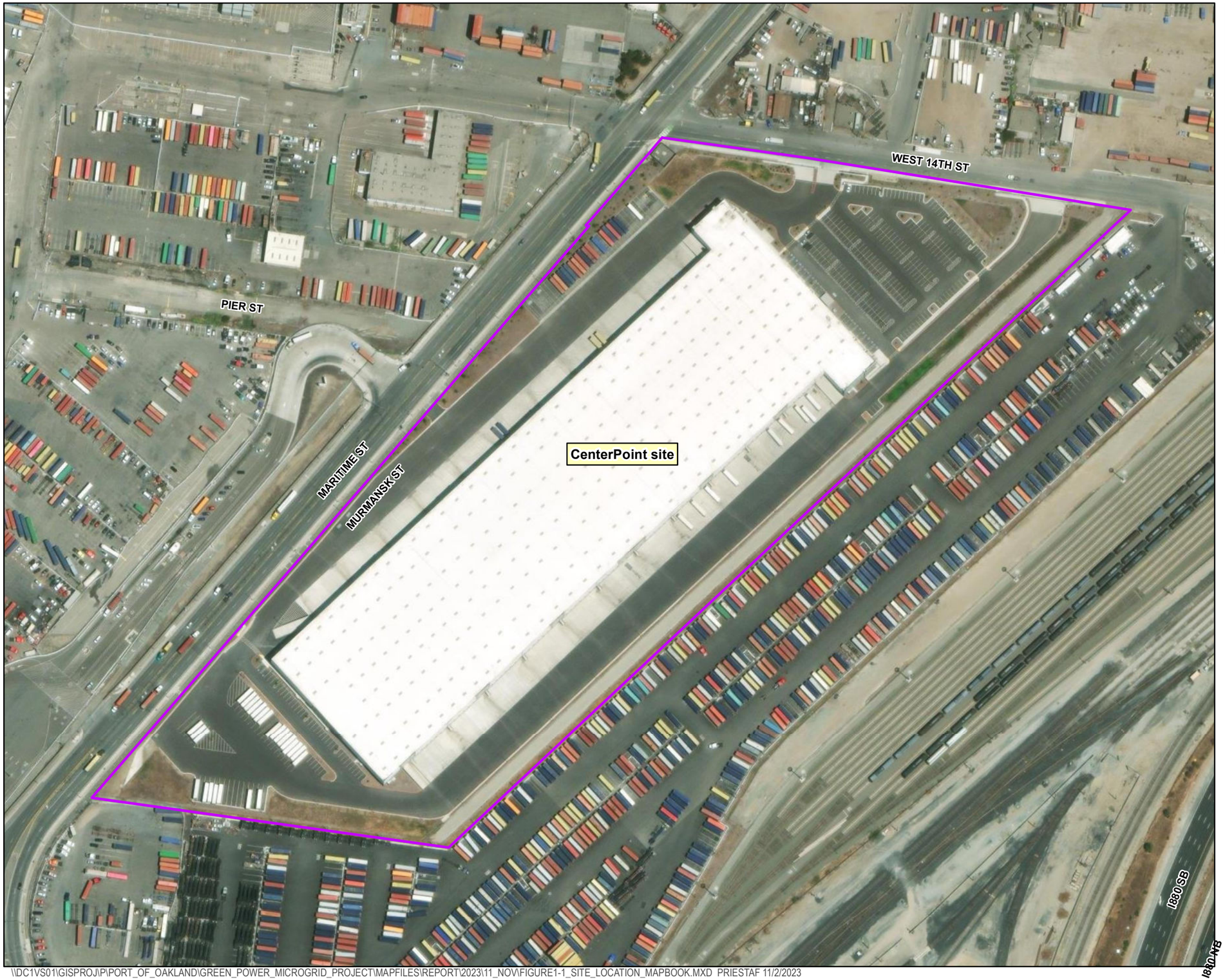

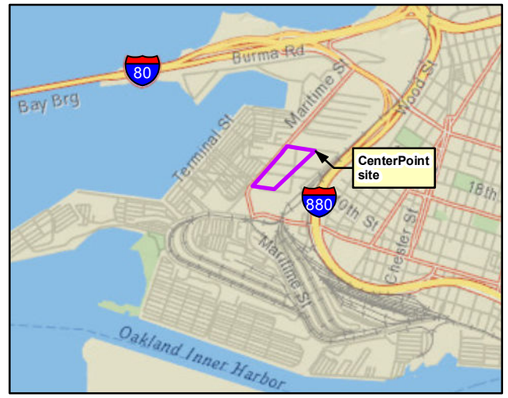

LEGEND

Site Boundary

Source:
1. Imagery: ESRI, Maxar March 2021

N

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Feet

Figure 1-1
Proposed Project Location
Map 04 of 12
CenterPoint site
Green Power Microgrid Project
Port of Oakland

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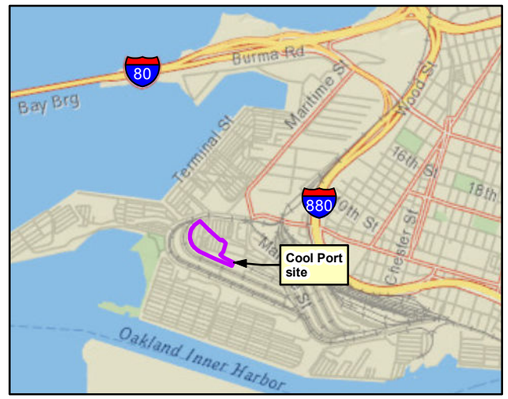

LEGEND

Site Boundary

Source:
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N

0 80 160

Feet

Figure 1-1
Proposed Project Location
Map 05 of 12
Cool Port site
Green Power Microgrid Project
Port of Oakland

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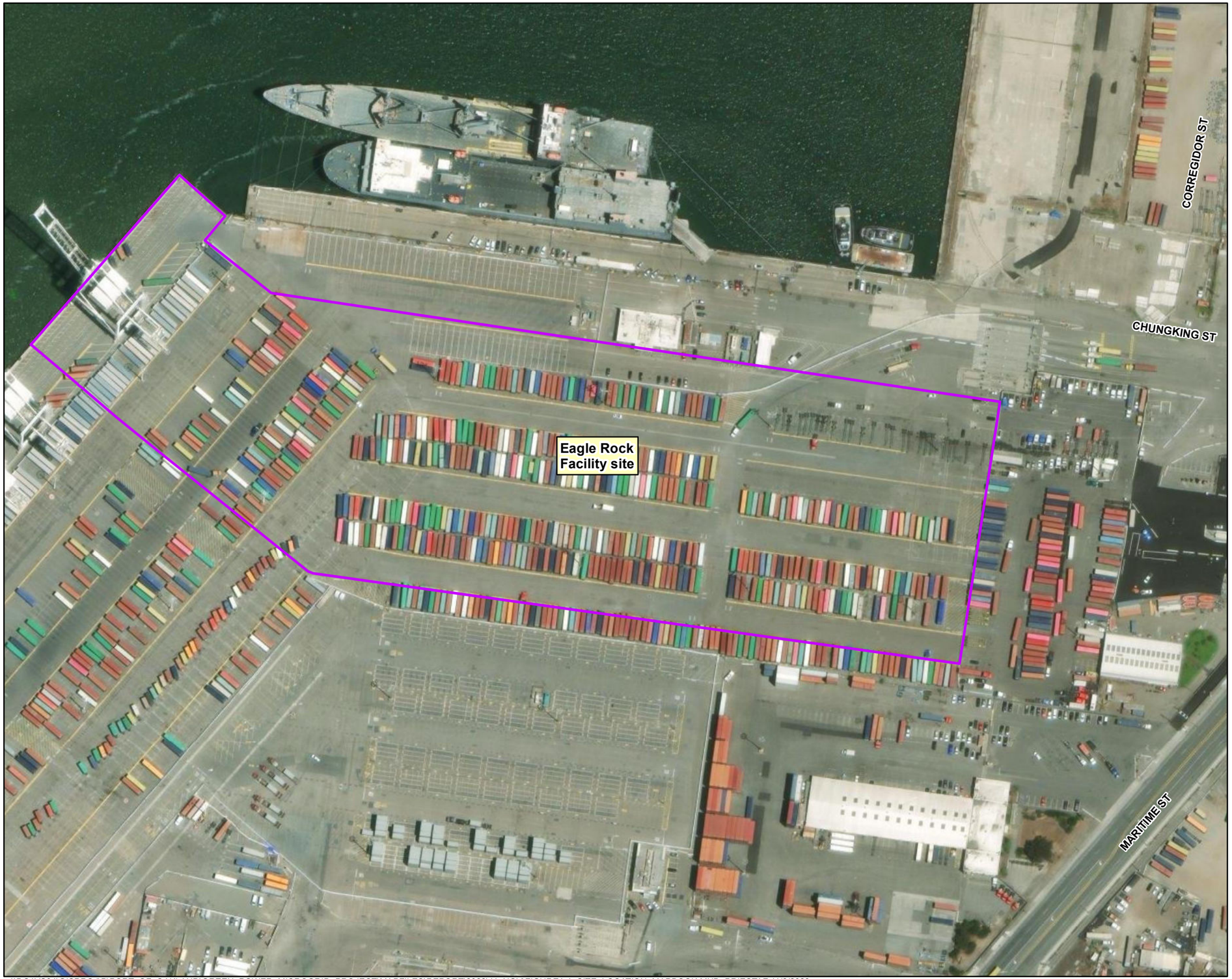

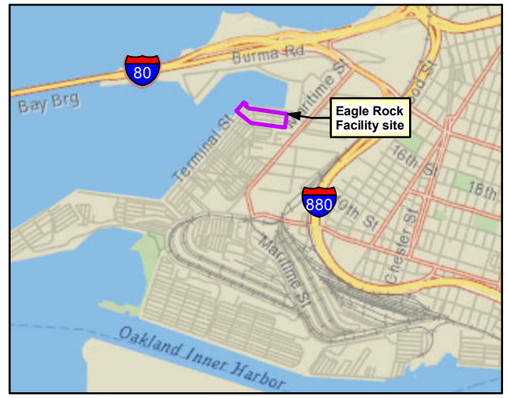

LEGEND

Site Boundary

Source:
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N

0 80 160

Feet

Figure 1-1
Proposed Project Location
Map 06 of 12
Eagle Rock Facility site
Green Power Microgrid Project
Port of Oakland

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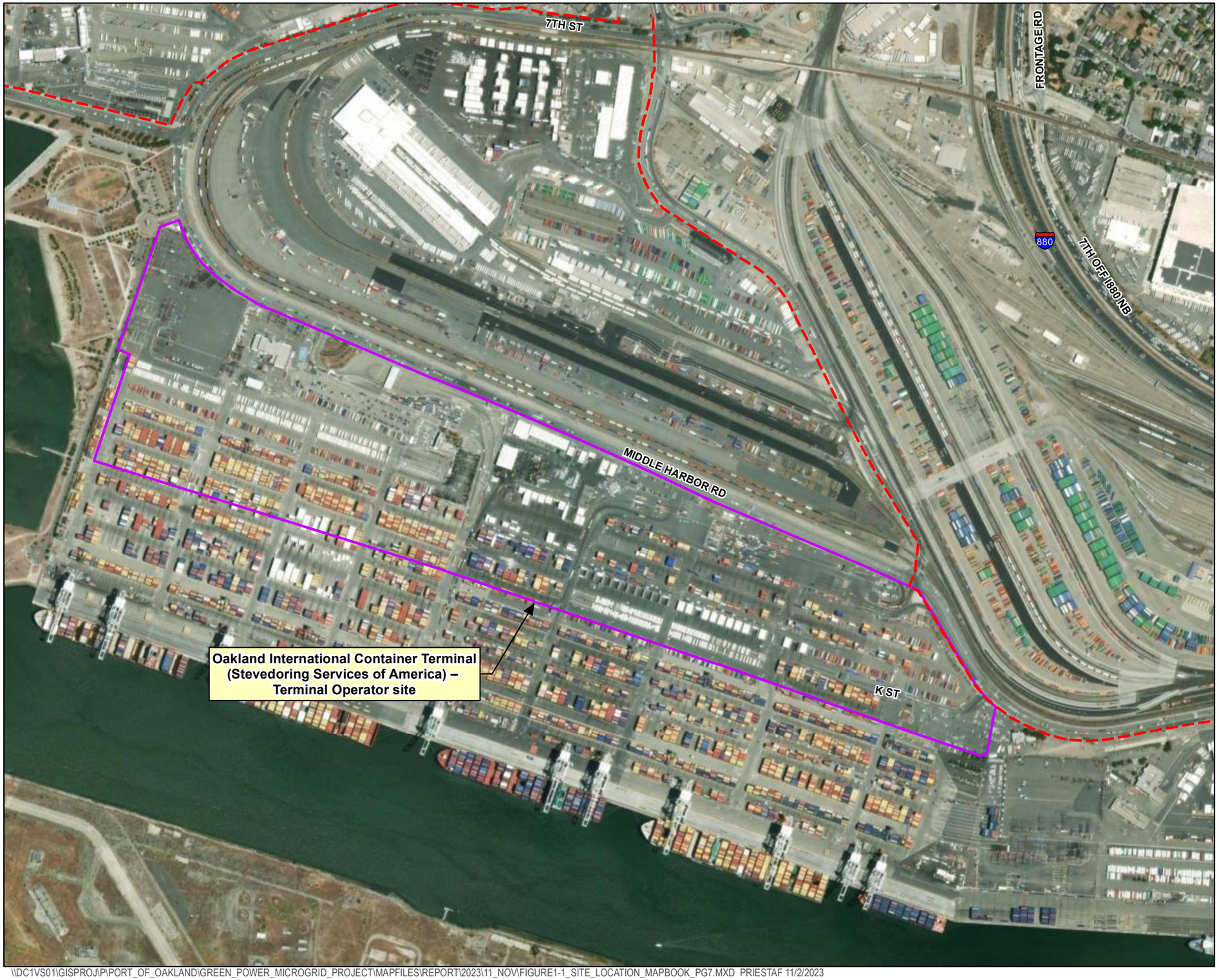

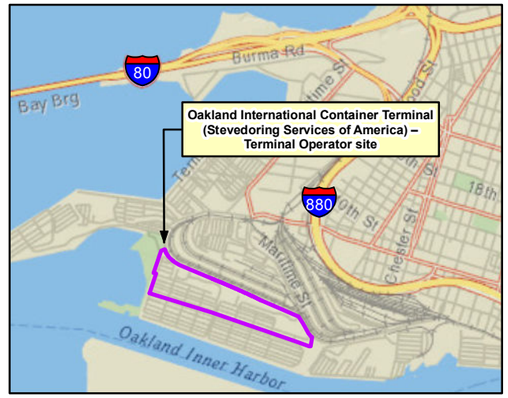

LEGEND

- Site Boundary
- Excavate Trench

Source:
1. Imagery: ESRI, Maxar March 2021

N

0 290 580

Feet

Figure 1-1
Proposed Project Location
Map 07 of 12
Oakland International Container Terminal (Stevedoring Services of America) – Terminal Operator site
Green Power Microgrid Project
Port of Oakland

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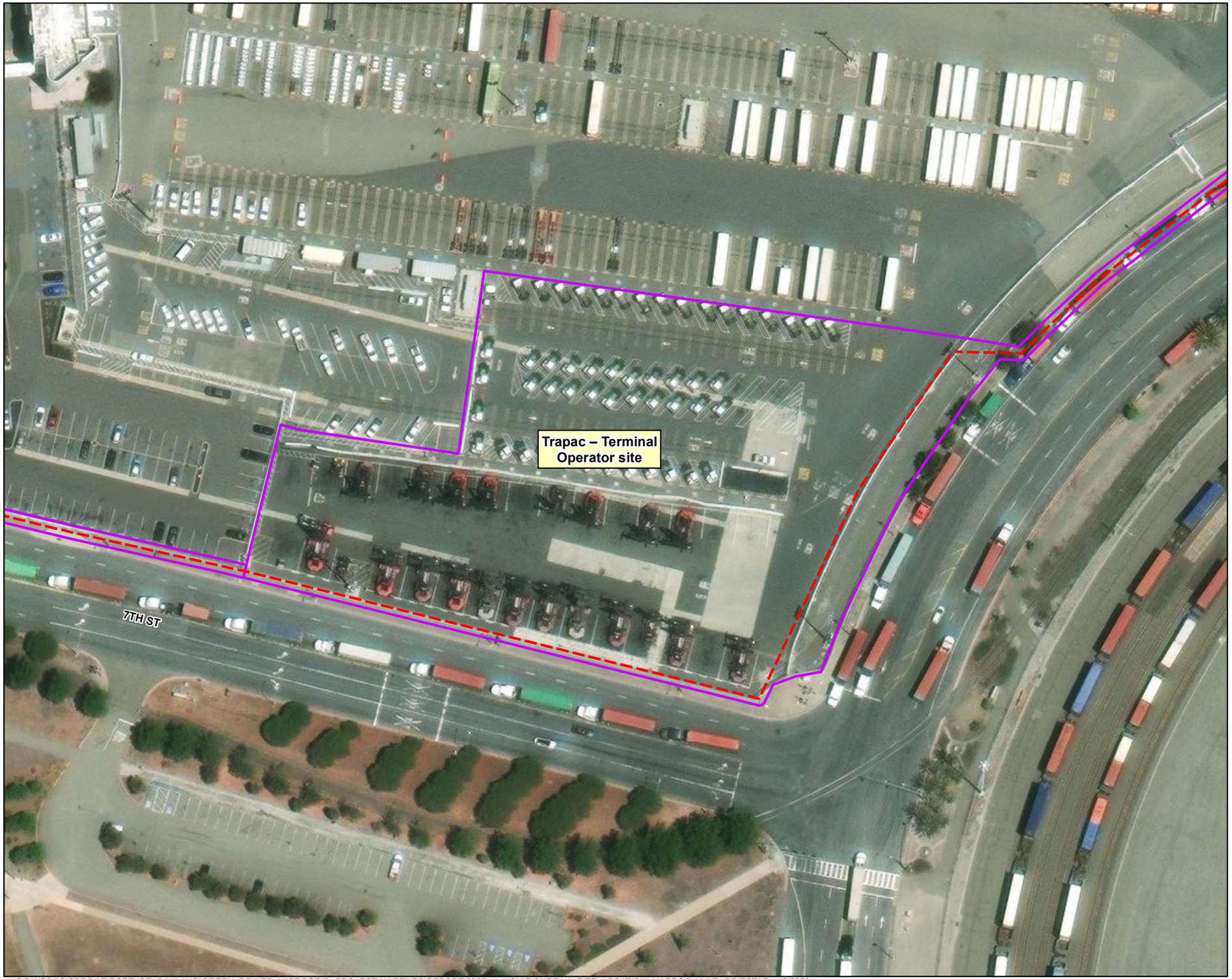

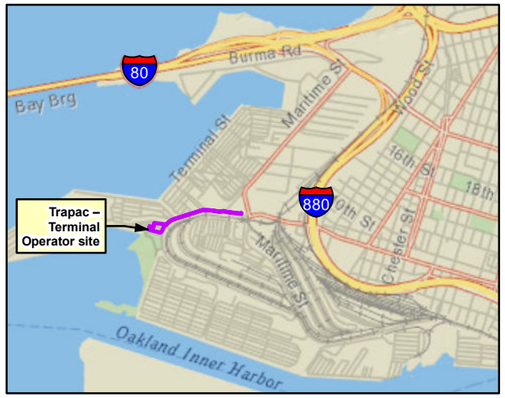

LEGEND

- Site Boundary
- Excavate Trench

Source:
1. Imagery: ESRI, Maxar March 2021

N

0 30 60

Feet

Figure 1-1
Proposed Project Location
Map 08 of 12
Trapac – Terminal Operator site
Green Power Microgrid Project
Port of Oakland

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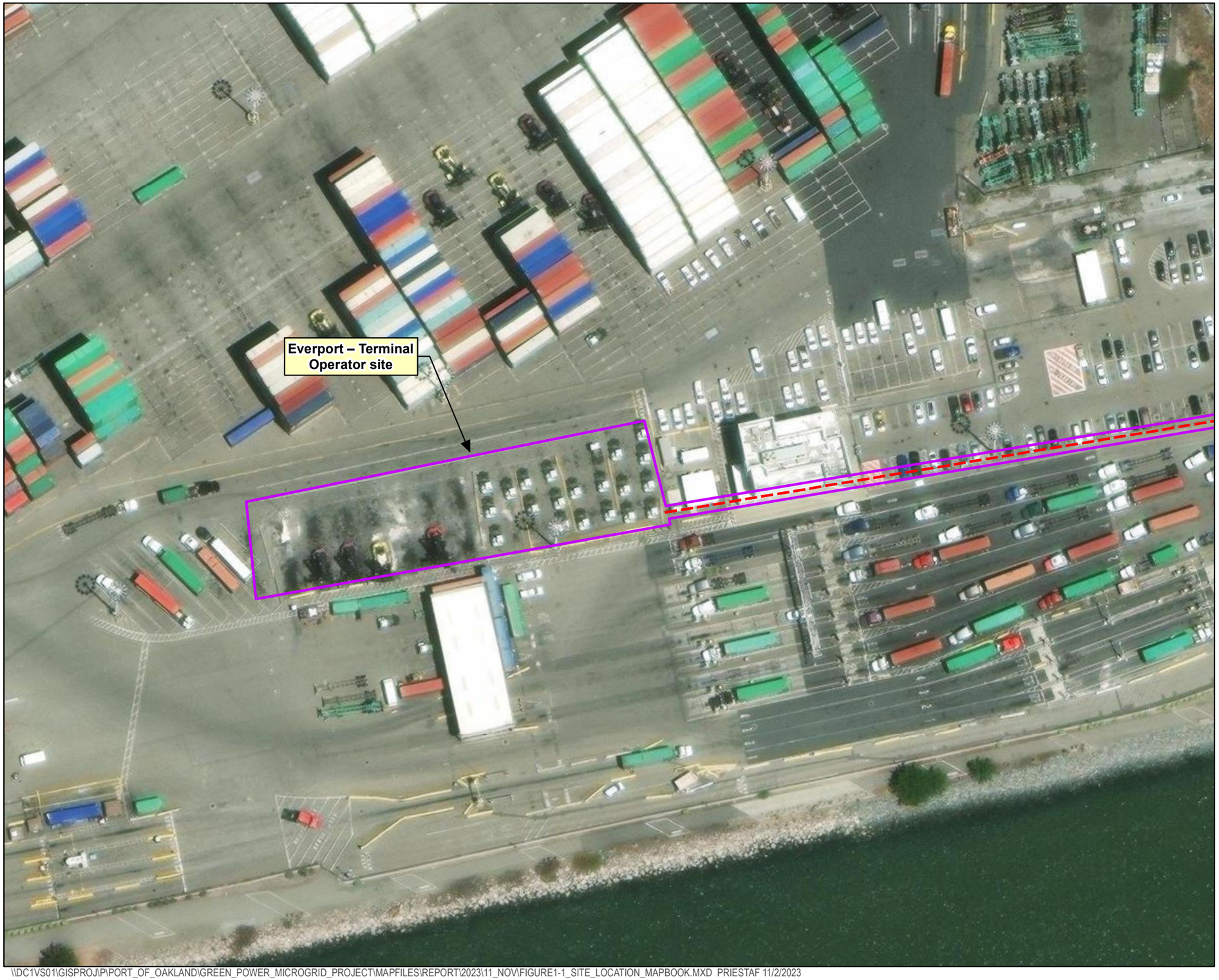

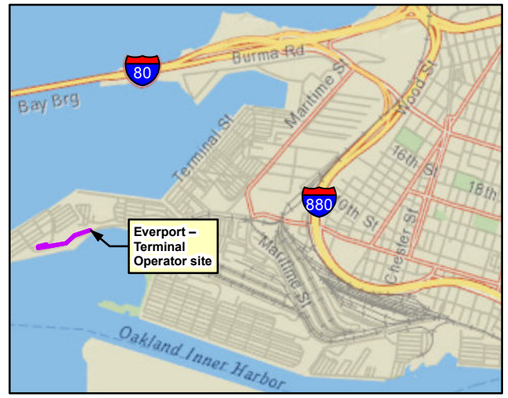

LEGEND

- Site Boundary
- Excavate Trench

Source:
1. Imagery: ESRI, Maxar March 2021

N

0 30 60

Feet

Figure 1-1
Proposed Project Location
Map 09 of 12
Everport – Terminal Operator site
Green Power Microgrid Project
Port of Oakland

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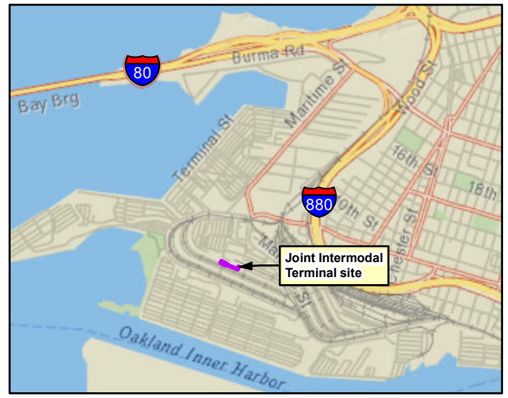

