Zero Emissions Port Electrification of Operations and Grid Reliability Project

Los Angeles Department of Water & Power

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111 N. Hope Street, Los Angles, California 90012

TRANSMITTAL 1

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Acronyms/Abbreviations	Definition
AB	Assembly Bill
ADT	average daily traffic
AFY	acre-feet per year
amsl	above mean sea level
API	area of potential impacts
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ATCM	Airborne Toxic Control Measure
BMP	best management practice
CAAP	Clean Air Action Plan
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCGS	combined cycle generation system
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CH_4	methane
CHE	cargo-handling equipment
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CTG	combustion turbine generator
CRHR	California Register of Historical Resources
CRMP	cultural resources monitoring plan
CRPR	California Rare Plant Ranks
CUPA	Certified Unified Program Agency
yd^3	cubic yards
dB	decibel
dBA	A-weighted decibel scale
DPM	diesel particulate matter
DS	Distributing Station
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency

Acronyms/Abbreviations	Definition
EPRI	Electric Power Research Institute
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
ft	feet
FTA	Federal Transit Administration
FRD-TER 1	Ford – Terminal 1 circuit
FRD-PED 1	Ford – Pedler 1 circuit
GHG	greenhouse gas
GPD	gallons per day
GPM	gallons per minute
GWP	global warming potential
HCP	Habitat Conservation Plan
HGS	Harbor Generating Station
HMBP	Hazardous Material Business Plan
HRSG	heat recovery steam generator
I	Interstate
ips	inches per second
IS	Initial Study
ISO	International Organization of Standardization
kV	kilovolt
LAHD	Los Angeles Harbor Department
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
L_{dn}	day/night average sound level
L_{eq}	Equivalent Noise Level
LAHCM	Los Angeles Historic Cultural Monument
LAMC	Los Angeles Municipal Code
LA Metro	Los Angeles Metropolitan Transportation Authority
LOS	level of service
LPHD	Leland Park Historic District
LST	Localized Significance Threshold
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MGD	million gallons per day
MM	mitigation measure
MND	Mitigated Negative Declaration
MP1HD	Municipal Pier 1 Historic District
MRZ	Mineral Resource Zone

Acronyms/Abbreviations	Definition
MS4	Municipal Separate Storm Sewer System
MT	metric tons
$MTCO_2e$	metric tons of carbon dioxide equivalent
MVA	megavolt-amperes
MW	megawatts
MWD	Metropolitan Water District of Southern California
Mya	million years ago
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
N_2O	nitrous oxide
NO_2	nitrogen dioxide
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OHP	California Office of Historic Preservation
OSHA	Occupational Safety and Health Administration
OTC	once through cooling
PCH	Pacific Coast Highway
PCE	passenger car equivalence
PF	Public Facilities
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
PM_{10}	particulate matter 10 microns or less in diameter
POLA, Port	Port of Los Angeles
PPV	peak particle velocity
PRC	Public Resources Code
PRMMP	Paleontological Resources Mitigation and Monitoring Program
project, proposed project	Zero Emissions Port Electrification of Operations and Grid Reliability Project
PVC	polyvinyl chloride
RCNM	Roadway Construction Noise Model
ROW	right-of-way
RS	Receiving Station
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments

Acronyms/Abbreviations	Definition
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SLF	Sacred Lands File
SLR	sea level rise
SO_2	sulfur dioxide
SO_X	sulfur dioxide
SPL	sound pressure level
SR	State Route
SRA	source receptor area
STG	steam turbine generator
SVP	Society of Vertebrate Paleontology
SWMP	soil and groundwater management plan
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminants
TCR	tribal cultural resource
TIHD	Terminal Island Historic District
TIWRP	Terminal Island Water Reclamation Plant
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
V	volt
VMT	vehicle miles traveled
VOC	volatile organic compound
ZEPEO	Zero Emissions Port Electrification of Operations