LEGEND

- Site Boundary
- Excavate Trench
- Upgrade Substation

Source:
1. Imagery: ESRI, Maxar March 2021

N

0 30 60

Feet

Figure 1-1
Proposed Project Location
Map 10 of 12
Joint Intermodal Terminal site
Green Power Microgrid Project
Port of Oakland

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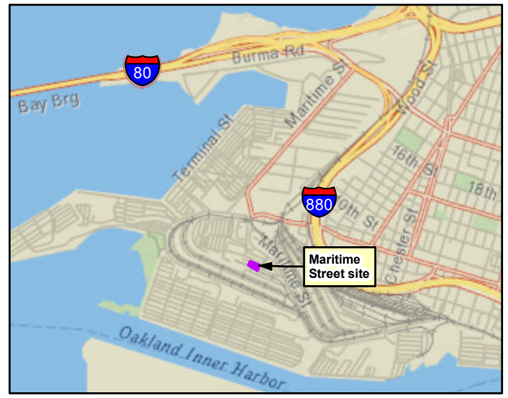

LEGEND

Site Boundary

Source:
1. Imagery: ESRI, Maxar March 2021

N

0 30 60

Feet

Figure 1-1
Proposed Project Location
Map 11 of 12
Maritime Street site
Green Power Microgrid Project
Port of Oakland

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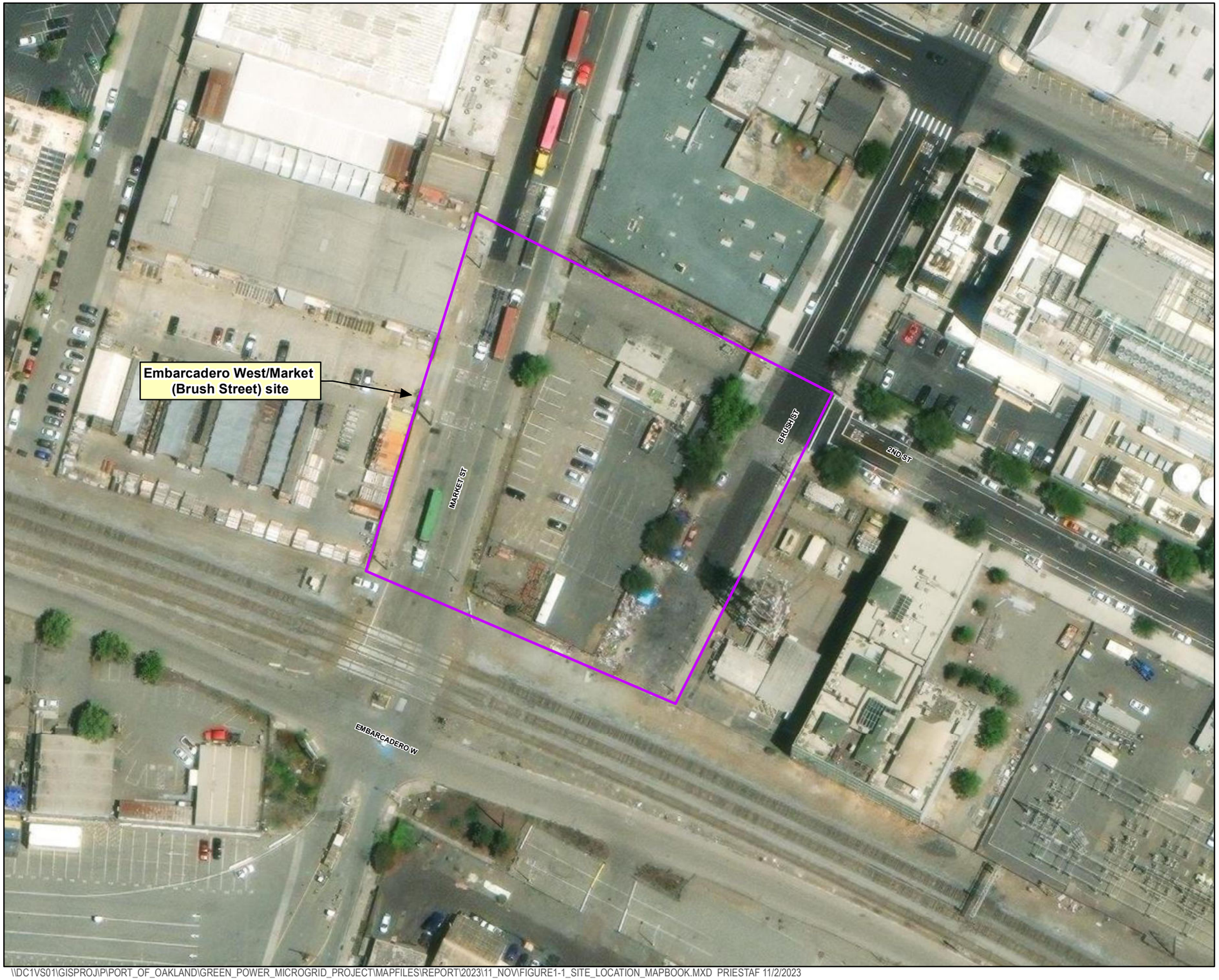
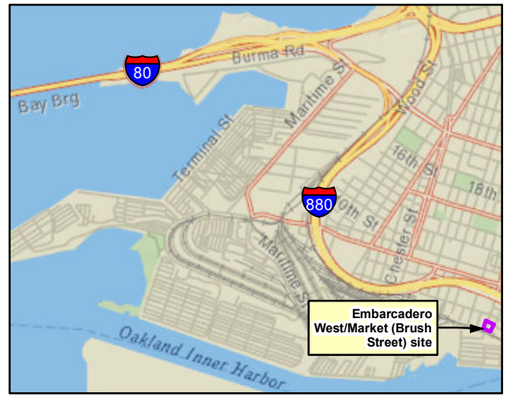




LEGEND

Site Boundary

Source:
1. Imagery: ESRI, Maxar March 2021

N

0 30 60

Feet

Figure 1-1
Proposed Project Location
Map 12 of 12
Embarcadero West/Market (Brush Street) site
Green Power Microgrid Project
Port of Oakland

\\DC1VS01\GISPROJ\P\PORT_OF_OAKLAND\GREEN_POWER_MICROGRID_PROJECT\MAPFILES\REPORT\2023\11_NOV\FIGURE1-1_SITE_LOCATION_MAPBOOK.MXD PRIESTAF 11/2/2023

2 PROJECT DESCRIPTION

2.1 PROJECT BACKGROUND

The Port's Seaport Air Quality 2020 and Beyond Plan – The Pathway to Zero Emissions (Port of Oakland, 2019) (Plan) for emissions reductions was built upon the foundation established by the Maritime Air Quality Improvement Plan (Port of Oakland, 2009) and looks ahead to address long-term planning for air quality with extensive local community and partner engagement. The Proposed Project implement actions in the Intermediate-Term (2023-2030) Phase of the Plan.

The Proposed Project would expand on and leverage the Port's previous electrification efforts, such as:

- The Zero and Near-Zero-Emission Freight Facility program grant battery electric truck demonstration
- The Sustainable Terminals Accelerating Regional Transformation project demonstration
- The California Air Resources Board (CARB) partnership demonstration
- Port funded existing electric charging stations and infrastructure upgrades
- The recent Port Infrastructure Development Program Powering the Future Project, which received federal funding in support of ZE infrastructure from the U.S. Maritime Administration. The PIDP Project would support the Port's expansion of an electric heavy-duty fleet and electrically powered cargo-handling equipment by increasing power capacity and electrical distribution resiliency through modernization of a substation and integration of solar power generation, and battery electric storage systems

In 2022, the California Department of Transportation (Caltrans), the Metropolitan Transportation Commission (MTC), and the Port nominated the Proposed Project for consideration in the California Transportation Commission's (CTC's) 2022 Trade Corridor Enhancement Program (TCEP). Caltrans, MTC, and the Port requested a total of $42,000,000.00 in TCEP grant funding. The Port committed $16,000,000.00 in local match funding and would serve as the lead agency.

2.2 PROJECT OBJECTIVES

The communities adjacent to the Port experience some of the highest levels of pollution in the Bay Area (BAAQMD, 2019). These communities have been identified as a priority Assembly Bill (AB) 617 Community Health Protection Program area and are included in the MTC's Equity Priority Communities effort representing census tracts that have a significant concentration of underserved populations, such as households with low incomes and people of color. The Port has been working together with the Bay Area Air Quality Management District (BAAQMD), the freight community, and the local community for over 15 years to improve air quality and support public health through major investments, innovation, and commitment, exceeding emissions reduction goals despite an increase in cargo volume (Port of Oakland, 2009 and Ramboll, 2021).

The purpose of the Proposed Project is to support the conversion of Port and/or Terminal Operator fleets, as well as privately owned/operated trucks from combustion engine to ZE vehicles, as California began requiring ZE drayage trucks in 2023 and will require a full transition by 2035, to avoid cargo disruption.

The Proposed Project objectives are to:

1. Reduce emissions, toxic air pollutants, and noise pollution associated with goods movement in the vicinity of the Port
2. Increase the Port's global competitiveness by introducing operational efficiencies
3. Increase Port's electrical distribution resiliency
4. Provide a back-up renewable energy source in case of outages or electricity utilization restriction events (e.g., heat waves), and
5. Reduce congestion by limiting the need for offsite trips necessary only for refueling

2.3 PROJECT DESCRIPTION

The 11 Proposed Project sites would total approximately 233.68 acres. The Proposed Project proposes to install new EV chargers in support of maritime terminal yard, dockside, and transient vehicle use (and thereby increase the number of ZE vehicles that can be supported); install solar systems and supporting infrastructure for increased capacity for EVs, facilities, and other ZE equipment; install battery systems to increase storage capacity for energy storage, charging vehicles during rolling blackouts or other electric grid power supply problems, and capacity expansion for EVs; and upgrade substations for electric grid modernization (through load shifting and better demand management). The Proposed Project elements are discussed in greater detail in the following subsections.

Three alternatives were evaluated for the Proposed Project: Two Build Alternatives (Alternative 1 and Alternative 2) and a No-Build Alternative (Alternative 3). Alternative 1 represents a full build-out of the Proposed Project for the maximum number of Project elements and Alternative 2 represents a scaled-back version of the Proposed Project with a smaller number of the Proposed Project elements, as summarized in the following sections.

2.3.1 Electrical Vehicle Chargers

The Proposed Project would install new EV chargers in support of maritime terminal yard, dockside, and transient vehicle use (and thereby increase the number of ZE vehicles that can be supported. EV e chargers would be mounted on steel columns that make up the support frames for the solar systems. The columns would be secured to the ground at the bottom in a concrete footing that would be poured in place. The solar systems would be located at Harbor Facilities and Roundhouse sites. Chargers would be mounted on pedestals at the remaining sites. Installation of EV chargers for transient vehicles would comply with the Americans with Disabilities Act of 1990 (e.g., provide curb ramps, ADA-accessible parking spaces, and pedestrian walkways at the Embarcadero West/Market (Brush Street) site). Alternative 1 would install up to 283 new EV chargers at up to 11 sites. Alternative 2 would install up to 157 new EV chargers at up to 8 sites. The number of EV chargers at each site for each Alternative are listed in Table 2-1.

Table 2-1. Number of Electric Vehicle Chargers to be Installed at Each Site Under Each Alternative

Site	Alternative 1	Alternative 2
Harbor Facilities	35	20
Roundhouse	50	35
CenterPoint	12	10
Cool Port	10	5
Eagle Rock Facility	6	0
Oakland International Container Terminal (Stevedoring Services of America) – Terminal Operator	50	35
Trapac – Terminal Operator	59	40
Everport Terminal Operator	34	0
Joint Intermodal Terminal (Burlington Northern Santa Fe Operator)	7	7
Maritime Street	10	0
Embarcadero West/Market Street (Brush Street)	10	5

A portion of each sites' existing parking lot pavement (asphalt or concrete) would be demolished (which would require excavating up to 1.5-feet below ground surface) and new concrete pads would be poured (up to 3-feet-long, 3-feet-wide, and 1-foot thick).

2.3.2 Solar System and Supporting Infrastructure

The Proposed Project would install solar systems and supporting infrastructure for increased capacity for EVs, facilities, and other ZE equipment at two sites for both Alternatives A and B: Harbor Facilities and Roundhouse. Solar canopies would have up to 20 feet of vertical clearance. Columns that support the canopies are steel and would be embedded in up to 3-feet-diameter reinforced concrete footings installed up to 15-feet below ground surface at 10-foot center to center spacing for every 1,200 square feet (SF) of canopy. Total canopy square footage would be up to approximately 100,000 SF at the Harbor Facilities site and up to approximately 12,000 SF at the Roundhouse site, and therefore the Proposed Project would require up to 84 poured-in-place concrete canopy columns at the Harbor Facilities site and up to 10 poured-in-place concrete canopy columns at the Roundhouse site. Solar panels would be mounted on canopies and would generate 10 watts (w) of electricity per SF (w/SF). Therefore, the Proposed Project would generate up to 1 megawatt (MW) of electricity at the Harbor Facilities site and up to 0.12 MW of electricity at the Roundhouse site, for a total of up to 1.12 MW of electricity.

2.3.3 Battery Systems to Increase Storage Capacity

The Proposed Project would install battery systems to increase storage capacity for energy storage, charging vehicles during rolling blackouts or other electric grid power supply problems, and capacity expansion for EVs. Battery Energy Storage Systems (BESS) would be up to 40 feet long by up to 8 feet wide by up to 9.50 feet tall. Alternative 1 would install up to 47 BESS at up to 8 sites and Alternative 2

would install up to 41 BESS at up to 7 sites. The number of BESS to be installed at each site for each Alternative is listed in Table 2-2.

Table 2-2. Number of Battery Energy Storage Systems to be Installed at Each Site Under Each Alternative

Site	Alternative 1	Alternative 2
Harbor Facilities	6	6
Roundhouse	8	6
CenterPoint	0	0
Cool Port	0	0
Eagle Rock Facility	0	0
Oakland International Container Terminal (Stevedoring Services of America) – Terminal Operator	10	6
Trapac – Terminal Operator	15	10
Everport Terminal Operator	4	10
Joint Intermodal Terminal (Burlington Northern Santa Fe Operator)	2	2
Maritime Street	1	0
Embarcadero West/Market Street (Brush Street)	1	1

A portion of each site's existing parking lot pavement (asphalt or concrete) would be demolished (which would require excavating up to 2.5 feet below ground surface) and new reinforced concrete pads would be poured (up to 1.5 feet thick). Concrete pads would be poured to accommodate 10 feet of horizontal clearance around each BESS to be installed. Up to 95,760 SF of pavement would be demolished, and therefore concrete poured, at up to 8 sites for Alternative 1. Up to 87,360 SF of pavement would be demolished, and therefore concrete poured, at up to 8 sites for Alternative 2. The amount of pavement to be demolished and concrete poured for BESS at each site for each Alternative is listed in Table 2-3.

Table 2-3. Amount of Pavement to be Demolished and Concrete to be Poured for Battery Energy Storage Systems at Each Site Under Each Alternative

Site	Alternative 1 (SF)	Alternative 2 (SF)
Harbor Facilities	10,880	10,880
Roundhouse	13,440	10,880
CenterPoint	0	0
Cool Port	0	0
Eagle Rock Facility	0	0
Oakland International Container Terminal (Stevedoring Services of America) – Terminal Operator	16,800	10,880
Trapac – Terminal Operator	25,200	16,800
Everport Terminal Operator	6,720	16,800
Joint Intermodal Terminal (Burlington Northern Santa Fe Operator)	3,360	3,360
Maritime Street	10,080	10,080
Embarcadero West/Market Street (Brush Street)	10,080	10,080

2.3.4 Substations

The Proposed Project would upgrade substations for electric grid modernization (through load shifting and better demand management). A portion of each sites' existing parking lot pavement (asphalt or concrete) would be demolished (which would require excavating up to 2.5 feet below ground surface) and reinforced concrete pads would then be constructed (up to 1.5 feet thick) to accommodate upgrades to switchgears/stepdown transformers. Small switchgears would be up to 15 feet long by up to 25 feet wide and large switchgears would be up to 20 feet long by up to 35 feet wide. Fence posts would be drilled every 10 feet and post footings would be up to 1 foot in diameter wide by up to 2 feet deep. Small stepdown transformers would be up to 10 feet long by up to 10 feet wide and large stepdown transformers would be up to 15 feet long by up to 15 feet wide. Reinforced concrete pads would be poured to accommodate 1.5 feet of horizontal clearance around each switchgear/stepdown transformer to be upgraded. A portion of each sites' existing parking lot pavement (asphalt or concrete) would also be demolished (which would require excavations up to 4 feet-wide and up to 6 feet deep) to accommodate trenching; trenches would be covered with the soils excavated and repaved. The Proposed Project would also require excavations up to 4-feet-wide and up to 10-feet deep to accommodate trenching (in which duct arrays and conduits would be installed) for substation upgrades for both Alternatives 1 and 2: up to 7,000 linear feet (LF) along 7th Street (from the Everport Terminal Operator site to the intersection of 7th Street at Maritime Street) and up to 9,000 LF along Maritime Street, Middle Harbor Road, and Adeline Street (from the Roundhouse site to the intersection of Maritime Street at 7th Street).

Alternative 1 would upgrade up to 5 switchgears, upgrade up to 11 stepdown transformers, trench up to 15,000 LF for switchgear and/or stepdown transformer upgrades, and demolish up to 60,000 SF of pavement and pour up to 66,109 SF of pavement at up to 11 sites.

Alternative 2 would upgrade up to 4 switchgears, upgrade up to 7 stepdown transformers, trench up to 11,400 LF for switchgear and/or stepdown transformer upgrades, and demolish up to 45,000 SF of pavement and pour up to 50,004 SF of pavement at up to 9 sites.

The type/amount of switchgear upgrades, stepdown transformers upgrades, trenching for switchgear and/or stepdown transformer upgrades, and/or pavement demolitions and pourings at each site is listed in Tables 2-4 (Alternative 1) and 2-5 (Alternative 2).

Table 2-4. Substation Upgrade Needs and Sizes/Quantities for Alternative 1

Site	Switchgear	Stepdown Transformer	Trenching (LF)	Pavement Demolition/ Pouring (SF)
Harbor Facilities	N/A	Small	2,500	10,169
Roundhouse	Small	Large	750	3,828
CenterPoint	Small	Small	1,750	7,673
Cool Port	N/A	Small	1,200	4,969
Eagle Rock Facility	N/A	Small	1,200	4,969
Oakland International Container Terminal (Stevedoring Services of America) – Terminal Operator	Large	Large	3,000	13,198
Trapac – Terminal Operator	Large	Large	1,000	5,198
Everport Terminal Operator	Large	Large	1,650	7,798
Joint Intermodal Terminal (Burlington Northern Santa Fe Operator)	N/A	Small	500	2,169
Maritime Street	N/A	Small	1,200	4,969
Embarcadero West/Market Street (Brush Street)	N/A	Small	250	1,169

N/A = not applicable

Table 2-5. Substation Upgrade Needs and Sizes/Quantities for Alternative 2

Site	Switchgear	Stepdown Transformer	Trenching (LF)	Concrete Demolition/ Pouring (SF)
Harbor Facilities	N/A	N/A	2,000	8,000
Roundhouse	Small	Large	750	3,828
CenterPoint	Small	Small	1,750	7,673
Cool Port	N/A	Small	1,200	4.969
Eagle Rock Facility	N/A	N/A	1,200	4,800
Oakland International Container Terminal (Stevedoring Services of America) – Terminal Operator	Large	Large	3,000	13,198
Trapac – Terminal Operator	Large	Large	750	4,198
Everport Terminal Operator	N/A	N/A	0	0
Joint Intermodal Terminal (Burlington Northern Santa Fe Operator)	N/A	Small	500	2,169
Maritime Street	N/A	N/A	0	0
Embarcadero West/Market Street (Brush Street)	N/A	Small	250	1,169

N/A = not applicable

2.4 CONSTRUCTION METHODOLOGY

As discussed in Chapter 1, construction-related activities consist of the following project components:

- Excavating and trenching
- Pouring concrete for foundations
- Constructing solar canopies
- Installing solar systems and supporting infrastructure, EV charger pedestals, BESS, switchgears/stepdown transformers, and electrical infrastructure

These construction-related activities are described below, followed by a discussion of the proposed phasing of construction-related activities.

Although the Proposed Project sites are fairly level paved areas, minor grading may be required for the Proposed Project. There is no vegetation on the Proposed Project sites; therefore, no vegetation removal is required. Deliveries of material and supplies would reach the Proposed Project sites by rail or on-road via Maritime Street, Middle Harbor Road, 7th Street, Embarcadero West, Market Street, and Brush Street, as appropriate.

The Port is located in an area with a history of industrial use, and fill was imported without testing; therefore, contaminated soils may be encountered at any of the Proposed Project sites. Due to their past use, some of the Proposed Project sites have a higher likelihood of containing contaminated soils. All work would be done in accordance with the Port-Wide Soil Management Protocol (Port of Oakland, 2020) and in consultation with the Port and other applicable requirements for sites known to have contamination, such as the Roundhouse site. For the Roundhouse site, excavating and trenching would

occur in accordance with the Environmental Covenant and Environmental Restriction on the Union Pacific Roundhouse Property (deed restriction) (Port of Oakland and San Francisco Bay Regional Water Quality Control Board, 2008) and the associated Revised Site Management Plan (SMP) (AMEC 2009).

2.4.1 Excavating and Trenching

The existing pavement within the Proposed Project footprint, as well as its base material, would be removed using an excavator or skid steer, and in some cases (e.g., removing curbs) the existing pavement would first be cut prior to being removed. Dust would be controlled by spraying water onto the work area, as needed. Dump trucks would be used to off-haul excavated pavement, which would be properly disposed of, or recycled, offsite.

Trenching would be conducted to connect or upgrade electrical infrastructure (e.g., cables) from the EV chargers and BESS to the overhead electrical utility lines and/or substations. Trenching would also be conducted to place canopy columns. A soil auger (or similar equipment) would be attached to a skidsteer to drill a canopy column footing; due to the shallow depth, shoring is not anticipated to be required. To minimize the amount of soil excavated, trenches would be shored with trench boxes or plates, and hydraulic pistons or other supports, to allow for vertical sides. Trench boxes or similar shoring are anticipated to be lifted into a trench using a crane. Conduits containing cables would be installed on a base of compacted soils and in some locations would pass underneath existing utilities or railroad tracks (unless directional drilling, which would allow the direct installation of conduits without requiring excavating, were to be used). Excavated soils would be stockpiled in accordance with the Port-Wide Soil Management Protocol (Port of Oakland, 2020), in consultation with the Port and other applicable requirements and tested. Soil that meets the screening criteria suitable for reuse would be reused in backfilling trenches and compacted using vibratory compactors and sheepsfoot rollers to provide a stable and level base or stockpiled and used for future construction within the Seaport complex (i.e., contaminated soil would be disposed of offsite at a suitable landfill). Then, either trenches would then be repaved in-kind, which would require delivery of asphalt (that would be placed using an asphalt paver) or concrete would be poured for canopy column footings, EV charger pedestals, BESS, switchgears/stepdown transformers, and electrical infrastructure foundations.

2.4.2 Concrete Pouring for Foundations

Prior to pouring reinforced concrete footings for canopy columns, rebar cages would be constructed off-site and placed using a crane. Prior to pouring concrete for EV charger pedestals, BESS, switchgears/stepdown transformers, and electrical infrastructure foundations, a rebar grid would be installed. Rebar grids are anticipated to be installed using battery-powered hand tools or air compressors. Concrete would be delivered by concrete trucks and pumped into the foundation excavations; collars would be installed around the edge of excavations to enable foundations to extend above ground surface.

2.4.3 Constructing Solar Canopies

Solar panels would be mounted on canopies that would be constructed of steel or aluminum alloy Canopies would be supported by steel columns embedded into reinforced concrete footings. Canopies would be installed using battery-powered hand tools to fasten the canopies together and the canopies to the steel columns. A crane or scissor lift would be used to lift the canopies and solar panels to the top of

the columns. The solar panels would be connected to an inverter that would deliver power to either the BESS or if excess power is generated, to the Port's grid.

2.4.4 Installing EV Charger Pedestals, Battery Energy Storage Systems, and Switchgears/Stepdown Transformers

After pouring concrete for foundations, EV chargers, BESS, and switchgears/stepdown, transformers would be installed. EV chargers would be mounted to steel columns that make up the support frames for the solar systems located at Harbor Facilities and Roundhouse sites and on pedestals at the remaining sites. Metal columns would be installed on concrete foundations for EV charger pedestals and then EV chargers would be attached to the pedestals using battery-powered hand tools. Up to 4 EV chargers may be installed on one pedestal, depending on the size of the EV chargers and location access.

Large BESS and switchgears/stepdown transformers would be placed onto foundations using a crane and secured (i.e., bolted) to foundations using battery-powered hand tools or air compressors. Generators would provide power to recharge battery-powered hand tools. Bollards, which are steel pipes, would be drilled every 5 feet on center (with post footings that would be reinforced with rebar and up to 2 feet in diameter wide by up to 5 feet deep), and would be installed to prevent construction vehicles and equipment from damaging EV charger pedestals, BESS, and switchgears/stepdown transformers.

2.5 CONSTRUCTION PROCUREMENT

The construction process would generally consist of contracting for a certain amount of construction, procuring the needed materials, and completing construction-related activities. The number of months anticipated to be required for procurement of each project element is listed in Table 2-6.

Table 2-6. Number of Months Anticipated to be Required for Procurement of each Proposed Project Element

Proposed Project Element	Number of Months Anticipated to be Required for Procurement
Conduit, Cables, and Solar Panels	3
EV Chargers	3 to 6
Switchgears/Stepdown Transformers	6 to 9
Battery Energy Storage Systems	9

Other construction materials, such as asphalt, concrete, and solar canopies, are anticipated to be readily available in the needed quantities. Excavating, trenching, and pouring foundations would occur prior to delivery of project elements requiring longer lead times.

It is anticipated that multiple contracts would be used to accomplish construction-related activities, which would overlap at various sites.

2.6 STAGING AND EQUIPMENT

Temporary construction staging areas to be used for construction worker parking, construction trailers, and staging and storing construction materials and equipment would be located on portions of the

existing paved areas within each of the Proposed Project sites. Security, such as temporary fencing and lighting, would be provided, as needed.

Construction equipment used to complete the Proposed Project may include, but is not limited to, air compressors, asphalt pavers, battery-powered hand tools, compactors, cranes, diamond wheels, excavators, concrete trucks, drayage trucks, dump trucks, pickup trucks, water trucks, generators, scissor lifts, soil augers, sheepsfoot rollers, skidsteers, sweepers, and vibratory compactors.

2.7 CONSTRUCTION PHASING

Construction of the Proposed Project would begin within 18 months of the award date and would continue for up to 45 months. Construction may begin in the spring of 2025 (provided design and procurement occur as anticipated). Excavating and trenching would occur first, followed by pouring foundations for concrete constructing solar canopies, and installing EV charger pedestals, BESS, and switchgears/stepdown transformers. As discussed in Chapter 2.4, the Proposed Project elements would vary between sites. Construction at sites where only EV chargers would be installed could be completed within 6 to 9 months; construction at sites where electrical infrastructure would be upgraded could be completed within 12 months. Construction for Alternative 1 is anticipated to occur between April of 2025 and December of 2028; the anticipated duration of construction for Alternative 2 would be less. The construction schedule depends on the ability to procure project elements.

2.8 BEST MANAGEMENT PRACTICES

Construction at the Proposed Project sites would be conducted in accordance with applicable laws and regulations, including laws and regulations pertaining to the handling and management of hazardous materials, site-specific restrictions contained in the deed restriction (Port of Oakland and San Francisco Bay Regional Water Quality Control Board, 2008), the associated Revised SMP (AMEC, 2009), and the Port-Wide Soil Management Protocol (Port of Oakland, 2020), as well as in consultation with Port. Although the likelihood of encountering unknown historical or archaeological resources is low, the contractor would also be required to comply with the Port of Oakland Emergency Plan of Action for Discoveries of Unknown Historic or Archaeological Resources (Port of Oakland, n.d.). Prior to the start of construction activities, the Port would require the contractor to develop all or more of the following plans for Port approval, as applicable:

- Stormwater Pollution Prevention Plan (SWPPP)
- Health and Safety Plan
- Spill Prevention and Control Plan
- Soil and Groundwater Management Plan
- Solid and Hazardous Waste Management Plan
- Dust Control and Air Pollution Management Plan (if needed)
- Traffic Control Plan (if needed)
- Debris Containment Plan
- Construction and Demolition Debris Waste Reduction and Recycling Plan

The Health and Safety Plan, Solid and Hazardous Waste Management Plan, and Revised SMP (AMEC, 2009) would address the site-specific work practices to ensure that workers and the environment are protected in the event that contaminated soil is uncovered. The Spill Prevention Plan would address management and protective measures, emergency response measures, and methods to capture fuel spills, require staging areas for heavy construction vehicles that prevent leaks into the soil or water, and require that maintenance of heavy equipment be conducted off-site. The Solid and Hazardous Waste management Plan and Revised SMP (AMEC, 2009) would also address handling and reuse/disposal of asphalt and other demolition waste that may be contaminated due to contact with underlying contaminated soil. The Dust Control and Air Pollution Management Plan would address measures to minimize dust generated during grading and other construction-related activities. In addition to the previously listed plans, the Proposed Project would implement appropriate best management practices (BMPs) to minimize emissions of fugitive dust during construction of the Proposed Project. To further reduce the potential for fugitive dust, the Proposed Project would also implement the following measures:

- During demolition and loading of aggregate materials, affected areas would be watered every 4 hours
- Areas being graded will be watered every 3 hours
- Areas being excavated will be water frequently enough to maintain a soil moisture of 12 percent, thereby reducing fugitive dust emissions by 69 percent
- Paved roads will be swept every 14 days, thereby reducing fugitive dust emissions by 26 percent
- A publicly visible sign will be posted at each of the Proposed Project sites with the contact information for a representative at the Lead Agency regarding dust complaints. This representative will respond and take corrective action within 48 hours. The BAAQMD's contact information will also be visible to ensure compliance with applicable regulations

These measures provide the greatest reduction from the potentially most substantial sources of fugitive dust from grading and excavating.

2.9 OTHER CONSTRUCTION BEST MANAGEMENT PRACTICES

To further reduce impacts from construction, the Proposed Project would also implement the following construction BMPs:

- Exhaust Control Measures
    - Idling times would be minimized either by shutting construction equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxic control measure (ATCM) Title 13, Section 2485 of the California Code of Regulations). Clear signage would be provided for construction workers at all access points.
    - All construction equipment would be maintained and tuned in accordance with manufacturer's specifications. All construction equipment would be checked by a certified mechanic and determined to be running in proper condition prior to operation.

- Water Quality Measures
    - The Contractor would be required to conform to the Linear Underground/Overhead Requirements (Attachment A in the General Construction Activity Storm Water Permit), or subsequent permits.
    - The Contractor would be required to keep a clean and safe workplace. Good housekeeping procedures would include locating fueling and construction equipment maintenance activities away from the Bay, avoiding spills through employee training, and immediately cleaning up accidental spills of construction-related materials (such as concrete, construction equipment fuel, hydraulic fluid, etc.).
    - The Contractor would be required to dispose of construction debris in accordance with all relevant laws and regulations.
- Noise Measures
    - The Contractor would be required to meet City of Oakland construction noise standards set forth in the Oakland Planning Code (City of Oakland, 2023b), including limits on the hours of noise-generating activities, limits on the number of consecutive days of noisy construction activities, and limits on maximum noise at receiving properties.
- Soil Management and Hazards Measures
    - The Contractor would be required to comply with the Revised SMP (AMEC, 2009) and the Port-Wide Soil Management Protocol (Port of Oakland, 2020) and consult with the Port.
    - The Contractor would be required to notify the Port's qualified Hazardous Materials Specialist if contamination is encountered in the field.
    - For trenching purposes only, any excavated soils when known to be, or found to be, contaminated would be stored immediately adjacent to the excavation and placed on, and covered by, plastic sheeting.
- Cultural Resources Measures
    - The Contractor would be required to follow the Port of Oakland Emergency Plan of Action for Discoveries of Unknown Historic or Archaeological Resources (Port of Oakland, n.d.) should construction workers encounter any unidentified resources during trenching. Construction workers would stop all activities within 50 feet of the find if material that may have cultural, historical, archaeological, and/or paleontological value is encountered. The Contractor would notify the Port and a qualified cultural resources specialist to evaluate the material before continuing with construction-related activities.
    - During all excavations, construction workers should be especially alert for cultural resources anytime the following conditions are observed:
        - Soil and deposit changes, such as color or type
        - Presence of charcoal particles in soil

- Any buried objects or structures
- A cluster, cache, or deposit (i.e., lens) of materials (which should be considered historically or archaeologically important by construction workers until it has been assess otherwise)
- Isolates (e.g., a bottle or two, a tool, a fragment of a plate, etc.) should be put aside until the Port's qualified cultural resources specialist can properly examine

2.10 NO-BUILD ALTERNATIVE

Under the No-build Alternative, the existing Proposed Project sites would not be developed with new EV chargers, solar systems and supporting infrastructure, battery systems to increase storage capacity, and substations upgrades, and the current uses of the Proposed Project sites would continue.

3 ENVIRONMENTAL CHECKLIST AND ANALYSIS

This section presents the Draft IS that was completed for the proposed Green Power Microgrid Project in accordance with the requirements of CEQA. The Draft IS identifies site-specific conditions and impacts, evaluates their potential significance, and, where applicable, discusses ways to avoid or lessen impacts that may be potentially significant. The information, analysis, and conclusions included in the Draft IS provide the basis for determining the appropriate document needed to comply with CEQA. For the Proposed Project, based on the analysis and information contained herein, the Port finds that the Proposed Project could have an effect on the environment; however, all effects would be less than significant. As a result, the Port has concluded that an ND is the appropriate CEQA document for the Proposed Project.

The evaluation of environmental impacts provided in this section is based in part on the environmental impact questions contained in Appendix G of the CEQA Guidelines. Each question is followed four categories of impact assessment that can be selected based on the analysis:

- **Potentially Significant Impact.** This determination is made if there is substantial evidence that a Project-related environmental effect may be significant. If there are one or more "Potentially Significant Impacts," an Environmental Impact Report (EIR) would be prepared for the Project.
- **Less than Significant with Mitigation.** This determination is made when the Project may result in a significant environmental impact, but the incorporation of identified Project revisions or mitigation measures would reduce the identified effect(s) to a less than significant level.
- **Less than Significant Impact.** This determination is made when the Project would not result in any significant effects. The Project's impact would be less than significant even without the incorporation of Project-specific mitigation measures.
- **No Impact.** This determination is made when the Project would not result in any impact in the category, or the category does not apply.

The environmental resource categories marked with an "X" in the following table would be potentially affected by the Proposed Project. Detailed descriptions and analyses of impacts associated with the Proposed Project for each category are provided in Sections 3.1 through 3.21.

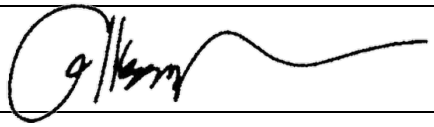
X	Aesthetics		Agriculture and Forestry	X	Air Quality
	Biological Resources	X	Cultural Resources	X	Energy
X	Geology/Soils	X	Greenhouse Gas Emissions	X	Hazards and Hazardous Materials
X	Hydrology/Water Quality		Land Use/Planning		Mineral Resources
X	Noise		Population/Housing	X	Public Services
	Recreation	X	Transportation/Traffic	X	Tribal Cultural Resources
X	Utilities/Service Systems		Wildfire	X	Mandatory Findings of Significance

Detailed descriptions and analyses of impacts from the Proposed Project activities and the basis for their significance determinations are provided for each environmental factor on the following pages, beginning with Section 3.1, Aesthetics. Relevant local laws, regulations, and policies potentially applicable to the Proposed Project are listed in the Regulatory Setting subsection for each environmental factor analyzed in this Draft IS/ND.

AGENCY DETERMINATION

Based on the environmental impact analysis provided by this Draft IS:

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

Signature: 	**Date:** 11/2/2023
Printed Name: Colleen Liang, Acting Director of EPP, Port of Oakland	

3.1 AESTHETICS

Except as provided in Public Resources Code (PRC) Section 21099, would the Proposed Project:

Question	CEQA Determination
a) Have a substantial adverse effect on a scenic vista?	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact
c) In nonurbanized 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 a publicly accessible vantage point). 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
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact

3.1.1 Environmental Setting

The Proposed Project is located on Port property, along the northern shoreline of the Oakland Estuary. In Oakland, the shoreline of San Francisco Bay extends 19 miles from San Leandro Bay to the Oakland-San Francisco Bay Bridge. At its northern end, the shoreline is dominated by the Port's marine terminals. At the southern end lies Oakland International Airport. The Oakland Estuary is one of California's most diverse shores, encompassing a variety of physical environments and settings, each with its own distinct visual quality and character.

The Estuary can be viewed as a single community resource that binds together the shorelines of Alameda and Oakland. The Estuary is an urbanized edge (i.e., defines the City of Oakland's urban limit) that has developed over a span of more than 100 years of city history. Unlike the hillside areas of the city, this area is intensely developed, with urbanization extending all the way to the water's edge. Little open space or vegetated area exists, with the notable exceptions of Estuary Park (south of Jack London Square), Port View Park and Middle Harbor Shoreline Park. The Proposed Project sites are located adjacent to or in close proximity north and east of the Estuary.

The Proposed Project site's immediate vicinity are characterized by industrial land uses. In general, the Proposed Project sites are flat expansive asphalt-paved areas notable for stacked shipping containers, facilities associated with Port activities, a large number of parked eighteen-wheeler trucks, and the presence of railroad tracks; resulting in the heavily industrial visual character of the Proposed Project sites. The Proposed Project sites are also occupied by a large number of automobiles parked on-site by Port employees. The overall visual quality of the Proposed Project sites is considered low due to the visual dominance of features associated with heavy industrial uses in the area. Given the flat topography of this part of Oakland, the majority of the Proposed Project sites are only visible from locations in their immediate vicinity. Areas of the city that are higher in elevation are a relatively long distance away. Therefore, from those higher elevations, the Proposed Project sites are not easily discernible when viewed within the context of the larger landscape.

Primary public views of the Proposed Project sites occur along 7th Street, Maritime Street, Middle Harbor Road, W. 14th Street, Embarcadero West, and Market Street, in Oakland. Proposed Project sites are visible from Port View Park and Middle Harbor Shoreline Park. These parks contain public parking areas and public walking areas with views of San Francisco Bay and the Oakland Estuary.

Port View Park is located south of 7th Street adjacent to the Oakland Bay Estuary. The park includes public parking, the International Maritime Center, and areas for viewing San Francisco Bay and the Oakland Estuary, which serve as the primary visual focus for the park's visitors. The Everport site is located approximately 600 feet west of Port View Park. The Proposed Project includes a proposed underground utility connection located along 7th Street directly north of the park.

Middle Harbor Shoreline Park is located adjacent to the Oakland International Container Terminal site to the east, and the Trapac site is located across 7th Avenue to the north of Middle Harbor Shoreline Park. The park includes public parking, the Chappel Hayes Observation Tower, the USS Oakland Monument, and areas for viewing San Francisco Bay and the Oakland Estuary, which serve as the primary visual focus for the park's visitors.

Adverse visual impacts from vantage points in Port View Park and Middle Harbor Shoreline Park would be minimized or eliminated by constructing modern structures, surrounded by landscaping. As such, the Proposed Project areas in proximity to the parks (which is closest to the waterfront) would be visually enhanced by improved landscaping, compared to the view of the existing industrial activities that currently exists on the Proposed Project sites.

3.1.2 Regulatory Setting

The City of Oakland General Plan Open Space Conservation and Recreation (OSCAR) Element (City of Oakland, 1996) outlines various goals and policies intended to preserve and protect areas of the city that are potentially scenic, such as the San Francisco Bay shoreline, or that would promote access to scenic areas. Some of these policies would under conventional circumstances apply to a project like the one evaluated in this environmental document. However, the Proposed Project would be implemented on Port property, which is currently not publicly accessible and would remain so after Proposed Project implementation due to safety and security considerations. In addition, the visual quality of the Proposed Project sites is currently not high and is not designated as scenic. Regulatory policies identified in the OSCAR pertaining to the protection of scenic resources in the City would be applicable to the Proposed Project. Stated in the General Plan (Policy OS-10.2), new development should minimize "adverse visual impacts" and encourage "opportunities for new vistas and scenic enhancement," and Policy OS-10.3 promotes enhancement to the City's underutilized visual resources, which include waterfronts, creeks, the San Leandro Bay, as well as architecturally significant buildings, major thoroughfares, and landmarks (City of Oakland, 1996).

The Port has an Exterior Lighting Policy which is proposed to mitigate the impacts of exterior lighting on the surrounding community and to conserve energy. Under this policy the Port's tenants will comply with established lighting measures to minimize lighting impacts from development and operations and to conserve energy. The Port's policy also includes the Senate Bill (SB) 5X standards. The Standards require that outdoor lighting be automatically controlled so that it is turned off during daytime hours and during times when it is not needed.

3.1.3 Impact Analysis

a, b) No Impact

The Proposed Project sites are not a part of any officially designated scenic vista and would not damage any scenic resources, including trees, rock outcroppings or historic buildings within a state scenic highway. There would be no impact.

c) Less Than Significant Impact

The Proposed Project sites and its vicinity are part of an area of Oakland that is characterized by heavy industrial uses. As a result, the level of visual quality in the area is low. The Proposed Project would change the visual character of the Proposed Project sites. The proposed fleet conversion to ZE vehicles, and installation of electrical vehicle chargers would be consistent with existing industrial use and development in the vicinity in terms of scale, design, and use, and therefore would not result in a significant impact on the visual quality of the Proposed Project sites. The proposed changes to the Proposed Project sites would bring to the Proposed Project sites uses that are substantially similar to existing on-site uses.

The Proposed Project would adhere to the landscaping requirements under the Port's Land Use and Development Code for the Proposed Project sites subject to such (Port of Oakland, 2016). Therefore, the Proposed Project would not result in a substantial adverse effect on the visual quality of the Proposed Project sites and would be less than significant.

Existing conditions at nighttime at the Middle Harbor Road location currently include a substantial number of light sources due to a large number of light poles that range in height between 80 to 100 feet, and the Port's container loading/off-loading cranes, which are 381 feet tall and are also equipped with multiple light fixtures, causing them to stand out clearly even at night.

Current conditions at the Proposed Project sites and the rest of the Port facility already operate lighting on a 24-hour per day basis. The Proposed Project would not be substantially different in character from existing maritime and industrial uses currently at the Proposed Project sites, therefore resulting in a less than significant impact.

d) Less Than Significant Impact

Implementation of the Proposed Project would result in construction of potentially new light sources. However, the Proposed Project sites and the rest of the Port facility is already a 24-hour per day facility that uses a large amount of artificial lighting. Additionally, the Proposed Project would not constitute a substantial new source of glare. The impact would be considered less than significant.

3.1.4 Mitigation Summary

No mitigation measures would be necessary.

3.2 AGRICULTURE AND FOREST RESOURCES

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) prepared by the California Department of Conservation 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 regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project and to the forest carbon measurement methodology provided in Forest Protocols adopted by the CARB. Would the Proposed Project:

Question	CEQA Determination
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
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
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
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
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

3.2.1 Environmental Setting

The Proposed Project would install new EV chargers, install solar systems and supporting infrastructure, install battery systems to increase storage capacity, and upgrade substations. The Proposed Project sites are generally paved and surrounded by industrial land use. There are no lands designated as farmland or forested or timber lands on or in the immediate vicinity of the Proposed Project.

3.2.2 Regulatory Setting

No federal or state laws or regulations pertaining to agriculture and forest resources were identified that are relevant to the Proposed Project. There are no local goals, policies, and/or regulations applicable to agricultural use at this site in the City of Oakland General Plan.

3.2.3 Impact Analysis

a, b, c, d, e) No Impact

The Proposed Project would have no impact on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance for Alternatives 1 and 2, as there are no current or planned agricultural uses at the Proposed Project sites, therefore, there would be no impact. The Proposed Project would not conflict with

existing zoning for agriculture because the Proposed Project sites are designated as General Industry and Transportation, Business Mix, or Urban Park and Open Space. The Proposed Project sites are not operated under a Williamson Act contract with any local governments for the purpose of restricting specific parcels of land to agricultural or related open space use. Similarly, there are no forest lands or timberlands located in the vicinity of the Proposed Project sites. There would be no impact.

3.2.4 Mitigation Summary

None of the Proposed Project would not result in any impacts; therefore, no mitigation is required.

3.3 AIR QUALITY

Would the Proposed Project:

Question	CEQA Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	Less Than Significant Impact
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
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact

This section evaluates the potential air quality impacts that may result from construction and operation of the Proposed Project.

3.3.1 Environmental Setting

The Proposed Project is located in the Port's Seaport facility in City of Oakland, Alameda County, within the San Francisco Bay Area Air Basin (SFBAAB). SFBAAB includes Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara Counties; the western portion of Solano County; and the southern portion of Sonoma County.

3.3.1.1 Climate, Meteorology, and Topography

Meteorology and terrain can influence air quality. Certain weather parameters are highly correlated to air quality, including temperature, the amount of sunlight, and the type of winds at the surface and above the surface. Winds can transport ozone (O_3) and O_3 precursors from one region to another, contributing to air quality problems downwind of source regions. Furthermore, mountains can function as a barrier that prevents O_3 from dispersing.

SFBAAB is characterized by complex terrain consisting of coastal mountain ranges, inland valleys, and bays, which distort normal wind flow patterns. The Coast Range splits, resulting in a western coast gap (the Golden Gate) and an eastern coast gap (the Carquinez Strait), both of which allow air to flow in and out of the SFBAAB and the Central Valley (BAAQMD, 2017a). The climate in the SFBAAB is dominated by the strength and location of a semipermanent, subtropical high-pressure cell. During the summer, the Pacific high-pressure cell is centered over the northeastern Pacific Ocean, resulting in stable meteorological conditions and a steady northwesterly wind flow. Upwelling of cold ocean water from below to the surface, because of the northwesterly flow, produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold-water band, resulting in condensation and the presence of fog and stratus clouds along the Northern California coast. In the winter, the Pacific high-pressure cell weakens and shifts southward, resulting in wind flow offshore, the absence of upwelling, and the occurrence of storms. Weak inversions coupled with moderate winds result in a low air pollution potential (BAAQMD, 2017a).

The SFBAAB has moderately wet winters and dry summers. Winter rains account for about 75 percent of the average annual rainfall. The amount of annual precipitation can vary greatly from one part of the

SFBAAB to another, even within short distances. In general, total annual rainfall can reach 40 inches in the mountains but is often less than 16 inches in sheltered valleys (BAAQMD, 2017a).

3.3.1.2 Criteria Pollutants and Attainment Status

O_3, particulate matter (PM) with aerodynamic diameter equal to or less than 10 micrometers and 2.5 micrometers (PM_{10} and $PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead are criteria air pollutants that are regulated at federal, state, and regional levels. Non-methane (CH_4) volatile organic compounds (VOCs), also referred to as reactive organic gases (ROGs), are regulated as precursors of O_3. These criteria air pollutants and their effects on humans are discussed in the following sections, with the exception of lead. Lead is not expected to be emitted by project activities and is not further discussed in this section.

Ozone: O_3 is a colorless gas that is not directly emitted as a pollutant but is formed when ROGs and NO_x react in the presence of sunlight. Low wind speeds or stagnant air mixed with warm temperatures typically provide optimum conditions for the formation of O_3. Because O_3 formation does not occur quickly, O_3 concentrations often peak downwind of the emission source. As a result, O_3 is of regional concern as it impacts a larger area. When inhaled, O_3 irritates and damages the respiratory system.

Particulate Matter: PM, which is defined as particles suspended in a gas, is often a mixture of substances, including metals, nitrates, organic compounds, and complex mixtures (e.g., diesel exhaust and soil). The most common sources of natural PM are dust and fires, while the most common man-made source is the combustion of fossil fuels. PM causes irritation to the human respiratory system when inhaled. The extent of health risks due to PM exposure can be determined by the size of the particles. The smaller the particles, the deeper they can be deposited in the lungs. PM is often grouped into two categories—PM_{10} and $PM_{2.5}$.

Carbon Monoxide: CO is a colorless, odorless, and tasteless gas that is directly emitted as a byproduct of combustion. CO concentrations tend to be localized to the source, and the highest concentrations are associated with cold, stagnant weather conditions. CO is readily absorbed through the lungs into the blood, where it reduces the ability of the blood to carry oxygen.

Nitrogen Oxides: NO_x is a generic name for the group of highly reactive gases that contain nitrogen and oxygen in varying amounts. Many types of NO_x molecules are colorless and odorless. However, when combined with particles in the air, NO_2—a common pollutant—can often be seen as a reddish-brown layer over many urban areas. NO_x forms when fuel is burned at high temperatures. Typical man-made sources of NO_x include motor vehicles; fossil-fueled electricity generation utilities; and other industrial, commercial, and residential sources that burn fuels. NO_x can harm humans by affecting the respiratory system. Small particles can penetrate the sensitive parts of the lungs, cause or worsen respiratory disease, and aggravate existing heart conditions. As discussed previously, O_3 is formed when NO_x and hydrocarbons react with sunlight.

Sulfur Oxides: Sulfur oxide (SO_x) is formed when sulfur-containing materials are processed or burned. SO_x sources include industrial facilities (e.g., petroleum refineries and cement manufacturing and metal-processing facilities), locomotives, large ships, and some non-road diesel equipment. A wide variety of health and environmental impacts is associated with SO_x because of the way it reacts with other substances in the air. Particular groups of people who are particularly sensitive to SO_x emissions include children, the elderly, people with asthma, and people with heart or lung disease. When inhaled, the SO_x

particles gather in the lungs and contribute to increased respiratory symptoms and disease, difficulty breathing, and premature death.

Volatile Organic Compounds: VOCs (or ROGs) are a group of chemicals that react with NO_x and hydrocarbons in the presence of heat and sunlight to form O_3. Examples of VOCs include gasoline fumes and oil-based paints. This group of chemicals does not include CH_4 or other compounds determined by the U.S. Environmental Protection Agency (USEPA) to have negligible photochemical reactivity.

EPA and CARB designate areas in California as being in attainment or nonattainment for the National Ambient Air Quality Standard (NAAQS) and California Ambient Air Quality Standards (CAAQS), respectively. Details of the NAAQS and CAAQS are discussed in Section 3.3.2. One of the following air quality designations is given to an area for a particular pollutant:

- Nonattainment – This designation applies when NAAQS or CAAQS have not been consistently achieved.
- Attainment – This designation applies when the NAAQS or CAAQS have been achieved.
- Maintenance – This designation applies to an area that was previously designated as a nonattainment area but has met the standard and has been reclassified by EPA as attainment with a maintenance plan.
- Unclassified – This designation applies when insufficient monitoring data exist to determine a nonattainment or attainment designation. Unclassified areas are typically considered to be in attainment.

The Proposed Project area is in Alameda County, currently designated as nonattainment for O_3 (federal and state standards), PM_{10} (state standard), and $PM_{2.5}$ (federal and state standard). The area is in attainment for all other pollutants (CARB, 2020).

3.3.1.3 Toxic Air Contaminants

Toxic air contaminants (TACs) are a regulatory designation that includes a diverse group of air pollutants which adversely affect human health. They are not fundamentally different from the criteria pollutants, but they have not had ambient air quality standards established for them for a variety of reasons (e.g., insufficient dose-response data, association with particular workplace exposures rather than general environmental exposure). The health effects of TACs can result from either acute or chronic exposure. Many types of cancer are associated with chronic TAC exposures, but TAC exposures can also cause other adverse health effects. Consequently, the BAAQMD has established both a cancer and a noncancer health risk threshold for TAC emissions.

Significant sources of TACs in the environment include industrial processes, such as petroleum refining, chemical manufacturing, electric utilities, metal mining/refining and chrome plating; and commercial operations, such as gasoline stations, dry cleaners, and buildings with boilers and/or emergency generators. Mobile sources are gasoline and diesel-powered vehicles of all types. CARB listed 10 compounds that pose the greatest known health risk in California. Based primarily on ambient air quality data, these are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM) (CARB, 2013). Of these pollutants, only DPM could potentially be emitted from the Project in quantities greater than de minimis levels. Information on DPM is included below.

Diesel Particulate Matter. DPM is found in engine exhaust and consists of a mixture of gases and fine particles (smoke or soot) that can penetrate deeply into the lungs where it can contribute to a range of health problems. In 1998, the CARB identified PM from diesel-powered engines as a TAC based on its potential to cause cancer and other adverse health effects (CalEPA, 1998a). Diesel exhaust is a complex mixture that includes hundreds of individual constituents and is identified by the State of California as a known carcinogen (CalEPA, 1998b). However, under California regulatory guidelines, DPM is used as a surrogate measure of exposure for the mixture of chemicals that comprise diesel exhaust (CalEPA, 1998b).

Based on receptor modeling techniques, the CARB estimated the background DPM health risk in the SFBAAB in 2000 to be approximately 500 cancer cases per million people. This reflects a drop of approximately 36 percent from estimates for 1990 (CARB, 2009). In 2000, the CARB approved a new regulation for existing heavy-duty diesel vehicles that requires retrofitting and replacement of vehicles or their engines over time such that by 2023 all vehicles must have a 2010 model year engine or equivalent. This regulation is anticipated to result in an 85 percent decrease in statewide diesel health risk in 2020 from the 2000 risk levels (CARB, 2000).

California Air Resources Board West Oakland Health Risk Assessment. In March 2008, the CARB, working in cooperation with the Port, UP, and the BAAQMD, completed a study designed to help understand the potential health impacts from DPM emissions on residents of the West Oakland community. Key findings of the CARB report are as follows:

- DPM ambient concentrations in West Oakland are estimated to be nearly three times the background DPM concentrations averaged over the entire SFBAAB.
- The estimated lifetime potential cancer risk for residents of West Oakland from exposure to all DPM emissions included in the study is estimated to be about 1,200 excess cancers per million. This estimate assumes residents are exposed to the estimated 2005 outdoor DPM levels continuously for 70 years. By way of comparison, the corresponding background risk from DPM emissions over the entire SFBAAB is estimated to be 480 excess cancer cases per million, the corresponding background risk from emissions of all air toxics species in the SFBAAB is 660 per million, and the expected cancer rate from all causes, including smoking, is about 200,000 to 250,000 per million, according to the CARB study.
- Of the total West Oakland DPM exposure risk noted previously (1,186 per million from all sources), emissions from Port seaport operations contribute to 16 percent (192 per million), UP railyard sources contribute 4 percent (43 per million), and other sources (primarily trucks) in and around West Oakland contribute to the remaining 80 percent (951 per million).

At the time of the 2008 report, CARB projections of future DPM emissions indicate that emissions and associated health risk would be reduced in West Oakland by about 80 percent by 2015, reflecting reductions achieved by state and federal regulations.

Bay Area Air Quality Management District Community Air Risk Evaluation Program. Under the Community Air Risk Evaluation (CARE) program, BAAQMD began identifying areas with high TAC emissions and sensitive populations that could be affected by such emissions and using this information to establish policies and programs to reduce TAC emissions and exposures. During Phase I of CARE, BAAQMD developed a preliminary Bay-Area-wide TAC emissions inventory (for the year 2000) and compiled demographic and health-statistics data to identify sensitive populations. Five TACs (DPM, 1,3-butadiene,

benzene, hexavalent chromium, and formaldehyde) were estimated to be responsible for about 97 percent of the SFBAAB's cumulative cancer risk, and DPM alone accounts for about 80 percent of this cancer risk. Major sources of DPM include on-road and off-road heavy-duty diesel trucks and construction equipment. The highest DPM emissions occur in the urban core areas of eastern San Francisco, western Alameda, and northwestern Santa Clara Counties.

3.3.2 Regulatory Setting

3.3.2.1 Federal Regulations

Clean Air Act and National Ambient Air Quality Standards

The federal Clean Air Act (CAA) establishes the statutory framework for regulation of air quality in the United States. Pursuant to this act, the USEPA has established various regulations to achieve and maintain acceptable air quality, including the adoption of NAAQS, mandatory state implementation plan (SIP) or maintenance plan requirements to achieve and maintain NAAQS, and emission standards for both stationary and mobile sources of air pollution. The NAAQS include primary standards that provide public health protection and secondary standards that protect public welfare. Table 3.3-1 presents a summary of the NAAQS and CAAQS.

Table 3.3-1. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Ambient Air Quality Standards [a]	National Ambient Air Quality Standard Primary[b, c]	National Ambient Air Quality Standard Secondary[b, d]
Ozone	8 hours 1 hour	0.070 ppm 0.09 ppm	0.070 ppm –	0.070 ppm –
Particulate matter with aerodynamic diameter equal to or less than 10 micrometers	Annual arithmetic mean 24 hours	20 µg/m^3 50 µg/m^3	– 150 µg/m^3	– 150 µg/m^3
Particulate matter with aerodynamic diameter equal to or less than 2.5 micrometers	Annual arithmetic mean 24 hours	12 µg/m^3 –	12 µg/m^3 35 µg/m^3	15 µg/m^3 35 µg/m^3
CO	8 hours 1 hour	9.0 ppm 20 ppm	9 ppm 35 ppm	– –
NO_2	Annual arithmetic mean 1 hour	0.03 ppm 0.18 ppm	0.053 ppm 0.100 ppm	0.053 ppm –
Sulfur Dioxide	24 hours 3 hours 1 hour	0.04 ppm – 0.25 ppm	– – 0.075 ppm[e]	– 0.5 ppm –
Lead[f]	Calendar quarter Rolling 3-month average 30-day average	– – 1.5 µg/m^3	1.5 µg/m^3 (certain areas) 0.15 µg/m^3 –	1.5 µg/m^3 – –

Pollutant	Averaging Time	California Ambient Air Quality Standards [a]	National Ambient Air Quality Standard Primary[b, c]	National Ambient Air Quality Standard Secondary[b, d]
Visibility-reducing particles	8 hours	[g]	–	–
Sulfates	24 hours	25 µg/m^3	–	–
Hydrogen sulfide	1 hour	0.03 ppm	–	–
Vinyl chloride[f]	24 hours	0.01 ppm	–	–

Source: (CARB, 2016.)
[a] CAAQS for O_3, CO (except Lake Tahoe), SO_2 (1-hour and 24-hour), NO_2, and suspended PM (PM_{10}, $PM_{2.5}$, and visibility-reducing particles) are not to be exceeded. All others are not to be equaled or exceeded.
[b] NAAQS other than O_3, PM, and those based on annual averages or annual arithmetic means are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, is equal to or less than the standard.
[c] NAAQS Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
[d] NAAQS Secondary Standards: The levels of air quality necessary to protect the public welfare from known or anticipated adverse effects of a pollutant.
[e] Final rule signed June 2, 2010. To attain this standard, the 3-year average of the 99th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 75 parts per billion.
[f] CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. CARB made this determination following the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
[g] In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.
µg/m^3 = micrograms per cubic meter and ppm = parts per million

EPA uses ambient air quality monitoring data to classify areas as being in attainment or nonattainment with the NAAQS for each criteria pollutant. Attainment status of the Proposed Project area is discussed in Section 3.3.1. The 1977 CAA amendment requires each state to develop and maintain an SIP for each nonattainment area. The SIP serves as a tool to help avoid and minimize emissions of nonattainment criteria pollutants and their precursor pollutants and achieve compliance with the NAAQS. In 1990, the CAA was amended to strengthen the regulation of both stationary and mobile emission sources.

Toxic Air Contaminants

In addition to the criteria pollutants, EPA also regulates emissions of hazardous air pollutants, or TACs. TACs include airborne inorganic and organic compounds that can have both short-term (acute) and long-term (carcinogenic, chronic, and mutagenic) impacts on human health.

Controlling air toxic emissions became a national priority with the passage of the CAA amendments in 1990, when Congress mandated that EPA regulate 188 air toxics. Prior to the 1990 CAA amendments, national emission standards were established for benzene, vinyl chloride, radionuclides, mercury, asbestos, beryllium, inorganic arsenic, radon 222, and coke oven emissions. The 1990 CAA amendments require EPA to set standards for categories and subcategories of sources that emit hazardous air pollutants, rather than for the pollutants themselves. EPA began issuing the new standards in November 1994. National emission standards set before 1991 remain applicable.

3.3.2.2 State Regulations

California Clean Air Act and Air Quality Standards

CARB is the state agency responsible for California air quality management, including establishment of CAAQS, mobile source emission standards, and GHG regulations, as well as oversight of regional air quality districts and preparation of implementation plans, such as regulations for stationary sources of air pollution. The CAAQS are generally more stringent, except for the 1-hour NO_2 and SO_2 standards, and include more pollutants than the NAAQS (Table 3.3-1). California specifies four additional criteria pollutants: visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Similar to EPA, CARB designates counties in California as being in attainment or nonattainment for the CAAQS.

The California Clean Air Act, which was approved in 1988, requires each local air district, where ambient concentrations violate the CAAQS, to prepare an air quality management plan to achieve compliance with the CAAQS as a part of the SIP. CARB has primary responsibility for the SIP for nonattainment pollutants but relies on each local air district to adopt mandatory statewide programs and provide additional strategies for sources under their jurisdiction.

Air Toxics

California's Air Toxic "Hot Spots" Information and Assessment Act (AB 2588) identifies TAC hot spots where emissions from specific sources may expose individuals to an elevated risk of adverse health effects, particularly cancer or reproductive harm. TACs are also referred to as hazardous air pollutants. The act requires that a business or other establishment identified as a significant source of toxic emissions provide the affected population with information about health risks the emissions pose.

CARB has adopted the *Diesel Risk Reduction Plan* (CARB, 2000) and a series of ATCMs for mobile and stationary sources, which are intended to reduce overall diesel exhaust emissions in California. CARB also adopted ATCMs for controlling naturally occurring asbestos, and CARB and local air districts have authority to enforce the federal National Emission Standards for Hazardous Air Pollutants regulations for asbestos.

3.3.2.3 Regional Regulations

BAAQMD is the primary regional agency responsible for attaining and maintaining air quality conditions in the SFBAAB through a comprehensive program of planning, regulation, and enforcement.

BAAQMD works in cooperation with the Association of Bay Area Governments and the MTC to develop air quality plans. The BAAQMD prepares O_3 attainment demonstrations for the federal O_3 standard and clean air plans for the California O_3 standard. The *2001 Ozone Attainment Plan* is BAAQMD's contribution to the SIP for demonstrating attainment of the federal 1-hour O_3 standard (BAAQMD, 2001). The *2017 Bay Area Clean Air Plan* (BAAQMD, 2017b) is the latest district-approved O_3 clean air plan, which shows how BAAQMD would make progress towards meeting the state 1-hour O_3 standard. The plan includes 85 distinct control measures to decrease fossil fuel combustion, improve energy efficiency, and decrease emissions of greenhouse gases (GHGs) and other pollutants.

The Proposed Project would be subject to BAAQMD's Regulation 6-6, which pertains to the management of trackout at construction sites larger than 1 acre. Specifically, this regulation prohibits trackout exceeding 25 LF onto public roadways, and also prohibits a project from causing or allowing fugitive dust

or visible emissions during cleanup of trackout that exceed 20 percent opacity for a period or aggregate periods of more than 3 minutes in any 1 hour.

The Port released the Plan which serves as the Port's master plan for achieving its vision of a ZE Seaport (Port of Oakland, 2019). The Proposed Project would support this initiative by adding EV charging stations. The Proposed Project would support Strategy #3 Develop Infrastructure to Support the Pathway to Zero Emissions.

3.3.3 Impact Analysis

a) Less Than Significant Impact

The most recent air quality plan adopted by BAAQMD, the *Bay Area 2017 Clean Air Plan: Spare the Air, Cool the Climate*, is the applicable air quality plan for projects in Alameda County (BAAQMD, 2017b). The Clean Air Plan provides an integrated, multi-pollutant control strategy to reduce emissions of O_3, particulates, air toxics, and GHGs. The Proposed Project would be consistent with the applicable air quality plan if it would comply with all applicable air quality regulations and if it would not obstruct or delay implementation of control measures in the air quality plan.

Specific rules and regulations adopted by the BAAQMD limit the emissions that can be generated by various activities and in some cases, identify specific pollution reduction measures that must be implemented. The Proposed Project would comply with applicable BAAQMD rules and regulations, such as general provisions in Regulation I, new source review requirements in Regulation 2, and PM/dust control requirements in Regulation 6. Haul truck, vendor truck, and worker vehicle trips would be generated during the proposed construction activities but would cease after construction is completed.

Emissions during construction would not exceed the BAAQMD significance thresholds (BAAQMD, 2022a) as shown in Table 3.3-2. During the longer-term operational phase, emissions from the routine inspection and maintenance activities would be minimal and would not exceed any significance threshold or violate any BAAQMD rule or regulation. That were developed to ensure the implementation of the air quality plans and regulations.

The Clean Air Plan identifies control measures and actions to be taken by the BAAQMD and the regulated community to reduce emissions of criteria pollutants, O_3 precursors, TACs, and GHGs from stationary and mobile sources in the SFBAAB. The Proposed Project would build charging stations for EVs, which is consistent with the Clean Air Plan that promotes ZE vehicles and renewable fuels. As a result, the Proposed Project would not conflict with or obstruct implementation of the 2017 Clean Air Plan and the impact would be less than significant.

b) Less Than Significant Impact

The Proposed Project area is currently designated as nonattainment for O_3, PM_{10}, and $PM_{2.5}$. The emissions associated with the Proposed Project are exhaust emissions from operation of construction equipment and vehicles, and fugitive dust emissions from grading, truck dumping/loading, and material haul trips. These emissions would only occur during construction and would not persist during regular operation of charging stations. The Proposed Project construction activities would be temporary at any given site.

Construction emissions from the Proposed Project were estimated using CalEEMod (CalEEMod, 2022) based on project specific schedule and equipment usage for Alternative 1. Alternative 2 would have less

construction activities than Alternative 1. Therefore, emissions from Alternative 1 was used in the analysis to represent the Proposed Project emissions and the impacts. A summary of the Proposed Project construction emissions and the comparisons to the BAAQMD CEQA significance thresholds are in Table 3.3-2. Project construction emissions are less than the BAAQMD significance thresholds.

Table 3.3-2. Average Daily Construction Emissions

Criteria Pollutants	ROG	CO	NO_x	Exhaust PM_{10}	Fugitive PM_{10}	Exhaust $PM_{2.5}$	Fugitive $PM_{2.5}$	SO_x
	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
2025	5.26	48.06	42.06	1.62	59.56	1.49	6.28	0.09
2026	5.60	54.26	46.27	1.65	115.37	1.50	11.97	0.11
2027	5.39	55.51	45.51	1.49	209.16	1.35	21.42	0.11
2028	4.15	43.45	35.13	1.09	178.23	0.99	18.21	0.09
BAAQMD thresholds	54	None	54	82	BMP	54	BMP	None
Exceed Threshold?	**No**	**NA**	**No**	**No**	**No**	**No**	**NA**	**NA**

NA=Not Applicable
lb/day = pounds per day

As shown in Table 3.3-2, construction emissions of criteria pollutants from the Proposed Project would be below the applicable BAAQMD emissions thresholds. BAAQMD does not have a quantitative emission threshold for fugitive PM_{10} and $PM_{2.5}$ emissions. Rather, it requires a project to implement BMP to minimize the emissions. The Proposed Project would comply with the state and BAAQMD regulations to avoid or minimize the construction emissions, as further discussed in Section 3.3.4.

Because the Proposed Project construction emissions would be below the BAAQMD thresholds and BMPs would be implemented for fugitive dust control, the Proposed Project would not result in a cumulatively considerable net increase of criteria pollutants that would violate any NAAQS or CAAQS or contribute substantially to an existing or projected air quality violation. The construction-related emissions impact would be less than significant.

Operation and maintenance activities of the Proposed Project would be infrequent and requires minimal equipment. Emissions from project operation would be negligible. Accordingly, operation and maintenance emissions would not result in a cumulatively considerable net increase of any criteria air pollutant, would have less than significant impact on air quality, and would not violate any air quality standard.

c) Less Than Significant Impact

Sensitive receptors are defined as facilities or land uses that include people who are particularly susceptible to the effects of air pollution (e.g., children, the elderly, and people with illnesses). Schools, hospitals, and residential areas are all examples of sensitive receptors. There are no schools or hospitals located within half a mile of the Port. The nearest residences are located 1,700 feet or 0.32 miles northwest. Additionally, the construction activities will occur within the highly industrialized areas of the Port. Construction of the Proposed Project will generate additional emissions that are not typically

experienced at the Port. However, construction will be short-term and minimization measures will be implemented to reduce emissions. Therefore, the Proposed Project would have less than significant impacts on potential sensitive receptors.

d) Less Than Significant Impact

The occurrence and severity of odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; distance from the odor source; and the sensitivity of the affected receptor. Offensive odors do not typically result in physical harm, but they can create a nuisance and may result in complaints from the affected public.

Construction could potentially result in odorous exhaust emissions from use of gasoline- and diesel-fueled vehicles and equipment. However, these emissions would be intermittent and temporary and would dissipate with an increase in distance from the construction location. Given the temporary and intermittent nature of odor-generating construction activities, and the dispersion of emissions compared to the limited proximity and low number of potential receptors, construction of the Proposed Project would not expose people to objectionable odors for an extended period or lead to odorous emissions that would adversely affect substantial numbers of people. Impacts associated with odors during construction would be less than significant.

The Proposed Project operation is not expected to result in objectionable odors during EV charging. Therefore, operation of the Proposed Project would not result in emissions leading to odors that would adversely affect substantial numbers of people, and the impact would be less than significant.

3.3.4 Avoidance and Minimization Measures

Because the Proposed Project activities would have a less-than-significant impacts from the construction and operation emissions, mitigation measures beyond what are required by air quality regulations are not required.

The Proposed Project would implement the BMPs recommended by BAAQMD to minimize and reduce fugitive dust (BAAQMD, 2022a). BMPs listed as Basic Construction Mitigation Measures in BAAQMD's CEQA Guidelines, Table 5-2 (BAAQMD, 2022a), would be implemented to minimize emissions during the construction phase. These BMPs include the following:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 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.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 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.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.

- All trucks and equipment, including their tires, shall be washed off prior to leaving the Proposed Project sites.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
- A publicly visible sign shall be posted 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 Air District's phone number shall also be visible to ensure compliance with applicable regulations.

3.4 BIOLOGICAL RESOURCES

Would the Proposed Project:

Question	CEQA Determination
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 (CDFW), U.S. Fish and Wildlife Service (USFWS), or National Oceanic and Atmospheric Administration National Marine Fisheries Service?	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?	No Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, or similar) through direct removal, filling, hydrological interruption, or other means?	No Impact
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
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
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

3.4.1 Environmental Setting

The Proposed Project sites consist of 11 areas within the Port. All these areas are paved and used for industrial purposes. There are no natural habitats, plant communities, trees, or wetlands in the Proposed Project area. Any use of the Proposed Project sites by avian species or other animal species would be incidental and temporary.

3.4.2 Regulatory Setting

Federal and state laws and regulations pertaining to this issue area and relevant to the Proposed Project are discussed in this subsection.

The Federal Endangered Species Act is a program for the conservation of threatened and endangered species including plants and animals and the habitats in which they are found. The law requires federal agencies, in consultation with the USFWS and/or the National Marine Fisheries Service, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The law also prohibits any action that causes a "taking" of any listed species of endangered fish or wildlife. Likewise, import, export, interstate, and foreign commerce of listed species are all generally prohibited.

The Migratory Bird Treaty Act of 1918 protects migratory birds by prohibiting the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior USFWS.

The California Endangered Species Act (CESA) is a California environmental law that conserves and protects plant and animal species at risk of extinction. Originally enacted in 1970, the CESA was repealed and replaced by an updated version in 1984 and amended in 1997. Pursuant to the requirements of CESA, an agency reviewing a project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the Proposed Project area and determine whether the Proposed Project would have a potentially significant impact on such species. In addition, CDFW encourages informal consultation on any project which may affect a candidate species. CESA prohibits the take of California listed animals and plants in most cases, but CDFW may issue incidental take permits under special conditions.

The California Native Plant Protection Act (Fish and Game Code, § 1900 et seq.) (NPPA) was enacted in 1977 and allows the CDFW to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

Alameda County does not have a Habitat Conservation Plan or a Natural Community Conservation Plan for the Port area. The City of Oakland General Plan Open Space, Conservation and Recreation Element contains policies relevant to the protection of biological resources, native plant communities and wetlands (City of Oakland, 1996). The City also has a creek protection ordinance.

3.4.3 Impact Analysis

a, b, c, d) No Impact

The Proposed Project would not have an impact on, on any species identified as endangered, threatened, candidate, sensitive, or special status species because the Proposed Project sites are paved and does not contain any wildlife habitat. The Proposed Project sites do not have any riparian habitat, sensitive natural communities, wetlands or other wildlife habitat. The Proposed Project would not have an impact on 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 due to the lack of any wildlife habitat.

No construction or operations would occur in or immediately adjacent to the water, and construction activities would not be allowed to affect the open water. No impact is expected.

e, f) No Impact

The Proposed Project would not conflict with any local policies or ordinances protecting biological resources because it does not support any wildlife habitat including trees. Additionally, there are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans for the Proposed Project area; therefore, there would be no impact.

3.4.4 Mitigation Summary

The Proposed Project would not result in any potentially significant impacts; therefore, no mitigation is required.

3.5 CULTURAL RESOURCES

Would the Proposed Project:

Question	CEQA Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5?	Less Than Significant Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Less Than Significant Impact
c) Disturb any human remains, including those interred outside of formal cemeteries?	Less Than Significant Impact

3.5.1 Environmental Setting

Cultural resources are sites, buildings, structures, objects, and districts that may have traditional or cultural value for their historical significance. Cultural resources include a broad range of resources, examples of which include archaeological sites, paleontological resources (fossils), historic roadways and railroad tracks, and buildings of architectural significance. Generally, for a cultural resource to be considered a historical resource for purposes of CEQA, it must be 50 years or older (California Office of Historic Preservation, 2011), or be formally recognized by a lead agency as constituting an historical resource. The City of Oakland's parcel information does not indicate that any local or national historic landmark, heritage property or designated historic districts at the Proposed Project sites (City of Oakland, 2023a).

The Proposed Project sites are flat expansive asphalt-paved area constructed over graded fill. The depth of fill at the Port is estimated to range from 5 to 8 feet deep.

3.5.2 Regulatory Setting

Federal and state laws and regulations pertaining to this issue area and relevant to the proposed Project are:

- Archaeological Resources Protection Act establishes protection for archaeological resources and includes both enforcement and permitting components.
- National Historic Preservation Act applies to Federal undertakings, to protect archaeological resources and provides policy to support and encourage the preservation of prehistoric and historic resources.

Local goals, policies, and/or regulations applicable to this issue area are described below.

The City of Oakland's General Plan Historic Preservation Element contains policies related to historic preservation (City of Oakland, 1998). These policies include:

- Goal 2 – to preserve, protect, enhance, perpetuate, use, and prevent the unnecessary destruction or impairment of properties or physical features of special character or special historic, cultural, educational, architectural, or aesthetics interest or value.

3.5.3 Impact Analysis

a, b, c) Less Than Significant Impact

No historical resources or resources potentially eligible for listing as historical resources have been identified at the Proposed Project sites. The City of Oakland's Land Use and Zoning interactive mapping (City of Oakland, 2023a) does not indicate any local or national historic landmark, heritage property or designated historic district at this site.

The depth of fill at the Port is estimated to range from 5 to 8 feet deep. Construction would require excavation and trenching to a depth of approximately 6 to 10 feet deep for installation of Project components and utilities.

The Proposed Project sites have been used for industrial purposes for many years. It is highly unlikely that unknown archeological resources or human remains would be discovered during proposed excavation at the Proposed Project sites. In the event that historical resources, archaeological resources, or human remains are uncovered during excavation, the Proposed Project would follow the requirements detailed in the Port's Emergency Plan of Action for Discoveries of Unknown Historic or Archaeological Resources (Port of Oakland, n.d.).

3.5.4 Mitigation Summary

The Proposed Project would not result in any potentially significant impacts; therefore, no mitigation is required.

3.6 ENERGY

Would the Proposed Project:

Question	CEQA Determination
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
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

3.6.1 Environmental Setting

The Proposed Project sites consist of 11 areas within the Port. All these areas are paved and used for industrial purposes.

The Port provides utility services (electrical and gas) that serve the Oakland Airport, the majority of the Oakland Seaport, and some areas of land along the shoreline in between the Airport and the Oakland Seaport. For the areas served by the Port as a municipal utility, the Port's Utilities Department purchases and manages the delivery of electricity to the Port's customers. Pacific Gas & Electric Company (PG&E) provides utility services to all other areas of the Port not served by the Port's Utilities Department.

3.6.1.1 Transportation Fuels Supply and Consumption

Most petroleum fuel refined in California is for use in on-road motor vehicles and is refined within California to meet state-specific formulations required by CARB. The major categories of petroleum fuels are gasoline and diesel for passenger vehicles, transit vehicles, and rail, and aircrafts; and fuel oil for industry and emergency electrical power generation. Other liquid fuels include kerosene, jet fuel, and residual fuel oil for marine vessels.

Transportation fuel sources also include electricity. Conventional gasoline and diesel vehicles consume gasoline or diesel fuel, whereas EVs consume electricity that can be sourced by fossil fuels or renewables. EVs, including battery- EVs and plug-in hybrid EVs, comprise a growing fraction of the passenger vehicles on the roads in California, and EV adoption is expected to increase over the upcoming decades due in part to improvements in battery technology and public initiatives and goals.

Other transportation fuel sources are alternative fuels, such as methanol and denatured ethanol (alcohol mixtures that contain no less than 70 percent alcohol), natural gas (compressed or liquefied), liquefied petroleum gas, hydrogen, and fuels derived from biological materials (i.e., biomass). Gasoline and diesel fuel are by far the largest transportation fuels used by volume in Alameda County. The total estimated 2022 retail gasoline sales in California were 11,495 million gallons. Of this total, 473 million gallons were Alameda County retail gasoline sales. The total estimated 2022 retail diesel fuel sales in California were 1,846 million gallons. Of this total, Alameda County had 57 million gallons.

3.6.2 Regulatory Setting

3.6.2.1 Federal

Energy Policy Act of 2005 and Energy Independence and Security Act of 2007

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Energy Policy Act, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products. Because driving fuel-efficient vehicles and installing energy-efficient appliances can provide many benefits, such as lower energy bills, increased indoor comfort, and reduced air pollution, businesses are eligible for tax credits for buying hybrid vehicles, building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are given for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

The Energy Policy Act of 2005 also established the first renewable fuel volume mandate in the United States. The original Renewable Fuel Standard program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the Energy Independence and Security Act of 2007, the Renewable Fuel Standard program was expanded to include diesel and to increase the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022. In December 2019, USEPA finalized volume requirements for cellulosic biofuel, biomass-based diesel, advanced biofuel, and total renewable fuel for 2020, and developed a requirement for biomass-based diesel for 2021. The rule became effective on April 6, 2020 (USEPA, 2023a).

American Recovery and Reinvestment Act

The American Recovery and Reinvestment Act of 2009 was passed in response to the economic crisis of the late 2000s, with the primary purpose of maintaining existing jobs and creating new jobs. Among the secondary objectives of the American Recovery and Reinvestment Act was investment in "green" energy programs, including funding the following through grants, loans, or other funding: private companies developing renewable energy technologies; local and state governments implementing energy efficiency and clean energy programs; research in renewable energy, biofuels, and carbon capture; and development of high efficiency or EVs.

3.6.2.2 State

California Public Resources Code Section 21100(b)

California PRC Section 21100(b), directs all State agencies, boards, and commissions to assess the environmental impacts of projects for which they are a lead agency under the CEQA to determine whether a project would result in significant effects on the environment, including effects from the wasteful, inefficient, and unnecessary consumption of energy, and to identify mitigation measures to minimize any such effects.

2021 Integrated Energy Policy Report Update

The 2021 Integrated Energy Policy Report (IEPR) Update provides an assessment of major energy trends and issues for a variety of energy sectors, as well as policy recommendations to address these concerns as required by SB 1389. Prepared by the California Energy Commission (CEC), this report details the key energy issues and develops potential strategies to address these issues. The 2021 IEPR Update includes a discussion of several strategies to reduce climate change impacts and address 2021 challenges, including

the COVID-19 pandemic, electricity outages, and statewide wildfires. Examples include a discussion of ZE vehicles deployment, an analysis of plug-in EVs, fuel cells, and hydrogen fueling for medium- and heavy-duty applications, and a discussion of microgrids. The assessments and forecasted energy demand within the 2021 IEPR will be used by the CEC to develop future energy policies. As of April 2023, CEC is developing the 2023 IEPR, which will continue to expand on efforts to decarbonize California's energy system and address topics such as energy reliability over the next five years, natural gas outlook, building decarbonization, and energy efficiency and demand.

Commercial Motor Vehicle Idling Regulation

On July 22, 2004, CARB initially adopted an ATCM to limit idling of diesel-fueled commercial motor vehicles (idling ATCM) and subsequently amended it on October 20, 2005, October 19, 2009, and December 12, 2013. This ATCM is set forth in Title 13, (California Code of Regulations [CCR]), Section 2485, and requires, among other things, that drivers of diesel-fueled commercial motor vehicles with gross vehicle weight ratings greater than 10,000 pounds, including buses and sleeper berth equipped trucks, not idle the vehicle's primary diesel engine longer than five minutes at any location. This anti-idling regulation helps to reduce fuel consumption by reducing engine usage. The ATCM also requires owners and motor carriers that own or dispatch these vehicles to ensure compliance with the ATCM requirements. The regulation consists of new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to idling the truck's main engine. Under the new engine requirements, 2008 and newer model year heavy-duty diesel engines need to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling or optionally meet a stringent oxide of nitrogen idling emission standard.

In-Use Off-Road Diesel Fueled Fleets Regulation

On May 16, 2008, CARB approved the In-Use Off-Road Diesel Fueled Fleets Regulation (Off-Road Regulation), which was later amended on December 31, 2009, July 16, 2010, and December 14, 2011. The overall purpose of the Off-Road Regulation is to reduce emissions of NO_X and PM from off-road diesel vehicles operating within California. The regulation applies to all self-propelled off-road diesel vehicles 25 horsepower or greater used in California and most two-engine vehicles. The Off-Road Regulation:

- Imposes limits on idling (i.e., fleets must limit unnecessary idling to 5 minutes), requires a written idling policy, and requires a disclosure when selling vehicles;
- Requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System and labeled;
- Restricts the adding of older vehicles into fleets starting on January 1, 2014; and
- Requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits).

The anti-idling component of this Off-Road Regulation helps to reduce fuel consumption by reducing engine usage.

3.6.2.3 Local

City of Oakland Green Building Ordinance

In October 2010, the City of Oakland adopted the Green Building Ordinance for Private Development Projects. This ordinance affects a wide range of projects, including new residential, non-residential, and

mixed-use developments. The minimum green building requirements described in the ordinance are designed to reduce energy use, conserve water and other natural resources, limit solid waste during construction and operation, and promote healthy indoor air quality. Requirements from both the City's local ordinance and the State's CALGreen code apply to future City developments.

3.6.3 Impact Analysis

a) Less Than Significant Impact

The proposed construction schedule is 45 months to install the EV chargers, solar systems and supporting infrastructure, and battery storage. Construction energy consumption would result primarily from transportation fuels (e.g., diesel and gasoline) used for haul trucks, heavy-duty construction equipment, and construction workers traveling to and from the Proposed Project sites. This analysis provides the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources.

Additionally, heavy-duty construction equipment associated with asphalt removal, paving, trenching, and installation would include excavators, pavers, and compactors. The majority of the equipment would likely be diesel-fueled. However, smaller equipment, such as air compressors, may be electric-, gasoline-, or natural gas-fueled. For the purposes of this analysis, it is assumed equipment would be diesel-fueled, due to the speculative nature of specifying the amounts and types of non-diesel equipment that might be used, and the difficulties in calculating the energy which would be consumed by this non-diesel equipment. This also represents a conservative worst-case scenario intended to represent the maximum potential energy use during construction. Based on the number and type of construction equipment that would be used during proposed Project construction, and based on the estimated duration of construction activities, the proposed Project would use approximately 796,650 gallons of diesel fuel for heavy-duty construction equipment. This would represent approximately 0.04 percent of diesel sold in California, which represents a small fraction of the state's annual fuel usage. Construction energy consumption is short-term and relatively minor compared to long-term regional energy use.

Electricity used during construction to provide temporary power for lighting, electronic equipment (e.g., computers, etc.), and to power certain construction equipment would generally not result in a substantial increase in on-site electricity use. Certain heavy-duty construction could be electric or alternatively fueled based on commercial availability. Electricity use during construction would be variable depending on lighting needs and the use of electric-powered equipment and would be temporary for the duration of construction activities. Therefore, construction electricity use would generally be considered as temporary and negligible over the long-term with a less than significant impact.

Additionally, BMPs will be implemented during construction to minimize the use of energy resources and reduce GHG emissions. BMPs will include limitations on vehicles idling when unnecessary and properly maintaining equipment to reduce potential fuel waste.

The primary purpose of the Proposed Project is to convert fleet from combustion engine to ZE vehicles. Installation of solar systems and supporting infrastructure would generate up to 1.12 MW of electricity. The BESS sites would be powered by future renewable energy facilities, and therefore would assist with providing stored renewable energy to the additional charging stations situated throughout the Port.

Therefore, the Proposed Project would not result in an unnecessary, inefficient, or wasteful use of energy resources. Moreover, by serving as a local power source during power outages, the Proposed Project may reduce local use of diesel emergency generators. As the Proposed Project will ultimately help with energy conservation for subsequent use there would be no impact associated with the operation of the Proposed Project.

b) No Impact

The primary purpose of the Proposed Project is to convert fleet from combustion engine to ZE vehicles. Constructing the Proposed Project would allow the Port to increase the number of ZE vehicles, increase storage capacity, and subsequently provide a back-up renewable energy source in case of outages or electricity utilization restriction events (e.g., heat waves). The Proposed Project is an essential element to the Port's Plan (Port of Oakland, 2019).

The Proposed Project supports the state and local plans for alternatively fueled vehicles by providing an electric charging station for fleet vehicles that may use renewable energy sources. Providing electric charging stations for fleet vehicles will support the conversion of petroleum fueled trucks to electric trucks at the Port. The Proposed Project is beneficial to state and local renewable energy plans; therefore, the Proposed Project has no impact.

3.6.4 Mitigation Summary

The Proposed Project would not result in any potentially significant impacts; therefore, no mitigation is required.

3.7 GEOLOGY AND SOILS

Would the Proposed Project:

Question	CEQA Determination
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 Division of Mines and Geology Special Publication 42.	No Impact
ii) Strong seismic ground shaking?	Less Than Significant Impact
iii) Seismic-related ground failure, including liquefaction?	Less Than Significant Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No Impact
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?	No Impact
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?	Less Than Significant Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less Than Significant Impact

3.7.1 Environmental Setting

The Proposed Project sites lie within the Coast Ranges geomorphic region. The Coast Ranges region lies between the Pacific Ocean and the Great Valley (Sacramento and San Joaquin Valleys) geomorphic region and stretches from the Oregon border to the Santa Ynez Mountains near Santa Barbara (ESA, 2009). Much of the Coast Ranges are composed of marine sedimentary deposits and volcanic rocks that form northwest trending mountain ridges and valleys, running subparallel to the San Andreas Fault Zone. In the San Francisco Bay Area, movement along this plate boundary is distributed across a complex system of strike-slip, right-lateral, parallel and sub-parallel faults. These faults include the San Andreas, Hayward, Rodgers Creek-Healdsburg, Concord-Green Valley, Greenville-Marsh Creek, Calaveras, and West Napa Faults (ESA, 2009).

The Coast Ranges can be further divided into the northern and southern ranges, which are separated by the San Francisco Bay. The San Francisco Bay lies within a broad depression created from an east-west expansion between the San Andreas and the Hayward Fault systems (ESA, 2009). The San Francisco and San Pablo Bays including shoreline areas are generally comprised of soft compressible sediments known as Bay Mud, which can be very thick in areas (ESA, 2009). The Proposed Project area is located within a seismically active region.

The proposed Project is located less than 12 miles from the San Andreas Fault and approximately 5 miles from the Hayward Fault. It is not within an Alquist-Priolo Special Study zone. While the Proposed Project sites will likely be subject to future strong ground shaking because of its proximity to the Hayward and San Andreas faults, the likelihood of a fault rupture is very low (CH2M HILL, 2016). The Proposed Project sites are generally underlain by artificial fill (consisting primarily of sand, gravel, and/or asphalt) generally extending to depths of 5 to 8 feet below ground surface. The fill typically is generally underlain by dark gray clay and water-bearing silts and fine- to medium-grained sand to depths of 8 to 10 feet bgs, which may be Young Bay Mud (YBM) or similar dredged material from the bay. These units reportedly are underlain by YBM (clay and silty clay rich in organic material) to a depth of 10 to 14 feet bgs. The YBM is underlain by the Merritt Sand that can generally reach a maximum thickness of 65 feet. The City of Oakland's zoning map indicates that the Proposed Project sites are within a very high and moderate Liquefaction Hazard Zone but is not within a Flood Zone (City of Oakland, 2023a).

3.7.2 Regulatory Setting

Local goals, policies, and/or regulations applicable to this issue area are described below. These City of Oakland General Plan policies include:

- Policy 1: Develop and continue to enforce and carry out regulations and programs to reduce seismic hazards and hazards from seismically triggered phenomena. Prioritize programs in areas of highest seismic risk and seismic vulnerability
- Policy 2: Continue, enhance or develop regulations and programs designed to minimize seismically related structural hazards from new and existing buildings
- Policy 3: Minimize threat to structures and humans by limiting development in areas subject to landslides or other geologic threat and undertake efforts to limit erosion from new development
- Policy 4: Work with other public agencies to reduce potential damage from earthquakes to "lifeline" utility, economic, and transportation systems, including Caltrans; Bay Area Rapid Transit (BART); PG&E, East Bay Municipal Utility District (EBMUD), and other utilities providers; the Port; and others

3.7.3 Impact Analysis

a) Less Than Significant Impact

For Alternatives 1 and 2, the Proposed Project sites do not lie within or near an Alquist-Priolo Earthquake zone and would have a very low potential for fault rupture to occur. The Proposed Project sites are in an area that has the potential to be subject to strong ground shaking from an earthquake along any of the active faults located in the region including the Hayward Fault, the closest fault to the Proposed Project sites. According to the Alameda County General Plan, the County is categorized by the International Building Code (IBC) as Seismic Zone 4, the most stringent category for seismic design (Alameda County, 2014). Implementation of all applicable standards of the Port's current standards for seismic safety would ensure impacts from ground shaking are less than significant.

Loose to medium soils exist in the subsurface at the Proposed Project sites. During a liquefaction event, lateral spreading and seismically induced settlement could take place at the Proposed Project sites. Liquefaction and subsequent settlement of soils were experienced in the seaport area during the 1989

Loma Prieta earthquake. Buildings, utilities, and other Proposed Project elements would meet IBC seismic zone design standards or better to withstand expected earthquake ground shaking, liquefaction, or other ground failures. Appropriate construction practices would be implemented during construction to ensure safety of workers and/or equipment during strong seismic shaking. Additionally, the Proposed Project sites are level as they are paved industrial areas with the only slopes in the vicinity of the Proposed Project being the shoreline, some sloping near the Everport site, the embankment of the shipping channel, and no changes to the shoreline or channel are proposed. Impacts would be less than significant.

b, c) No Impact

For Alternatives 1 and 2, the Proposed Project sites are level and paved; there would be no exposed soil during site operations. As part of construction, asphalt paving would be removed from portions of the Proposed Project sites, and excavations would be conducted. All excavation and soil management activities would be conducted in accordance with applicable permits, including storm water management permits, and the requirement to cover contaminated soil stockpiles. There would be no erosion or loss of topsoil as a result of construction. The only exposed slope in the vicinity of the Proposed Project is along part of the shoreline, which is covered with riprap (the remainder of the shoreline has a quay wall). No changes to the shoreline are proposed. Additionally, the Proposed Project sites are level and have been used to support various structures and industrial activities for over 100 years. There would be no impact.

d) Less Than Significant Impact

Expansive soils are soils that expand when water is added and shrink when they dry out. This continuous change in soil volume can cause structures built on this type of soil to move unevenly and crack when the moisture content in the soil changes. Bay Muds may be considered expansive soils. No significant changes in soil moisture would occur during operations because the Proposed Project sites for Alternatives 1 and 2 are generally paved. During construction, soil moisture in soils used to backfill trenches and other excavation would be controlled and the soil appropriately compacted to avoid future settlement.

e, f) No Impact

For Alternatives 1 and 2 the Proposed Project would not involve a septic system or alternative wastewater system. There would be no impact. In addition, the Proposed Project sites are underlain by fill and native Bay Mud. Fill would not contain any paleontological resources. Bay Mud is geologic material of recent origin (less than 10,000 years old), and the Proposed Project sites have been heavily disturbed by prior construction and industrial activities. Although the Proposed Project sites have been used for industrial purposes for many years, if a unique paleontological resource or site were encountered, the Port of Oakland Emergency Plan of Action for Discoveries of Unknown Historic or Archaeological Resources (Port of Oakland, n.d.) for such cases would be implemented. Work would be stopped within 50 yards of the find, and work would not resume until the finds were properly assessed and the Port gave permission to resume work. Therefore, there would be no impact.

3.7.4 Mitigation Summary

The Proposed Project would not result in any potentially significant impacts; therefore, no mitigation is required.

3.8 GREENHOUSE GAS EMISSIONS

Would the Proposed Project:

Question	CEQA Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant Impact

3.8.1 Environmental Setting

GHGs include both naturally occurring and artificial or anthropogenic gases, such as carbon dioxide (CO_2), CH_4, nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF_6). The accumulation of GHGs in the atmosphere influences the long-term range of average atmospheric temperatures. These gases trap the energy from the sun and help maintain the temperature of the earth's surface, creating a process known as the greenhouse effect. The largest anthropogenic source of GHGs is the combustion of fossil fuels, which results primarily in CO_2 emissions.

In the United States, the main source of GHG emissions is transportation, followed by electricity production (USEPA, 2023b). In California, 2020 emissions from GHG-emitting activities were 369.2 million metric tons of CO_2 equivalent (CARB, 2022a). The transportation sector accounts for about 38% of the statewide GHG emissions inventory. Industrial and the electric power sectors account for 23% and 11%, respectively, of the total statewide GHG emissions inventory (CARB, 2022a). The dominant GHG emitted is CO_2, primarily from fossil fuel combustion.

3.8.2 Regulatory Setting

3.8.2.1 Federal Regulations

Climate change and its associated effects are being addressed through various efforts at the federal level to improve fuel economy and energy efficiency. The Supreme Court decision in *Massachusetts et al. v. Environmental Protection Agency et al.* found that EPA has the authority to list GHGs as pollutants and to regulate emissions of GHGs under the federal CAA. On April 17, 2009, EPA found that CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6 may contribute to air pollution and may endanger public health and welfare. Based on the endangerment finding, EPA and the National Highway Traffic Safety Administration issued a series of GHG emission standards for new vehicles (USEPA, 2023c). EPA also established reporting regulations that require specific facilities and industries to report their GHG emissions annually.

3.8.2.2 State Regulations

Executive Order S-3-05:

State Executive Order S-3-05 issued in 2005 established GHG reduction targets for the state of California. The targets called for a reduction of GHG emissions to 2000 levels by 2010, a reduction of GHG emissions to 1990 levels by 2020, and a reduction of GHG emissions to 80% below 1990 levels by 2050. The California Environmental Protection Agency (CalEPA) secretary is required to coordinate development and implementation of strategies to achieve the GHG reduction targets.

Global Warming Solutions Act of 2006:
In 2006, the California State Legislature signed the Global Warming Solutions Act of 2006 (AB 32), which provides the framework for regulating GHG emissions in California. This law requires CARB to design and implement emission limits, regulations, and other measures such that statewide GHG emissions are reduced in a technologically feasible and cost-effective manner to 1990 levels by 2020.

Executive Order B-30-15:
In April 2015, Governor Jerry Brown signed Executive Order B-30-15, which added the intermediate target of reducing GHG emissions to 40% below 1990 levels by 2030.

Senate Bill 32 and Assembly Bill 197:
On September 8, 2016, Governor Brown signed SB 32 and AB 197, which codified the 2030 GHG emissions reduction target of 40% below 1990 levels and provided additional direction for updating the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) (CARB, 2022b).

Assembly 1279:
AB 1279, the California Climate Crisis Act, signed into law on September 16, 2022, requires the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. It also requires the state to reduce statewide GHG emission by 85% compared to 1990 levels and directs CARB to work with relevant state agencies to achieve these goals.

Scoping Plans:
Part of CARB's direction under AB 32 was to develop a scoping plan for the main strategies California will use to reduce GHG emissions that cause climate change. The scoping plan includes a range of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and nonmonetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 cost of implementation fee regulation to fund the program. CARB first approved the AB 32 Scoping Plan in 2008, and its latest adopted plan is the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) (CARB, 2022b). The 2022 Scoping Plan identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40% below 1990 emissions by 2030, and a technologically feasible, cost-effective path lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85% below 1990 levels no later than 2045.

3.8.2.3 Regional and Local Regulations

The Port adopted the Plan in 2019 (Port of Oakland, 2019) to achieve its vision of a ZE Seaport. Reducing DPM, GHGs, and other TACs will reduce health risks for people living and working nearby and reduce emissions contributing to climate change.

In 2020, City of Oakland Council adopted the 2030 Equitable Climate Action Plan (ECAP), targeting a 60% reduction in GHG emissions by 2030 while increasing climate resilience and improving racial and economic equity (City of Oakland, 2020). The City Council also committed Oakland to attaining carbon neutrality by 2045. *City of Oakland Zero Emission Vehicle Action Plan* was released in January 2023 (City of Oakland, 2023c) that includes strategies to increase access to ZE vehicles, EV supply equipment, and hydrogen fueling stations for all Oakland residents and visitors.

3.8.3 Impact Analysis

a) Less Than Significant Impact

GHG emissions would occur during project construction and would include emissions from construction equipment, haul trucks, and worker commute vehicles. The Proposed Project's temporary construction emissions for GHGs were estimated using CalEEMod and are summarized in Table 3.8-1. Because Alternative 1 would have more construction activities than Alternative 2, emissions from Alternative 1 was used in the analysis to represent a conservative emission scenario. Because the BAAQMD has not adopted a construction related GHG emission threshold to determine the significance of a project's impacts on GHG, the data are presented for informational purposes. The Proposed Project would implement BMPs during construction, such as minimizing unnecessary construction vehicle trips and idling time, which would reduce GHG emissions.

In responses to frequently asked questions on CEQA Thresholds for Climate, BAAQMD states "Greenhouse gas (GHG) emissions from construction represent a very small portion of a project's lifetime GHG emissions. The proposed thresholds for land use projects are designed to address operational GHG emissions which represent the vast majority of project GHG emissions" (BAAQMD, 2022a).

Table 3.8-1. Construction GHG Emissions (CO_2 equivalent)

Construction GHG	Emissions (MT CO_2e/year)
2025	1,400.5
2026	2,296.3
2027	2,484.7
2028	1,928.5
Total	**8,109.9**

Emissions of GHG from project operation of vehicles or equipment would be negligible because the operation and maintenance activities during project operation would require be infrequent and require minimal use of vehicle or equipment.

Therefore, the Proposed Project would not generate GHG emissions that would have a significant impact on the environment. The Proposed Project impact would be less than significant.

b) Less Than Significant Impact

The purpose of this Proposed Project is to support the conversion of Port and/or Terminal Operator fleets from combustion engine to ZE vehicles. By providing infrastructure for EV charging, the Proposed Project would support achieving the GHG reduction goals in the City of Oakland's ECAP and the *City of Oakland Zero Emission Vehicle Action Plan*, and the goal of ZE seaport in the Plan (Port of Oakland, 2019). The Proposed Project is also consistent with the BAAQMD *2017 Clean Air Plan* that promotes ZE vehicles (BAAQMD, 2017b). As such, the Proposed Project is consistent with local GHG reduction strategies that meet criteria in CEQA Guidelines Section 15183.5(b), qualifying its impact as less than significant under Option B of the BAAQMD Climate Impact Thresholds of Significance (BAAQMD, 2022a).

3.8.4 Mitigation Summary

The Proposed Project would not result in any potentially significant impacts; therefore, no mitigation is required.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the Proposed Project:

Question	CEQA Determination
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
b) 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?	Less Than Significant Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
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?	Less Than Significant Impact
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
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

3.9.1 Environmental Setting

The Proposed Project sites contains subsurface contaminants due to historical use of the site. The following describes site history of known contamination.

CenterPoint

Under the regulatory jurisdiction of the DTSC, the Port is obligated to investigate, remediate, and obtain DTSC completion certification for all designated Remedial Action Plan and Risk Management Plan (RMP) sites located on Port property within the former Oakland Army Base, including CenterPoint. In addition to prohibiting sensitive land uses (such as residential housing and hospitals), work includes: i) providing environmental monitoring oversight for all construction activities that disturb soils per the 2002 RMP; ii) addressing and documenting categorical RMP locations when encountered during construction (i.e., historical railroad ties); iii) appropriately managing new pollution events or newly discovered contaminated soil and/or groundwater if encountered during construction or maintenance activities; and iv) investigating and/or remediating in- place impacts as-needed.

Harbor Facilities

An open leaking underground storage tank cleanup site is located within the Harbor Facilities site located at 651 Maritime Street. Due to the scope of work including canopy piles as deep as 6 feet, soil sampling and proper contaminated soil stockpile and off-site hauling will be incorporated as part of the Proposed

Project. Port entered a Voluntary Remedial Action Agreement with the Alameda County Department of Environmental Health (ACDEH) and has agreed to perform the remedial actions set forth in this plan.

Roundhouse

UP operated a railroad roundhouse in the northern portion of the Roundhouse site from the early 1900s to 1964. Several site investigations were conducted by UP and the Port from 1991 through 2020. The field work included soil borings, monitoring wells, soil vapor measurement, and exploratory test pits for observing the presence or absence of separate-phase petroleum hydrocarbon (SPH) products. The investigations results indicate historical SPH migration appears to have been through preferential pathways, e.g., along storm drain lines and sewer lines.

Source removal activities included removal of petroleum hydrocarbon storage tanks and petroleum hydrocarbon-impacted soils and groundwater. One oil aboveground storage tank was removed before 1972 and four underground storage tanks (USTs) (two diesel, one gasoline, one new oil UST) and portions of the underground piping were removed in 1991. One waste oil UST, one clarifier tank, and a wooden sump used for the storage of used oil were removed in 1992. SPH-impacted soils surrounding the USTs, the sump and the clarifier were excavated and disposed of at appropriate off-site disposal facilities. SPH-impacted groundwater was removed from the UST and sump excavations and discharged into storm drains or transported to off-site treatment facilities (RWQCB, 2010).

In 2004, an investigation found that the storm drain system was leaking SPH into adjacent Bay water. Under a Notice of Federal Interest (NFI) to address the product migration into Oakland Inner Harbor, the Roundhouse site underwent USEPA-ordered remedial activities in 2004-2005. These remedial activities included the abandonment of the entire storm drain network and the installation of 1,330 feet of a new water-tight storm drain network consisting of shallow trench drains, sealed catch basins, fusion-welded high-density-polyethylene piping, and controlled-density backfill barriers. The USEPA issued the Port a Notice of Completion of the NFI-required response actions on November 8, 2005. The entire Roundhouse site was capped with asphalt in 2005 to prevent surface water infiltration into the fill material and SPH beneath the Roundhouse site. Downward migration of the SPH plume and dissolved SPH products is prevented by the low permeability of the Roundhouse site's soils.

In 2006 and 2007, the Port implemented a two-year product monitoring program to verify that the installed engineering controls had effectively addressed the preferential pathways. In August 2008, additional shallow and deeper groundwater site investigations were conducted. Confirmation sampling and monitoring demonstrated that the shallow and deeper groundwater zones were not significantly impacted by dissolved-phase petroleum constituents as a result of the SPH at the Roundhouse site. Site monitoring wells were abandoned in 2008. The wells were abandoned in accordance with proper procedures to prevent potential cross-contamination of the deeper aquifer beneath the Roundhouse site. The total petroleum hydrocarbons (TPH)-diesel concentration in one groundwater sample slightly exceeded the RWQCB Environmental Screening Level (ESL) of 210 micrograms per liter (µg/L). Groundwater is not a current or potential drinking water resource. TPH-motor oil concentration in one groundwater sample slightly exceeded the ESL of 210 µg/L. Testing indicated that the implemented remedial measures were preventing SPH migration towards the Oakland Estuary (RWQCB, 2010). Concentrations of all other constituents detected in groundwater including benzene, toluene,

ethylbenzene, xylenes, and polynuclear aromatic hydrocarbons were below their respective ESLs. Natural attenuation is expected to reduce SPH concentrations in soil and shallow groundwater to below commercial land use ESLs. The heavy metals such as lead in soil are believed to be intrinsic to fill material from historic reclamation activities at the Roundhouse site and are not related to the SPH beneath the Roundhouse site (RWQCB, 2010).

The Port recorded a deed restriction for the Roundhouse site (Port of Oakland and San Francisco Bay Regional Water Quality Control Board, 2008) and prepared a Revised SMP (AMEC, 2009). The Revised SMP (AMEC, 2009) is required by the deed restriction (Port of Oakland and San Francisco Bay Regional Water Quality Control Board, 2008). It presents protocols and measures to protect construction workers from potential exposures to the remaining hazardous constituents and SPH at the Roundhouse site. The Revised SMP (AMEC, 2009) also provides a plan for the management of soil and groundwater during future operations, maintenance, construction, and development activities to ensure that all such activities occur in a manner that protects human health and the environment (RWQCB, 2010). The deed restriction (Port of Oakland and San Francisco Bay Regional Water Quality Control Board, 2008) prohibits groundwater use at the Roundhouse site, and residential and other sensitive uses and developments on the Roundhouse site.

Key requirements of the Revised SMP (AMEC, 2009) include:

- Excavated areas that are left open at the end of the day must have controlled access and contain dust control measures
- Equipment used on contaminated areas must be decontaminated prior to working in other areas
- Decontamination wash water must be containerized and tested
- CH_4 monitoring is required for excavation work
- Perform work in accordance with the latest National Pollutant Discharge Elimination System (NPDES) General Permit

The proposed work at the Roundhouse site would require approximately 30 cubic yards of excavation for below ground utilities installation. The majority of the excavated material would be placed back in the utility trench as backfill. All below grade site construction would be in accordance with the deed restriction for the Roundhouse site (Port of Oakland and San Francisco Bay Regional Water Quality Control Board, 2008), and the Revised SMP (AMEC, 2009). Contaminated soil that cannot be reused on-site would be stockpiled and tested prior to disposal at an appropriate offsite facility. If groundwater is encountered, groundwater would be stored in a tank for testing and if determined to be contaminated it would be disposed at an offsite facility.

Embarcadero West/Market Street (Brush Street)

Additionally, at the Embarcadero West/Market site previous findings by the Port at 205 Brush Street was listed on the Alameda County CS and Spills, Leaks, Investigations, and Cleanups databases in the Environmental Database Resources report, on the State Water Resources Control Board (SWRCB) GeoTracker database, and the Alameda County Environmental Health Department database (ERM 2013). According to the *Removal Action Oversight and Documentation at Downtown Oakland CNG Station,*

205/209 Brush Street, Oakland, CA (R&M, 2007) the soils at the Embarcadero West/Market site and adjacent areas contained high concentrations of petroleum hydrocarbons, benzene, toluene, ethylbenzene, and xylenes in some areas of the excavation. Encountering pockets of subsurface contamination during excavation at this general area would likely occur given the historical industrial activities in the general area and the results of the groundwater and soil sampling in the adjoining area. Additional soil and groundwater sampling would occur at this site prior to any site excavation. If contaminated soil is encountered, proper stockpiling and site off haul will occur. Continued environmental monitoring will be incorporated into the Proposed Project given the nature of the soil conditions.

As described in Chapter 3, Project Description, the operations of the electrical vehicle chargers may require use of hazardous materials commonly associated with minor maintenance of industrial equipment and would be subject to the same legal and regulatory requirements.

3.9.2 Regulatory Setting

Federal and state laws and regulations pertaining to this issue area and relevant to the proposed Project are:

- Clean Water Act (33 USC 1251 et seq.) a comprehensive piece of legislation to protect the nation's water from pollution by setting water quality standards for surface water by limiting the discharge of effluents into waters of the United States.
- Oil Pollution Act (33 USC 2712) requires owners and operators of facilities that could cause substantial harm to the environment to prepare and submit plans for responding to worst-case discharges of oil and hazardous substances.
- California Toxics Rule (40 Code of Federal Regulations [CFR] 131), established by the USEPA, promulgated numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in the State of California.
- Hazardous Materials Transportation Act (HMTA) (49 USC 5901) delegates authority to the U.S. Department of Transportation to develop and implement regulations pertaining to the transport of hazardous materials.
- National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) outlines the requirements for responding to both oil spills and releases of hazardous substances.
- Resource Conservation and Recovery Act (42 USC 6901 et seq.) authorizes the USEPA to control hazardous waste from "cradle to grave" which encompasses its generation, transportation, treatment, storage, and disposal.
- Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Gov. Code § 8750 et seq.) seek to protect State waters from oil pollution and to plan for the effective and immediate response, removal, abatement, and cleanup in the event of an oil spill.

Local goals, policies, and/or regulations applicable to this issue area are described below. The City of Oakland's General Plan includes the following policies:

- POLICY HM-1: Minimize the potential risks to human and environmental health and safety associated with the past and present use, handling, storage and disposal of hazardous materials.
- POLICY HM-3: Seek to prevent industrial and transportation accidents involving hazardous materials and enhance the city's capacity to respond to such incidents.

3.9.3 Impact Analysis

a) Less Than Significant Impact

The proposed Project involves routine, but minor, transport or disposal of hazardous materials as part of the ongoing operations of the facility's equipment. Routine use of the following hazardous material would be required:

- Maintenance chemicals such as lubricating oils and welding gases

These types of materials are routinely used in industry, and would be transported, stored, used, and disposed of in accordance with all applicable laws and regulations. Stormwater treatment may generate small quantities of waste oil or oily water; this material would be transported under manifest to a licensed recycling or disposal facility. This is a routine waste and would be stored, transported, and recycled or disposed of in accordance with all applicable laws and regulations.

During construction, the Proposed Project would also be expected to use and/or generate hazardous materials, including diesel fuel, maintenance chemicals, and contaminated soil and groundwater. Fuel and maintenance chemicals would be transported, stored, used, and disposed of in accordance with all applicable laws and regulations. Contaminated soil and groundwater would be managed in accordance with the Revised SMP (AMEC, 2009) and solid and hazardous waste management plan. Due to the nature of the historic soil conditions, continued environmental monitoring will be incorporated into the Proposed Project. This impact is less than significant.

b) Less Than Significant Impact

As discussed previously, the Proposed Project would require the use of hazardous materials during operation and construction and would likely generate contaminated soil and groundwater during construction. While it is possible that use or transport of these materials could result in a spill, all hazardous materials would be transported by a licensed transporter, and on-site use and management of these materials would be in conformance with all applicable laws and regulations as well as the Revised SMP (AMEC, 2009). The Port also retains an on-call Emergency Response contractor to minimize the impact of any potential spills should they occur. This impact is less than significant.

c) No Impact

There are no existing or proposed K-12 schools within 0.25 mile of the Proposed Project sites.

d) Less Than Significant Impact

As discussed for the CenterPoint site, the Proposed Project will comply with the requirements of the RAP/RMP including i) providing environmental monitoring oversight for all construction activities that disturb soils per the 2002 RMP; ii) addressing and documenting categorical RMP locations when

encountered during construction (i.e., historical railroad ties); iii) appropriately managing new pollution events or newly discovered contaminated soil and/or groundwater if encountered during construction or maintenance activities; and iv) investigating and/or remediating in- place impacts as-needed.

One of the Proposed Project sites is currently on the list of hazardous material sites pursuant to Government Code section 65962.5 (CalEPA 2023). The Harbor Facilities site located at 651 Maritime Street currently proposes the installation of new canopies in the parking lot. Due to the scope of work including canopy piles as deep as 6 feet, soil sampling and proper contaminated soil stockpile and off-site hauling will be incorporated as part of the Proposed Project.

The Port entered a Voluntary Remedial Action Agreement with ACDEH and has agreed to perform the remedial actions set forth in this plan. The Roundhouse site was under an NFI to address the product migration into Oakland Inner Harbor and underwent USEPA-ordered remedial activities in 2004-2005. The USEPA issued the Port a Notice of Completion of the NFI-required response actions on November 8, 2005. The Port recorded a deed restriction for the Roundhouse site (Port of Oakland and San Francisco Bay Regional Water Quality Control Board, 2008), and prepared a Revised SMP (AMEC, 2009). The Revised SMP (AMEC, 2009) is required by the deed restriction (Port of Oakland and San Francisco Bay Regional Water Quality Control Board, 2008) to be implemented for work at the Roundhouse site.

e, f, g) No Impact

The Oakland International Airport is more than 2 miles from the Proposed Project sites. There are no public airports within two miles of the Proposed Project. The Proposed Project would not physically interfere with an emergency response plan or affect the implementation of an emergency response plan. The Proposed Project is not located within wildlands and does not pose a risk of wildland fire. Therefore, there would be no impact.

3.9.4 Mitigation Summary

The Proposed Project would not result in any significant impact; no mitigation is required.

3.10 HYDROLOGY AND WATER QUALITY

Would the Proposed Project:

Question	CEQA Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less Than Significant Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	No Impact
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:	No Impact
i) result in substantial erosion or siltation on- or off-site;	No Impact
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	No Impact
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	No Impact
iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	Less Than Significant Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

3.10.1 Environmental Setting

The Project sites are entirely covered with asphalt graded to drain to the storm drains and are used for industrial purposes. The Project sites are largely flat, and the adjacent shoreline is protected in most areas by sheet piling and other artificial shoreline protective structures (CH2M HILL, 2016). There are no natural streams, channels or ponds on the site. All storm drains empty to the San Francisco Bay.

3.10.2 Regulatory Setting

Federal and state laws and regulations pertaining to this issue and relevant to the proposed Project are:

- The Clean Water Act (33 USC 1251 et seq.) a comprehensive piece of legislation to protect the nation's water from pollution by setting water quality standards for surface water by limiting the discharge of effluents into waters of the United States. Section 404 or NPDES permits are not needed for the Proposed Project.

- SWRCB Water Quality Order No. 2013-0001-DWQ NPDES General Permit No. CAS000004, WDR for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s).

- SWRCB General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit [CGP], Order No. 2009-0006-DWQ)

- SWRCB Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities (Industrial General Permit, Order No. 2014-0057-DWQ).
- The Oil Pollution Act (33 USC 2712) requires owners and operators of facilities that could cause substantial harm to the environment to prepare and submit plans for responding to worst-case discharges of oil and hazardous substances.
- The Porter-Cologne Water Quality Control Act (Cal. Water Code § 13000 et seq) is the principal law governing water quality in California. Section 401 permits and Regional Water Quality Board involvement is not needed for the Proposed Project.
- The San Francisco Bay Plan outlines the responsibilities of San Francisco Bay Conservation and Development Commission (BCDC) and administration of the federal Coastal Zone Management Act within the Bay segment.

Local goals, policies, and/or regulations applicable to this issue area are described below.

The Port's Stormwater Ordinance No. 4311, which provides authority to control discharges to the storm drain system in the Port Area. The purpose of the Ordinance is to protect and enhance the water quality of water bodies by reducing pollutants in stormwater discharges to the maximum extent practicable and eliminating unauthorized non-stormwater discharges to the Port storm drains.

The City of Oakland's General Plan Safety Element contains policies related to flooding, tsunami and seiche (City of Oakland, 2023b). These policies include:

- Policy FL-SAF-3.1: Continue or strengthen City programs that seek to minimize the storm-induced flooding hazard.
- Policy SAF-3.2: Enforce and update local ordinances and comply with regional orders that would reduce the risk of storm-induced flooding.
- Policy SAF-3.4: Seek the cooperation and assistance of other government agencies in managing the risk of storm-induced flooding.

3.10.3 Impact Analysis

Would the Project:

a) Less Than Significant Impact

The storm water system would be modified to accommodate the location of the new facilities to be constructed as part of the Project and would provide treatment as necessary to comply with SWRCB Water Quality Order No. 2013-0001-DWQ NPDES General Permit No. CAS000004, WDR for Storm Water Discharges from the Port's MS4 permit. The Project would provide post-construction stormwater treatment if applicable, reducing pollutant runoff from applicable impervious surfaces. There would be no significant increase in storm water run-off, and no changes in the constituents contained in the storm water run-off are anticipated. This impact is less than significant.

The Project would be required, both during construction and operation of the storm water system, to meet the requirements of the deed restriction for the Roundhouse site (Port of Oakland and San Francisco Bay Regional Water Quality Control Board, 2008) and the Revised SMP (AMEC, 2009), as well as to comply with the MS4 permit requirements.

Potential short-term impacts on water quality due to construction could occur due to non-stormwater discharges form construction activities, such as increases in sediments, trash, oil, and grease from construction equipment and sanitary waste. However, the project will be required to prepare and implement a SWPPP during construction of the proposed project. The SWPPP identifies specific BMPs that will be implemented during Project construction. The Project will follow SWPPP requirements of the CGP, if applicable, or the Port's Municipal General Permit, if CGP is not applicable.

b) No Impact

The proposed Project would not use any groundwater and therefore it would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

c) No Impact

The Project sites are entirely covered with asphalt and would remain entirely paved following construction. Storm water run-off drains to the storm water system. There are no natural streams or rivers on the sites. The existing drainage pattern of the Proposed Project sites are not anticipated to significantly change, nor is the Proposed Project anticipated to substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. The Proposed Project would not significantly increase storm water runoff above the current level; the area of paved/impervious surface area would remain the same following construction of the Proposed Project and would not exceed the capacity of existing stormwater drainage systems or provide substantial additional sources of polluted runoff from existing conditions. The Proposed Project is not anticipated to impede or redirect flood flows. There would be no impact.

d) Less Than Significant Impact

Tsunamis are caused by underwater earthquakes, landslides, or volcanic eruption. San Francisco Bay is an enclosed body of water and severe impacts to Oakland are unlikely. The narrow opening of the Golden Gate attenuates tsunamis that may reach the San Francisco Bay Area. These waves would be substantially muted as they near the Inner Harbor at the Port. Seiches are waves in enclosed bodies of water including harbors. Due to the large size of Bay, the hazard from seiche waves is low. The proposed Project is not located in an area mapped as a tsunami or seiche risk and is not expected to be subject to inundation by seiche or tsunami. The Project sites are not located in an area that is susceptible to mudflows.

e) No Impact

The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan; therefore, there would be no impact.

3.10.4 Mitigation Summary

The Proposed Project would not result in significant impacts; therefore, no mitigation is required

3.11 LAND USE AND PLANNING

Would the Proposed Project:

Question	CEQA Determination
a) Physically divide an established community?	No Impact
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

3.11.1 Environmental Setting

Land uses in the vicinity of the Proposed Project sites consist of other industrial facilities, including maritime terminals, ancillary trucking services, and warehousing. Land uses also include public open space in the western portion of the Proposed Project area adjacent to San Francisco Bay. Commercial and light industrial facilities and I-880 are located to the north and east of the Proposed Project sites.

The Proposed Project sites are used for industrial purposes associated with Port activities to include truck and vehicle parking, buildings and other industrial facilities, and container storage.

3.11.2 Regulatory Setting

The Port's Plan (Port of Oakland, 2019) for emissions reductions was built upon the foundation established by the Maritime Air Quality Improvement Plan (Port of Oakland, 2009) and looks ahead to address long-term planning for air quality, including GHG emissions reductions targets, with extensive local community and partner engagement.

In 2022, Caltrans, MTC, and the Port nominated the Proposed Project for consideration in the CTC's 2022 TCEP. The Proposed Project is needed to reduce emissions, toxic air pollutants, and noise pollution associated with goods movement in the vicinity of the Port, increase the Port's global competitiveness by introducing operational efficiencies, increase Port electrical distribution resiliency, provide a back-up renewable energy source in case of outages or electricity utilization restriction events (e.g., heat waves), and reduce congestion by limiting the need for offsite trips necessary only for refueling.

City of Oakland General Plan

The City of Oakland in the Land Use and Transportation Element (City of Oakland, 1998) has land use policies applicable to this area. The City has general city-wide policies and also specific area policies. They include the following goals related to industry and commerce:

- Policy I/C4.1, Protecting Existing Activities: Existing industrial, residential, and commercial activities and areas which are consistent with long-term land use plans for the City should be protected from the intrusion of potentially incompatible land uses.
- Policy I/C4.2, Minimizing Nuisances: The potential for new or existing industrial or commercial uses, including seaport and airport activities, to create nuisance impacts on surrounding residential land uses should be minimized through appropriate siting and efficient implementation and enforcement of environmental and development controls.

- Policy T1.5, Locating Truck Services: Truck services should be concentrated in areas adjacent to freeways and near the seaport and airport, ensuring the attractiveness of the environment for visitors, local business, and nearby neighborhoods.
- Policy W1.3, Reducing Land Use Conflicts: Land uses and impacts generated from Port or neighborhood activities should be buffered, protecting adjacent residential areas from the impacts of seaport, airport, or other industrial uses. Appropriate siting of industrial activities, buffering (e.g., landscaping, fencing, transitional uses, etc.), truck traffic management efforts, and other mitigation efforts should be used to minimize the impact of incompatible uses.
- Policy W2.2, Buffering of Heavy Industrial Uses: Appropriate buffering measures for heavy industrial uses and transportation uses on adjacent residential neighborhoods should be developed and implemented.
- Policy W3.1, Requiring Consistency with Conservation Objectives and Policies: Waterfront objectives, policies, and actions regarding geology, land stability, erosion, soils, water quality, flood hazards, wetland plant and animal habitats, and air quality and pollutants, shall be consistent and in compliance with the 1996 Open Space, Conservation, and Recreation Element of the City's General Plan.
- Policy W6.1, Maintaining a Competitive Edge: In order to maintain international stature and competitiveness, the Port should continue to develop, expand, or otherwise modernize facilities and/or support infrastructure to enhance its overall efficiency and capabilities to handle increasing amounts of cargo and passengers.

The Port is given responsibility by the City of Oakland Charter to own, develop and manage lands along the Oakland Estuary, including but not limited to Oakland International Airport, within the specified area of Port jurisdiction. The land within the Port jurisdiction is subject, like the rest of the City, to the Oakland General Plan and is included within the City's General Plan Area. Development permits approved by the Port must comply with the City of Oakland General Plan. Any development or construction in the Port Area must be approved by the Port prior to start of work, and prior to submittal for a City of Oakland building permit (CH2M HILL, 2016).

The majority of the Proposed Project is location within the general plan designation General Industry and Transportation. This designation is intended to create, preserve and enhance areas of the City that are appropriate for a wide variety of businesses and related commercial and industrial establishments that may have the potential to generate off-site impacts such as noise, light/glare, odor, and traffic. This zone allows heavy industrial and manufacturing uses, transportation facilities, warehousing and distribution, and similar and related supporting uses. The Embarcadero West/Market Street site is designated Business Mix, and a portion of the Everport and Trapac sites are within the Open Space designation. (City of Oakland, 2023a).

Downtown Oakland Specific Plan

The Downtown Oakland Specific Plan (DOSP) (City of Oakland, 2022b) provides policy guidance on development, linking land use, transportation, economic development, housing, public spaces, cultural belonging, and social equity in Downtown Oakland. The Embarcadero West/Market Street site is located within the DSOP. The current General Plan designation for this location is Business Mix. The current and

proposed use of the Embarcadero West/Market Street site is consistent with the Business Mix uses included in the DSOP.

Oakland Army Base Redevelopment Area Plan

In 2000 the City adopted the Oakland Army Base Redevelopment Area Plan (City of Oakland 2000); the CenterPoint site is within the OAB. The current and proposed use of the CenterPoint site is consistent with the commercial uses included in the Oakland Army Base Redevelopment Area Plan.

San Francisco Bay Conservation and Development Commission

BCDC oversees areas that lie within a 100-foot 'Shoreline Band' surrounding the San Francisco Bay, ensuring development within this area is consistent with the San Francisco Bay Plan and the San Francisco Bay Area Seaport Plan. BCDC is responsible for granting or denying permits for any proposed Project scope that involves fill; extraction of materials; or substantial changes in use of any water, land, or structure within the Commission's jurisdiction (California Government Code Section 66632). Additionally, Section 66602 of the McAteer-Petris Act states, "that maximum feasible public access, consistent with a proposed project, should be provided."

The Proposed Project is located adjacent to San Francisco Bay, and in near proximity to the 100-foot shoreline band; however, the proposed Project facilities would be constructed outside of the BCDC's 100-foot shoreline band jurisdiction.

3.11.3 Impact Analysis

a, b) No Impact

The Proposed Project is located in an industrial area bordered by other industrial facilities and is consistent with the City of Oakland's General Plan, OAB Redevelopment Area Plan, DOSP, and industrial and business mix zoning. None of the proposed facilities would be constructed within BCDC's 100-foot shoreline band jurisdiction and the proposed site use is consistent with the San Francisco Bay Plan. No impact would occur.

3.11.4 Mitigation Summary

The Proposed Project would not result in any impacts; therefore, no mitigation is required.

3.12 MINERAL RESOURCES

Would the Proposed Project:

Question	CEQA Determination
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
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

3.12.1 Environmental Setting

The Proposed Project sites are in an urban industrial setting. There are no known mineral resources that occur on or in the immediate vicinity of the Proposed Project sites.

3.12.2 Regulatory Setting

There are no federal or state laws or regulations pertaining to this issue area. Local goals, policies, and/or regulations applicable to this issue area are described below.

The City of Oakland's General Plan Open Space, Conservation and Recreation Element contains the following applicable policy related to mineral resources at the Proposed Project sites:

- Objective CO-3—Mineral Resources: To conserve mineral resources and minimize environmental impacts from extraction (City of Oakland, 1996).

3.12.3 Impact Analysis

a, b) No Impact

There are no known mineral resources that occur on the Proposed Project sites for Alternatives 1 and 2. The Proposed Project would not result in the use of any locally important mineral resources and would not 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. There would be no impact.

3.12.4 Mitigation Summary

The Proposed Project would not result in any impacts; no mitigation is required.

3.13 NOISE

Would the Proposed Project result in:

Question	CEQA Determination
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 applicable standards of other agencies?	Less Than Significant Impact
b) Generation of excessive ground borne vibration or ground borne noise levels?	No Impact
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

3.13.1 Environmental Setting

This section describes the noise sensitive land uses in the vicinity of the Proposed Project sites and the existing ambient noise within the Proposed Project sites.

3.13.1.1 Noise Sensitive Land Uses

The Proposed Project sites consist of 11 areas within the Port. Land uses that are traditionally sensitive to noise include residences, recreational areas, places where people gather (schools, promenades, and patios), and some commercial operations that could be disrupted by noise. A review of the study area identified the following land uses that might be considered sensitive to noise. These include:

- Phoenix Lofts – Located at 737 Second Street, these lofts are in a rehabilitated building. There are no outdoor amenities; however, there are balconies on the eastern side of the building facing the Embarcadero West/Market (Brush Street) site. The building is roughly 175 feet from the Embarcadero West/Market (Brush Street) site. The dominant noise source experienced here would be traffic traveling on 2nd Street, Market Street, and rail activity.
- Old Kan Beer & Co. – Located at 95 Linden Street, this business operates a small outdoor beer garden. The land use is located approximately 900 feet northeast of the Roundhouse site and 1,000 feet west of the Embarcadero West/Market (Brush Street) site. Land uses between the Proposed Project sites and this receptor include the Union Pacific (UP) main rail lines, Embarcadero West (roadway), and Schnitzer Steel.
- Civicorps Academy – Located at 101 Myrtle Street, this organization provides career pathways in high-demand industries. Each year, about 120 youth perform real-world workplace tasks under contracts with public agencies. The Academy is located approximately 1,500 feet northeast of the Roundhouse site and 400 feet west of the Embarcadero West/Market (Brush Street) site. There are no outdoor operations at the Academy. Land uses between the Civicorps Academy and the Proposed Project sites include the eastbound UP main rail line, Embarcadero West, Schnitzer Steel, and the Howard Terminal.
- Jack London Square – This multi-use area includes retail, restaurant, hotel, and other entertainment uses. In addition to these amenities, patrons of Jack London Square like to linger in the plazas and

enjoy the bay along its shoreline walkways. The Oakland Ferry Terminal is also located in this area and is located roughly 2,500 feet to the east of the nearest Project site (Embarcadero West/Market (Brush Street) site). Land uses between these resources include the UP rail lines, Embarcadero West, Schnitzer Steel, and the Howard Terminal.

- Outdoor areas at Amtrak/Caltrans – Located on both sides of Third Street (at #340 and #332). At the Bay District Trailer A, there are picnic tables at the mechanical facility. At the main Amtrak/Caltrans office, there is an outdoor garden area with minimal walk paths. These resources are roughly 1,000 feet from the Roundhouse site and 2,400 feet from the Embarcadero West/Market (Brush Street) site; intervening land uses include the UP rail lines/depot, East Bay Recycling and Middle Harbor Road.
- Prescott Park – The noise environment north of I-880 is dominated by I-880 highway noise. There is currently a noise barrier along I-880. Prescott Park is roughly 2,000 feet from the nearest Project site, the Roundhouse site. There are also single-family residences adjacent to Prescott Park. Intervening land uses include I-880, the UP rail lines/depot and Middle Harbor Road.
- Apartments at Seventh/Filbert Street – Roughly 1,500 feet from the Embarcadero West/Market (Brush Street) site, numerous roadways and buildings separate the two resources.
- Single and multi-family residences on Pine Street between 8th Street and 14th Street – Approximately 2,100 feet north of the nearest Project site. The noise environment north of I-880 is dominated by I-880 highway noise. There is currently a noise barrier along I-880.

3.13.2 Regulatory Setting

The City of Oakland Noise Ordinance (City of Oakland, 2022c) regarding construction noise includes limits on the hours of noise-generating activities and limits on maximum noise at receiving properties. Maximum noise levels shall not exceed 65 dBA at residential land uses and 70 dBA at commercial/industrial land uses on weekdays between the hours of 7 a.m. and 7 p.m. On weekends from 9 a.m. to 8 p.m., maximum noise levels shall not exceed 55 dBA at residential land uses and 60 dBA at commercial/industrial land uses.

In addition, nighttime construction or demolition work, between weekday hours of seven (7) p.m. and seven (7) a.m. or between eight (8) p.m. and nine (9) a.m. on weekends and federal holidays shall not exceed the applicable nighttime noise level as shown in Table 3.13-1. The City of Oakland's Vibration Ordinance (City of Oakland, 2022d exempts temporary construction from the ordinance.

Table 3.13-1. City of Oakland Nighttime Noise Standards

Cumulative Number of Minutes in Nighttime One Hour Time Period	Weekdays 7 p.m. to 7 a.m. and Weekends and Federal holidays 8 p.m. to 9 a.m.
20	45
10	50
5	55
1	60
0	65

Source: City of Oakland, 2022c

3.13.3 Impact Analysis

a) Less Than Significant Impact

The Proposed Project is located in an industrial area where noise generation from large freight vehicles, heavy equipment, and containerized and bulk cargo transloading activities occur. During construction, temporary noise increase from the use of heavy construction equipment is expected. Construction of the Proposed Project would take approximately 18 months to complete. Nightwork is expected to occur for trench work throughout the Proposed Project sites.

Noise at each of the 11 Project sites would be intermittent, and its intensity would vary. The degree of construction noise impacts may vary for different areas of the Proposed Project sites and also vary depending on the construction activities. Table 3.13-2 summarizes noise levels produced by construction equipment that is commonly used. Construction equipment is expected to generate noise levels ranging from 55 to 85 dB at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance.

Table 3.13-2. Construction Noise Levels From a Distance of 50 Feet

Type of Equipment	L_{max}, dBA	Hourly L_{eq}, dBA/% Use[1]
Concrete Mixer Truck	85	79/40
Dump Truck	84	76/40
Pneumatic Tools	85	85/50
Air Compressor	80	78/40
Excavator	85	81/40
Roller	85	80/20
Compactor	80	83/20
Pickup Truck	55	75/40
Generator	82	81/50
Crane	85	81/16
Lift	85	75/20
Trenching Machine	82	80/50

Note:
[1]Percent used during the given time period (usually an hour – hourly L_{eq}) were obtained from FHWA, 2017.
Source: FHWA, 2017.

The nearest sensitive receptor to one of the 11 Proposed Project sites is the Phoenix Lofts, located approximately 175 feet east of the Embarcadero West/Market (Brush Street) site. Assuming two of the loudest types of construction equipment were operating at the same time and place (e.g., pneumatic tools and concrete mixer truck), the Phoenix Lofts would be exposed to a noise level of approximately 78 dBA L_{max} during project construction, which exceeds the City's noise ordinance of 65 dBA at residential land uses on weekdays between the hours of 7 a.m. and 7 p.m.

Nighttime trench work would potentially occur approximately 1,800 feet from Old Kan Beer & Co. and 3,000 feet from Phoenix Lofts. Old Kan Beer & Co. would be exposed to a noise level of approximately 51 dBA L_{max} and Phoenix Lofts would be exposed to a noise level of approximately 47 dBA L_{max}. If nighttime work exceeds 20 minutes in one hour, noise levels experienced at both noise sensitive land uses would exceed the City's nighttime noise ordinance of 45 dBA.

Construction of the Proposed Project has the potential to generate a noise impact at the Phoenix Lofts and Old Kan Beer & Co; however, the Proposed Project would be required to implement the noise-related the City of Oakland SCAs. Compliance with SCA-NOI-1 through SCA-NOI-3 which would ensure that construction noise impacts associated with construction of the Proposed Project would be reduced for all receiving land uses in the Proposed Project vicinity resulting in a less than significant impact.

Operation of the Proposed Project would not increase capacity, it would not create a permanent increase in ambient noise levels above existing conditions; therefore, operation of the Proposed Project would result in no impact.

b, c) No Impact

The Proposed Project would not create excessive ground borne vibration or ground borne noise levels. Sensitive receptors described in Section 3.13.1 would not experience additional noise levels generated during construction when compared to existing conditions and activities at the Port. Additionally, the Proposed Project is not located in the vicinity of a private airstrip or within 2 miles of a public airport. Therefore, the Proposed Project would not expose people residing or working in the Proposed Project area to excessive noise levels or ground borne vibration and/or noise levels during construction. There would be no impact.

3.13.4 Avoidance and Minimization Measures

The City's SCAs would apply to the Proposed Project. Compliance with the applicable SCAs would ensure that the noise associated with the Proposed Project would be reduced to less than significant levels. Therefore, no additional mitigation would be required.

To address the potential for increased noise from the construction of the Proposed Project, implementation of the Standard Conditions of Approval would ensure that construction and operation noise effects associated with the Proposed Project would be less than significant. The following City of Oakland SCAs will be implemented:

- **SCA NOI-1: Days/Hours of Construction Operation:** The Proposed Project applicant shall require construction contractors to limit standard construction activities as follows:

  a) Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Saturday, except that unloading of soil shall be allowed 24 hours per day, 7 days per week for about 45 months.

  b) Any construction activity proposed to occur outside of the standard hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis, with criteria

including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division. The Proposed Project applicant shall also submit an air quality report prepared by a qualified professional evaluating the air quality impacts of the special activities, if the duration of each activity exceeds 6 months.

c) No construction activity shall take place on Sundays or federal holidays, except as noted previously.

d) Construction activities include but are not limited to truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.

e) Applicant shall use temporary power poles instead of generators where feasible.

- **SCA NOI-2: Noise Control:** To reduce noise impacts due to construction, the Proposed Project applicant shall require construction contractors to implement a site-specific noise reduction program, subject to the Port Building Services Division review and approval, which includes the following measures:

  a) Equipment and trucks used for Project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds, wherever feasible).

  b) Except as provided herein, impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used if such jackets are commercially available and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.

  c) Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.

  d) The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.

- **SCA NOI-3: Noise Complaint Procedures:** Prior to the issuance of each building permit, along with the submission of construction documents, the Proposed Project applicant shall submit to the Port a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:

  a) A procedure and phone numbers for notifying Port staff and Oakland Police Department; (during regular construction hours and off-hours);

  b) A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);

  c) The designation of an on-site construction complaint and enforcement manager for the Proposed Project;

  d) Notification of neighbors and occupants within 300 feet of the Proposed Project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity; and

  e) A preconstruction meeting shall be held with the job inspectors and the general contractor/onsite project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

3.14 POPULATION AND HOUSING

Would the Proposed Project:

Question	CEQA Determination
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
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

3.14.1 Environmental Setting

The Proposed Project sites are industrial and are located in industrial settings used for transportation or Port related industrial activities. All sites would continue to be used for Port-related industrial activities.

The closest residential properties are located approximately 0.2 mile north of the Embarcadero West / Market Street site, approximately 0.33 mile north of the Roundhouse site, and approximately 0.32 mile east of the CenterPoint site. Active industrial properties and I-880 are located between all Project sites and residential properties.

3.14.2 Regulatory Setting

No federal or state laws relevant to population and housing are applicable to the Proposed Project. Local goals, policies, and/or regulations applicable to this issue area are as follows:

The City of Oakland's General Plan Land Use and Transportation Element (City of Oakland 1998) contains the following policy applicable to population and housing at the Proposed Project sites:

Policy 1/C4.1: Existing industrial, residential, and commercial activities and areas which are consistent with long term land use plans for the City should be protected from the intrusion of potentially incompatible land uses.

3.14.2.1 Impact Analysis

a, b) No Impact

The Proposed Project would install battery-electric freight vehicle charging stations. The Proposed Project would generate an estimated 1 full time job, and construction at each site would require up to 35 workers per day. The Proposed Project is located in a metropolitan area where regional labor is sufficient to support construction and operation of the proposed Project. The Proposed Project would not induce substantial unplanned population growth either directly or indirectly because it does not increase population or housing growth (or demand for new housing, or public services). The Proposed Project would not displace existing people or housing, nor necessitate the construction of replacement housing elsewhere. There would be no impact.

3.14.3 Mitigation Summary

The Proposed Project would not result in any impacts; no mitigation is required.

3.15 PUBLIC SERVICES

Question	CEQA Determination
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, theconstruction of which could cause significantenvironmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services	N/A
Fire protection?	Less Than Significant Impact
Police protection?	Less Than Significant Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

3.15.1 Environmental Setting

3.15.1.1 Fire Protection

The closest City of Oakland fire stations are Fire Station No. 2 located at 47 Clay St., and Fire Station No. 3 located at 1445 14th St, in Oakland. The Fire Department responds to fire and emergency response calls at the Port area.

3.15.1.2 Police Protection

Police protection services are provided by the City of Oakland Police Department, which is responsible for the enhancement and maintenance of public safety. Additional services are provided by U.S. Department of Homeland Security (U.S. Customs Service and U.S. Coast Guard).

3.15.1.3 Schools

The Proposed Project is within the Oakland Unified School District. There are no schools near (within 0.5 mile of) the Proposed Project sites.

3.15.1.4 Parks

The City of Oakland has over 2,500 acres of open space, including 100 parks. The closest parks to the Proposed Project sites are Port View Park located approximately 75 feet south of the Everport site, and Middle Harbor Shoreline Park located approximately 250 feet south of the Trapac site and 200 feet north of the Oakland International Container Terminal site. All other parks in the vicinity of the Proposed Project are located either north or east of I-880 or south of the Oakland Inner Harbor (on Alameda Island).

3.15.1.5 Other Public Facilities

There are no other public facilities in the vicinity of the proposed Project sites.

3.15.2 Regulatory Setting

Local goals, policies, and/or regulations applicable to this issue area are as follows.

The City of Oakland's General Plan Safety Element contains the following policy related to public services (City of Oakland, 2023d):

- Policy SAF-8.1-1: Maintain and enhance the city's capacity for emergency response, fire prevention, and firefighting.

3.15.3 Impact Analysis

a) No Impact

The proposed Project sites would be equipped with modern fire suppression technology, and the construction and operation of the proposed Project would not be expected to increase the need for fire protection services; consequently, there would be no need for changes to existing facilities or development of new facilities. The Proposed Project sites would be fenced and have controlled access. It would not be expected to increase the need for police protection beyond the current level; consequently, there would be no need for changes to existing facilities or development new facilities. Additionally, the Proposed Project would not increase the local population or create the need for additional schools, parks, or other public facilities. No impact would occur.

3.15.4 Mitigation Summary

The Proposed Project would not result in significant impacts; therefore, no mitigation is required.

3.16 RECREATION

Question	CEQA Determination
a) Would the Project 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
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

3.16.1 Environmental Setting

The Proposed Project is located in the Port seaport area, an industrial area. There is no recreational use onsite. The Oakland Inner Harbor, which is located immediately south of the Proposed Project sites, is heavily used by recreational boaters; use of the Oakland Inner Harbor would not be affected by the proposed Project.

3.16.2 Regulatory Setting

No Federal laws are applicable to the Proposed Project. State laws, local goals, policies, and/or regulations applicable to this issue area are as follows.

The San Francisco Bay Plan under BCDC:

- BCDC responsibilities include the regulation of new development within the first 100 feet inland from the Bay to ensure public access and recreational opportunities are provided where feasible.

The City of Oakland General Plan Open Space, Conservation and Recreation Element (City of Oakland, 1996) contains the following goals relevant to the recreation:

- Goal REC-1: A parks system which meets a diverse range of recreational needs without compromising the value of parks as open space.
- Goal REC-2: Safe, clean, accessible, efficiently run parks that complement the quality of life in Oakland.
- Goal REC-3: Recreational facilities which fully utilize human resources and promote personal growth, celebrate Oakland's cultural diversity, and serve all community equitably.

3.16.3 Impact Analysis

a, b) No Impact

For Alternatives 1 and 2, the proposed Project would install new EV chargers, install solar systems and supporting infrastructure, install battery systems to increase storage capacity, and upgrade substations which would not be expected to result in increased use of neighborhood and regional parks or other recreational facilities. Recreational facilities would not be expanded because there are no parks or trails on site. There would be no impact.

3.16.4 Mitigation Summary

The Proposed Project would not result in any impacts; therefore, no mitigation is required.

3.17 TRANSPORTATION AND TRAFFIC

Would the Proposed Project:

Question	CEQA Determination
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Less Than Significant Impact
b) Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Less Than Significant Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less Than Significant Impact
d) Result in inadequate emergency access?	Less Than Significant Impact

3.17.1 Environmental Setting

The Proposed Project sites consist of 11 areas located within the Port, in an industrialized urban setting. The Proposed Project sites are served regionally by I-880 and I-580, and locally by Middle Harbor Road via Adeline Street, Maritime Street, and 7th Street, the primary arterials that provide access to the Port Marine Terminals and local railyards (such as UP). These three arterials have primary access to I-880 and are located near the East Bay hub of the Bay Area freeway system near the Bay Bridge Toll Plaza. Middle Harbor Road, Maritime Street, and 7th Street are heavily used by trucks and other traffic accessing the Port's seaport area.

Regional rail service is provided by Amtrak and BART, which both connect to the Oakland International Airport via the Coliseum/Oakland Airport Station. Via the Coliseum/Oakland Airport Station and the nearby Jack London Square Station, Amtrak connects riders to three main routes: San Jose to Sacramento, Los Angeles to Seattle, and Oakland to Chicago. BART connects transit riders from the Coliseum/Oakland Airport Station to stations around the East Bay, San Francisco, and northern San Mateo County.

3.17.2 Regulatory Setting

Federal, state, regional, and local laws and regulations pertaining to transportation and relevant to the proposed Project are described in this section.

The Fixing America's Surface Transportation (FAST) Act was signed into law by President Obama in December 2015. The FAST Act provided long-term funding certainty for planning and investment in surface transportation infrastructure through authorization of $305 billion over fiscal years 2016 through 2020. The act supported the Federal Highway Administration's (FHWA's) programs for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. Under the FAST Act, the Advanced Transportation and Congestion Management Technologies Deployment program was established to fund technological advancements to enhance existing traffic capacity for commuters and businesses.

The Infrastructure Investment and Jobs Act effectively replaced the FAST Act. It was signed by President Biden in November 2021. The legislation provides $567.5 billion in funding over five years.

The US Ports and Waterways Safety Act provides authority for the United States Coast Guard's program to increase vessel safety and protect the marine environment in ports, harbors, waterfront areas, and navigable waters. This includes authorizing the Vessel Traffic Service, controlling vessel movement, and establishing requirements for vessel operation.

The CFR includes the following regulations pertaining to transportation:

- Title 49 CFR 171–177 governs the transportation of hazardous materials, the types of materials defined as hazardous, and the marking of the transportation vehicles.
- Title 49 CFR 350-399 and Appendices A-G, Federal Motor Carrier Safety Regulations, address safety considerations for the transport of goods, materials, and substances over public highways.
- Title 49 CFR 397.9, the HMTA, directs the U.S. Department of Transportation to establish criteria and regulations for the safe transportation of hazardous materials.

In 2013, SB 743 was signed into law in California. SB 743 required the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. SB 743 effectively replaced level of service as a performance metric, moving the state to using a vehicle miles traveled (VMT) approach. The intent of SB 743 was to better align transportation impact analyses and mitigation outcomes with the State's goals to reduce GHG emissions, encourage infill development, and improve public health through the development of multimodal transportation networks. OPR produced the *Technical Advisory on Evaluating Transportation Impact in CEQA* in December 2018 to provide guidance for assessing VMT, thresholds of significance, and mitigation measures.

Caltrans has developed guidelines for VMT analysis. These documents include the *Vehicle Miles Traveled–Focused Transportation Impact Study Guide* (Caltrans, 2020a), *Transportation Analysis Under CEQA* (Caltrans, 2020b), and *Transportation Analysis Framework Under CEQA* (Caltrans, 2020c). Specifically, Section 5.3.3 of the *Transportation Analysis Under CEQA* states, "Generally, a qualitative analysis of VMT impacts associated from the construction of the Proposed Project would be appropriate… Vehicle trips used for construction purposes would be temporary, and any generated VMT would generally be minor and limited to construction equipment and personnel and would not result in long-term trip generation."

MTC and the Alameda County Transportation Commission (ACTC) jointly developed the San Francisco Bay Area Goods Movement Plan (MTC, 2016) and the Alameda Countywide Goods Movement Plan (ACTC 2016), published in February 2016. The goals of the Goods Movements Plan include the following: reduce and mitigate impacts from goods movement operations to create a healthy and clean environment, and support improved quality of life for people most impacted by goods movement; provide safe, reliable, efficient, resilient, and well- maintained goods movement facilities and corridors; promote innovative technology and policy strategies to improve the efficiency of the goods movement system; preserve and strengthen an integrated and connected, multimodal goods movement system that supports freight mobility and access, and is coordinated with passenger transportation systems and local land use decisions; and increase jobs and economic opportunities that support residents and businesses.

In July 2017, MTC adopted Plan Bay Area 2040, Regional Transportation Plan and Sustainable Communities Strategy (SCS) for the Bay Area, 2017-2040 (Plan Bay Area 2040) (MTC, 2017). This plan provides a long-range regional transportation plan and SCS for the nine-county Bay Area with an updated

integrated transportation and land use plan. Plan Bay Area 2040 build on earlier work to develop an efficient transportation network, provide more housing choices, and grow in a financially and environmentally responsible way.

In November 2020, ACTC adopted the 2020 Alameda Countywide Transportation Plan (2020 CTP) (ACTC, 2020). The 2020 CTP is a long-range policy document that establishes the vision for Alameda County's transportation system over a 30-year planning horizon. The 2020 CTP includes a New Mobility Roadmap which provides a foundation for agency policy, advocacy, and funding decisions to advance new mobility technologies and services for the ACTC and partner agencies, as well as the private sector.

The City of Oakland and Port adopted the West Oakland Truck Management Plan (Port of Oakland and City of Oakland, 2019), an action-based plan designed to reduce the effects of haul trucks on local streets in West Oakland. When the TMP is implemented, the West Oakland community should experience fewer trucks driving or parking where they should not be, improved safety for people walking, biking, and driving in West Oakland, and an overall improvement in the quality of life for people living and working in West Oakland.

3.17.3 Impact Analysis

a) Less Than Significant Impact

The Proposed Project sites consist of 11 areas within the Port. These areas are paved and used for industrial purposes such as storage and parking. As described in Section 2.4, Alternative 1 and Alternative 2 would install battery-electric freight vehicle charging stations, solar systems and supporting infrastructure, and battery systems to increase storage capacity, with Alternative 1 installing more charging stations within the Proposed Project boundary than Alternative 2. Construction would take place within existing Port facilities and would not affect public ROW, including transit, roadway, bicycle, or pedestrian facilities. No long-term closures of travel lanes or roadway segments, permanent alteration of public access roadways, or creation of new public roadways would occur. Parking permanently displaced by implementation of Alternative 1 or Alternative 2 would be minimal, contained within Port facilities, and would not have an effect on public parking. Parking of construction-related trucks and worker vehicles would occur within the Port as well. The proposed Project will not conflict with any adopted program, plan, ordinance or policy regarding the circulation system, public transit, bicycle or pedestrian facilities in the Port's seaport area. There are no public transit, bicycle or pedestrian facilities in project area and such facilities outside of the Port jurisdiction would not be affected by the Proposed Project. Therefore, any impact would be less than significant.

b) Less Than Significant Impact

CEQA Guidelines Section 15064.3(b) provides guidance on determining the significance of transportation impacts based on VMT, pursuant to SB 743 as discussed in Section 3.17.2 Regulatory Setting. VMT analysis focuses on automobile and light-duty truck trips and excludes heavy truck trips. Compared to existing Port conditions, construction of the Proposed Project would result in a temporary increase in VMT during the up to 45-month construction phase as a result of trips made by construction workers and transportation of construction material and equipment. This increase in VMT would be temporary in

nature and localized. Project construction is not anticipated to result in long-term, permanent changes to the surrounding vehicle transportation system.

Once the Proposed Project is constructed and in operation, the temporary construction-related increase in VMT would no longer occur. Per OPR guidance, permanent development of projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact. Operational staff would perform periodic inspections and maintenance as necessary at the Proposed Project sites; however, these irregular visits would comprise fewer than 110 trips per day and would not result in a substantive increase in VMT. Therefore, construction and operation of the Proposed Project would not conflict or be inconsistent with Section 15064.3(b) of the CEQA Guidelines and would result in less than significant impacts related to VMT.

c) Less Than Significant Impact

The Proposed Project would not include changes to existing roadways during construction, operations, or maintenance. Construction for both alternatives would take place within existing paved parking lot and storage sites. Alternative 1 and Alternative 2 would not permanently alter any roadways that would result in a design feature that could substantially increase hazards. Project land use is considered a compatible use as discussed in Section 3.11 Land Use. Therefore, any impacts of Alternative 1 and Alternative 2 related to increased hazards dues to design features or incompatible uses would be minimal, and less than significant.

d) Less Than Significant Impact

The Proposed Project would not alter any roadways nor create any traffic conditions that would permanently impede emergency access. During construction of Alternative 1 and Alternative 2, emergency vehicles would have right-of-way over construction vehicles. Emergency response vehicles may potentially be delayed due to additional traffic associated with construction trips during the AM and PM peak hours; however, this delay would be minimal as all vehicles would yield to emergency response vehicles. Therefore, Alternative 1 and Alternative 2 would result in less than significant impacts related to emergency access.

3.17.4 Mitigation Summary

The Proposed Project would not result in any potentially significant impacts to transportation; therefore, no mitigation is required.

3.18 TRIBAL CULTURAL RESOURCES

Would the Proposed Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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:

Question	CEQA Determination
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	Less Than Significant 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 I of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision I of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less Than Significant Impact

3.18.1 Environmental Setting

The Proposed Project sites are located in an urban industrial setting. There are no known tribal resources that occur on or in the immediate vicinity of the Proposed Project sites.

3.18.2 Regulatory Setting

PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Pub. Res. Code § 21080.3.1. AB 52 involves formal consultation by the Port with the potentially affected tribes. Formal notification by the Port to California Native American tribes that have requested such notification of the Proposed Project offering consultation under AB 52 would be circulated prior to the public review period.

3.18.3 Impact Analysis

a, b) Less Than Significant Impact

The Proposed Project would not cause a substantial adverse change in the significance of known tribal cultural resources. If any cultural resources or human remains are discovered during Project construction, the Proposed Project would follow the requirements detailed in the Port's Emergency Plan of Action for Discoveries of Unknown Historic or Archaeological Resources (Port of Oakland, n.d.). Work would be stopped within 100 yards of the find, and work would not resume until the finds were properly assessed and the Port provides permission to resume work. This impact is less than significant.

3.18.4 Mitigation Summary

The Proposed Project would not result in significant impacts; therefore, no mitigation is required.

3.19 UTILITIES AND SERVICE SYSTEMS

Would the Proposed Project:

Question	CEQA Determination
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less Than Significant Impact
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) Result in a determination by the wastewater treatment provider which 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?	No Impact
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
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

3.19.1 Environmental Setting

Potable water is supplied to the Proposed Project sites by EBMUD. The Proposed Project sites are generally paved and surrounded by industrial land use. The Proposed Project sites have lighting, fencing, and K-rail barriers to control truck parking. Underground electrical, fire suppression water, potable water, and storm drain lines are present at the Proposed Project sites.

3.19.2 Regulatory Setting

No federal or state laws or regulations pertaining to this issue area were identified. Local goals, policies, and/or regulations applicable to this issue area are as follows.

The City of Oakland General Plan Open Space, Conservation and Recreation Element (City of Oakland 1996) contains the following goals relevant to utilities and services systems:

- Policy CO-4.1: Emphasize water conservation and recycling strategies in efforts to meet future demand.
- Policy CO-4.3: Promote the use of reclaimed wastewater for irrigating landscape medians, cemeteries, parks, golf courses, and other areas requiring large volumes of non-potable water.
- Policy CO-13.2: Support public information campaigns, energy audits, the use of energy-saving appliances and vehicles, and other efforts which help Oakland residents, businesses, and City operations become more energy efficient.
- Policy CO-13.3: Encourage the use of energy-efficient construction and building materials. Encourage site plans for new development which maximize energy efficiency.

The City also has other applicable programs which include the following:

- *City of Oakland Zero Waste Strategic Plan*
  The City of Oakland developed the Zero Waste Strategic Plan in November 2006. A goal of the plan is to reduce waste disposal.
- *City of Oakland Green Building Ordinance and Sustainable Green Building*
  The City adopted mandatory green building standards for private development projects to integrate environmentally sustainable strategies in building construction in the City of Oakland.

3.19.3 Impact Analysis

a) Less Than Significant Impact

The Proposed Project would require construction to upgrade electric power facilities. Alternatives 1 and 2 propose to install new EV chargers, install solar systems and supporting infrastructure, install battery systems to increase storage capacity, and upgrade substations on existing paved lots within the Proposed Project sites. The Proposed Project would also require excavations up to 4-feet-wide and up to 10-feet deep to accommodate trenching (in which duct arrays and conduits for electric power facilities would be installed) for substation upgrades for both Alternatives 1 and 2: up to 7,000 LF along 7th Street (from the Everport Terminal Operator site to the intersection of 7th Street at Maritime Street) and up to 9,000 LF along Maritime Street, Middle Harbor Road, and Adeline Street (from the Roundhouse site to the intersection of Maritime Street at 7th Street). The Proposed Project would generate up to 1 MW of electricity at the Harbor Facilities site and up to 0.12 MW of electricity at the Roundhouse site, for a total of up to 1.12 MW of electricity. Per the lease, the lessee shall make all utility-related improvements necessary to fulfill the obligations of the lease. Off-site relocations are not anticipated to be required. The impact is less than significant.

b, c, e) No Impact

The Proposed Project would not require water to serve the Proposed Project sites other than for emergency use for both alternatives 1 and 2. While a fire suppression water system exists at the Proposed Project sites, no additional demands on fire suppression water are anticipated. The Proposed Project would not require new or expanded entitlements to the water supply. Additionally, the Proposed Project would not affect the capacity of the existing wastewater treatment system. The Proposed Project would comply with all federal, state and local statutes and regulations related to solid waste. The Proposed Project would dispose of or recycle all construction debris in accordance with applicable laws and regulations. There would be no impact.

d) Less Than Significant Impact

For both alternatives 1 and 2, solid waste generated from construction would consist of a small amount of construction debris and recyclable material; ballast, asphalt and excavated soil would be reused/recycled to the degree feasible. During operations solid waste generation would be limited to small quantities of debris removed from containers and wastes generated by on-site maintenance activities. There are several landfills within 50 miles of the Proposed Project that have sufficient permitted capacity to accommodate the Proposed Project's solid waste disposal needs. The impact is less than significant.

3.19.4 Mitigation Summary

The Proposed Project would not result in significant impacts; therefore, no mitigation is required.

3.20 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Proposed Project:

Question	CEQA Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
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
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
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

3.20.1 Environmental Setting

The Proposed Project is located in a developed industrial area. The California department of Forestry and Fire Protection identifies fire hazards based on factors such as fuels, terrain, and weather. The Proposed Project is not located within a designated State Responsibility Area or Federal Responsibility Area fire hazard severity zone (CALFIRE, 2022). The Proposed Project is located within a Non-Very High Fire Hazard Severity Zone (CALFIRE, 2008).

3.20.2 Regulatory Setting

There are no federal laws or regulations pertaining to this issue area that are relevant to the Proposed Project. State laws, Local goals, policies, and/or regulations applicable to this issue area are as follows.

CCR Title 24 Title 24 of the CCR ("California Building Standards Code") sets forth the fire, life-safety and other building-related regulations applicable to any structure fit for occupancy statewide for which a building permit is sought. The 2022 triennial edition of Title 24 contains 11 parts, including (with brief descriptions):

- Part 2, California Building Code: general standards for the design and construction of buildings, including provisions related to fire, life safety and structural safety.
- Part 3, California Electrical Code: electrical building standards.
- Part 9, California Fire Code (CFC): building standards related to fire safety that are referenced in other parts of Title 24. Topics addressed in the code include automatic sprinkler systems, fire-alarm systems, access by fire-fighting equipment, fire hydrants, explosion-hazards safety, hazardous-materials storage and use, protection for first responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and premises. The CFC is based on the Uniform Fire Code (UFC), a "model" code adopted through national-level consensus, and which

does not carry the weight of law (unlike the CFC). The CFC incorporates by reference the text of the latest published UFC, and reflects additions and deletions made to the UFC by the state.

The City of Oakland General Plan Safety Element includes the following policies relevant to the Proposed Project, and wildfire risk (City of Oakland, 2023e).

- Policy SAF-2.1: Continue, enhance or implement programs that seek to reduce the risk of structural fires. Prioritize programs in areas with greatest risk and greatest social vulnerability.
- Policy SAF-2.2: Manage vegetation and the urban forest to reduce combustible load, erosion, and other risks exacerbated by climate change.
- Policy SAF-2.3: Prioritize development in areas with existing adequate road networks, evacuation routes, and water infrastructure. Require any new development in the Very High Fire Hazard Severity Zone to prepare a Fire Protection Plan that minimizes risks.

3.20.3 Impact Analysis

a) No Impact

The Proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Emergency response times are not anticipated to change during construction. In addition, the Proposed Project would not conflict with any other emergency response or evacuation plan. Therefore, there would be no impact.

b, c, d) No Impact

The Proposed Project would not exacerbate wildfire risks, require the installation or maintenance of infrastructure that may exacerbate wildfire risk, or expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Alternatives 1 and 2 propose to new EV chargers, install solar systems and supporting infrastructure, install battery systems to increase storage capacity, and upgrade substations on existing paved lots. The Proposed Project does not involve the occupation of habitable structures and does not include the installation of associated infrastructure that would exacerbate wildfire risk.

3.20.4 Mitigation Summary

The Proposed Project would not result in significant impacts; therefore, no mitigation is required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

Question	CEQA Determination
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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant Impact
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 Impact
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Less Than Significant Impact

3.21.1 Impact Analysis

a, b, c) Less Than Significant Impact

As supported by the impact analyses of this Draft IS/ND, the proposed Project does not have the potential to substantially degrade the quality of the environmental, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal. In the event that historical resources are uncovered during Project construction, the Proposed Project would follow the requirements detailed in the Port's Emergency Plan of Action for Discoveries of Unknown Historic or Archaeological Resources (Port of Oakland, n.d.) and therefore the impact to examples of the major periods of California history or prehistory would be less than significant. Construction-related air quality impacts would be less than significant because BMPs would be implemented for fugitive dust control and the following would be implemented to minimize construction-related air quality impacts:

- Require all diesel-fueled off-road construction equipment used on land to be equipped with USEPA Tier 4 final compliant engines or better as a condition of contract unless a unique piece of equipment is not available as a Tier 4 engine.
- Use ZE and hybrid-powered equipment, to the greatest extent possible. The performance criterion for meeting this standard assumes availability by at least two commercial rental facilities in the SFBAAB, to the greatest extent possible.

Therefore, environmental effects would cause less than significant substantial adverse effects on human beings, either directly or indirectly. Construction-related utilities and service systems impacts would be less than significant; electrical power facilities may be temporarily impacted when tying upgraded infrastructure into existing infrastructure. Nighttime and/or weekend work would be implemented to reduce construction-related utilities and service systems impacts and therefore cumulatively considerable air quality and utilities and service systems construction-related impacts would be less than significant.

Operational and maintenance-related utilities and service systems cumulatively considerable impacts on past, other current, and probable future projects would also be less than significant, as the Proposed Project would increase the Port's electrical distribution resiliency, provide a back-up renewable energy source in case of outages or electricity utilization restriction events (e.g., heat waves), and reduce congestion by limiting the need for offsite trips necessary only for refueling. The impacts would be less than significant.

4 LIST OF PREPARERS AND REVIEWERS

The Port's Environmental Programs and Planning staff, with the assistance of Jacobs, prepared this Draft IS/ND. The analysis in this Draft IS/ND is based on information identified, acquired, reviewed, and synthesized based on the Port's guidance and recommendations. The primary people responsible for contributing to, preparing, and reviewing this report are listed in Table 4-1.

Table 4-1. List of Preparers and Reviewers

Organization	Name	Role
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5 DISTRIBUTION LIST

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6 REFERENCES

Alameda County. 2014. Castro Valley General Plan. Natural Hazards and Public Safety. Accessed online at: https://www.acgov.org/cda/planning/generalplans/documents/Chapter-10-Natural-Hazards-and-Public-Safety.pdf.

Alameda County Transportation Commission. 2016. Alameda County Goods Movement Plan. Accessed online at: https://www.alamedactc.org/wp-content/uploads/2018/11/AlamedaCTC_GoodsMovementPlan_FINAL.pdf. February.

Alameda County Transportation Commission. 2020. Alameda Countywide Transportation Plan. Accessed online at: https://www.alamedactc.org/wp-content/uploads/2021/02/2020_CTP_Final.pdf. December.

AMEC Geomatrix, Inc. (AMEC), 2009. Revised Site Management Plan Former Union Pacific Roundhouse Area 1407 Middle Harbor Drive, Oakland, California. January 9.

Bay Area Air Quality Management District. 2001. Revised San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard. Accessed online at: https://ww2.arb.ca.gov/resources/documents/2001-san-francisco-bay-area-ozone-plan. October 24.

Bay Area Air Quality Management District. 2017a. California Environmental Quality Act Air Quality Guidelines. Accessed online at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. May.

Bay Area Air Quality Management District. 2017b. Final 2017 Clear Air Plan. Accessed online at: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf. April 19.

Bay Area Air Quality Management District. 2019. Owning Our Air – the West Oakland Community Action Plan – A Summary. Accessed online at: https://www.baaqmd.gov/~/media/files/ab617-community-health/west-oakland/100219-files/owning-our-air-plan-summary-pdf.pdf?sc_lang=en. October 2.

Bay Area Air Quality Management District. 2022a. CEQA Thresholds and Guidelines Update. Accessed online at: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. April 20.

California Air Resources Board. 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. Accessed online at: https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/rrpfinal.pdf. October.

California Air Resources Board. 2013. California Almanac of Emissions and Air Quality – 2013 Edition. Accessed online at: https://ww2.arb.ca.gov/our-work/programs/resource-center/technical-assistance/air-quality-and-emissions-data/almanac.

California Air Resources Board. 2016. Ambient Air Quality Standards. Accessed online at: https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf. May 4.

California Air Resources Board. 2020. Ambient Air Quality Standards Designation Tool. Attainment Status for 94607 in the year 2020. Accessed online at: https://ww2.arb.ca.gov/aaqs-designation-tool.

California Air Resources Board. 2022a. Current California GHG Emission Inventory Data. Accessed online at: https://ww2.arb.ca.gov/ghg-inventory-data. October 26.

California Air Resources Board. 2022b. 2022 Scope Plan for Achieving Carbon Neutrality. Accessed online at: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf. December.

California Department of Forestry and Fire Protection. 2008. Alameda County Very High Fire Hazard Severity Zones in LRA. Accessed online at: https://osfm.fire.ca.gov/media/6638/fhszl_map1.pdf. September 3.

California Department of Forestry and Fire Protection. 2022. Fire Hazard Severity Zones (FHSZ). Accessed online at: https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/. November 21.

California Department of Transportation. 2020a. Vehicle Miles Traveled-Focused: Transportation Impact Study Guide. Accessed online at: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf. May 20.

California Department of Transportation. 2020b. Transportation Analysis under CEQA: First Edition. Evaluating Transportation Impacts of State Highway System Projects. Accessed online at: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-taf-fnl-a11y.pdf. September.

California Department of Transportation 2020c. Transportation Analysis Framework: First Edition. Evaluating Transportation Impacts of State Highway System Projects. Accessed online at: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-taf-fnl-a11y.pdf. September.

California Emissions Estimator Model. 2022. New Project. Accessed online at: https://www.caleemod.com/.

California Environmental Protection Agency. 1998a. Initial Statement of Reasons for Rulemaking – Staff Report – Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant. Accessed online at: https://ww2.arb.ca.gov/sites/default/files/classic/toxics/dieseltac/staffrpt.pdf. June.

California Environmental Protection Agency. 1998b. Findings on the Scientific Review Panel on The Report on Diesel Exhaust As Adopted at the Panel's April 22, 1998 Meeting. Accessed online at: https://ww2.arb.ca.gov/sites/default/files/classic/toxics/dieseltac/de-fnds.htm.

California Environmental Protection Agency. 2023. Cortese List: Section 65962.5(a). Accessed online at: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/. October 25.

California Office of Historic Preservation. 2011. Technical Assistance Series #6 California Register and National Register: A Comparison (for purposes of determining eligibility for the California Register). Accessed online at: https://ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

CH2M Hill. 2016. Final Initial Study/Negative Declaration for the Roundhouse Area Improvements Project. December.

City of Oakland. 1996. Open Space Conservation and Recreation: An Element of the Oakland General Plan. Accessed online at: https://cao-94612.s3.us-west-2.amazonaws.com/documents/oak035254.pdf. June.

City of Oakland. 1998. Envision Oakland. City of Oakland General Plan. Land Use and Transportation Element. Accessed online at: https://oaklandca.s3.us-west-1.amazonaws.com/oakca1/groups/ceda/documents/webcontent/oak035264.pdf. March.

City of Oakland. 2000. Redevelopment Plan for the Oakland Army Base Redevelopment Project. Accessed online at: https://cao-94612.s3.amazonaws.com/documents/OAB-Redevelopment-Plan-2000.pdf. June 27.

City of Oakland. 2020. Oakland 2030 Equitable Climate Action Plan. Accessed online at: https://www.oaklandca.gov/documents/oakland-2030-equitable-climate-action-plan-final-draft-july-2020. July.

City of Oakland. 2022a. City of Oakland Zoning and Estuary Policy Plan Maps. Accessed online at: https://cao-94612.s3.amazonaws.com/documents/Oakland-Zoning-Map-2.17.2022.pdf. February 17.

City of Oakland. 2022b. Downtown Oakland Plan Area Proposed Zoning. Accessed online at: https://oakland.konveio.com/downtown-oakland-specific-plan-zoning-amendments. April.

City of Oakland. 2022c. Oakland, California - Planning Code / Chapter 17.120 – Performance Standards. Accessed online at: https://library.municode.com/ca/oakland/codes/planning_code?nodeId=TIT17PL_CH17.120PEST#:~:text=050%20%2D%20Noise.,%2C%20B.%2C%20or%20C. August 11.

City of Oakland. 2022d. Oakland, California – Planning Code / Code Comparative Table and Disposition List. Accessed online at: https://library.municode.com/ca/oakland/codes/planning_code?nodeId=COCOTADILI. August 11.

City of Oakland. 2023a. City of Oakland Planning and Zoning Interactive Map. https://oakgis.maps.arcgis.com/apps/webappviewer/index.html?id=3676148ea4924fc7b75e7350903c7224. Accessed October 31.

City of Oakland. 2023b. Review Construction Ordinance Hours & Report a Noise Violation. Accessed online at: https://www.oaklandca.gov/resources/read-the-oakland-noise-ordinance. October 25.

City of Oakland. 2023c. Zero Emission Vehicle Action Plan. Accessed online at: https://www.oaklandca.gov/documents/oakland-2030-equitable-climate-action-plan-final-draft-july-2020. January.

City of Oakland. 2023d. 2045 General Plan Update. Safety Element. Accessed online at: https://www.oaklandca.gov/topics/oakland-2045-general-plan-safety-element. September 26.

ERM-West, Inc. 2013. Phase I Environmental Site Assessment. Former Port of Oakland Facilities Operations and Maintenance Property. 205/209 Brush Street Oakland, CA. June.

ESA. 2009. Coscol Petroleum Corporation Marine Terminal Deconstruction and Pipeline Abandonment Project MND - Mitigated Negative Declaration. Accessed online at: https://ceqanet.opr.ca.gov/2009032085. March 25.

Federal Highway Administration (FHWA). 2017. Construction Noise Handbook. Accessed online at: https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm. August 24.

Metropolitan Transportation Commission. 2016. San Francisco Bay Area Goods Movement Plan. Accessed online at: https://mtc.ca.gov/sites/default/files/RGM_Full_Plan.pdf. February.

Metropolitan Transportation Commission. 2017. Final Plan Bay Area 2040. Accessed online at: https://mtc.ca.gov/sites/default/files/Final_Plan_Bay_Area_2040.pdf. July 26.

Port of Oakland and City of Oakland. 2019. West Oakland Truck Management Plan. Accessed online at: https://www.oaklandca.gov/resources/west-oakland-truck-management-plan-tmp. May.

Port of Oakland and San Francisco Bay Regional Water Quality Control Board. 2008. Covenant and Environmental Restriction on Property: Former Union Pacific Railroad Roundhouse Area. April 11.

Port of Oakland. No date. Emergency Plan of Action for Discoveries of Unknown Historic or Archaeological Resources.

Port of Oakland. 2009. Maritime Air Quality Improvement Plan. Accessed online at: https://www.portofoakland.com/files/pdf/environment/maqip090515.pdf. April.

Port of Oakland. 2016. Land Use and Development Code for the Oakland Airport Business Park. April.

Port of Oakland. 2019. Accessed online at: Seaport Air Quality 2020 and Beyond Plan – The Pathway to Zero Emissions. https://www.portofoakland.com/files/PDF/Volume%20I.pdf. May 23.

Port of Oakland. 2020. Port-Wide Soil Management Protocol: Part of Port of Oakland Materials Management Plan. January.

Port of Oakland. 2022. Green Power Microgrid Project Trade Corridor Enhancement Program Project Application Cycle 3. November.

R&M Environmental and Infrastructure Engineering, Inc. 2007. Removal Action Oversight and Documentation. Downtown Oakland CNG Station. 205/209 Brush Street Oakland, CA. October 16.

Ramboll. Port of Oakland 2021. Seaport Air Emissions Inventory Final Report. Accessed online at: https://www.portofoakland.com/files/PDF/Port%20Oakland%202020%20Emissions%20Inventory%20Final%20Report.pdf. November.

Regional Water Quality Control Board. 2010. No Further Action for the Former Union Pacific Roundhouse site, 1407 Middle Harbor Road, Oakland, Alameda County. April 23.

U.S. Environmental Protection Agency. 2023. Summary of the Energy Independence and Security Act. Accessed online at: https://www.govinfo.gov/content/pkg/BILLS-110hr6enr/pdf/BILLS-110hr6enr.pdf.

U.S. Environmental Protection Agency. 2023b. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021. Accessed online at: https://www.epa.gov/system/files/documents/2023-04/US-GHG-Inventory-2023-Main-Text.pdf.

U.S. Environmental Protection Agency. 2023c. Regulations for Greenhouse Gas Emissions from Passenger Cars and Trucks. Accessed online at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-passenger-cars-and#Overview. October 31.