SECTION 1
PROJECT DESCRIPTION

1.1 Project Overview

In 2017, the City of Los Angeles Harbor Department (LAHD) adopted the Clean Air Action Plan (CAAP), which outlined goals to make the Port of Los Angeles (POLA or Port) a global leader for cleaner air, sustainability, and innovation by electrifying Port operations and reducing greenhouse gas (GHG) emissions below 1990 levels by 40% in 2030 and 80% by 2050. POLA is expected to see increasing levels of electrical load growth and electrification as it adopts the CAAP zero-emission goals, zero-emission cargo-handling equipment (CHE) by 2030, and zero-emission trucks by 2035. CHE includes equipment that moves cargo (including cargo in containers, general cargo, and bulk cargo) to and from marine vessels, railcars, and on-road trucks. To support these goals, the Los Angeles Department of Water and Power (LADWP) proposes to expand the capacity of the electrical sub-transmission and electric distribution system within POLA, known as the Zero Emissions Port Electrification of Operations (ZEPEO) and Grid Reliability Project and referenced herein as the "proposed project" or "project."

LADWP proposes to increase the capacity of electricity distribution within the POLA by installing sixteen (16) new 34.5-kilovolt (kV) underground distribution circuits. Electricity is currently supplied to POLA through Receiving Station (RS) - Q located at the Harbor Generating Station (HGS); however, RS-Q and RS-C (located in Wilmington) would need to increase their electrical capacity to provide the additional 200 megavolt-amperes (MVA) needed for the established electrification goals. To accommodate the estimated increase in load, LADWP is proposing to expand the capacity of RS-Q and RS-C, install three (3) new switching stations, and construct a wet cooling tower for HGS to maintain existing generation capacity.

1.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA; California Public Resources Code [PRC] Section 21000 et seq.) applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. The proposed project constitutes a project as defined by CEQA. The CEQA Guidelines (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Sections 15000–15387) Section 15367 states that lead agency "means the public agency which has the principal responsibility for carrying out or approving a project." Therefore, as a municipal utility that will implement the proposed project, LADWP is the lead agency responsible for compliance with CEQA.

As the CEQA lead agency, LADWP must complete an environmental review to determine if implementation of the proposed project would result in significant adverse environmental impacts and to propose measures, as feasible, to eliminate or reduce any such identified impacts. LADWP has prepared a CEQA Initial Study (IS) to assist in making this determination. Based on the nature and scope of the proposed project and the evaluation contained in the IS environmental checklist (included herein), LADWP, as the lead agency, has concluded that a Mitigated Negative Declaration (MND) is the proper level of CEQA environmental documentation for the proposed project. The IS shows that impacts caused by the proposed project are either less than significant or significant but mitigable to a less-than-significant level with incorporation of appropriate

mitigation measures as defined herein. This conclusion is supported by CEQA Guidelines Section 15070, which states that an MND can be prepared when:

> the initial study identifies potentially significant effects, but (1) revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

1.3 Location and Setting

The proposed project is located within POLA, HGS, and the neighborhoods of Wilmington and San Pedro. The POLA is bounded to the north by Harry Bridges Avenue, to the east by the Schuyler F. Heim Bridge and Navy Way, to the south by the San Pedro Breakwater, and to the west by Harbor Boulevard. The project has eight (8) components (see Figure 1-1):

RS-Q Rack D	The new RS-Q Rack D would be directly west of HGS, on remediated Parcel Y.
RS-C Rack C	RS-C is located at 900 E Lomita Boulevard in the Wilmington community of Los Angeles.
Distribution Circuits	Ten (10) new circuits would be located within San Pedro and the outer POLA. Four (4) circuits would be located within Terminal Island in the POLA. Two (2) new circuits would be installed from RS-C in Wilmington to the RS-Q Area.
Three New Switching Stations	Three new switching stations would be constructed: one on Terminal Island, one on the southwest corner of John S Gibson Boulevard and Harry Bridges Boulevard, and one south of Signal Street and 22nd Street.
Parcel K Demolition and Remediation	Parcel K is located across Harry Bridges Avenue from HGS. The two (2) existing warehouses and associated hardscape would be demolished. After demolition, Parcel K would undergo soil remediation to industrial usage standards.
Harbor Wet Cooling Tower	A new cooling tower would be installed at HGS, located at 161 N Island Avenue north of the POLA. The HGS is bounded by E Harry Bridges Boulevard on the north, the Union Pacific Railroad right-of-way (ROW) on the south, N Fries Avenue on the east, and Lagoon Avenue on the west. HGS is associated with Assessor's Parcel Numbers (APNs) 7440-006-945 and 7440-009-904 and is zoned for Public Facilities.

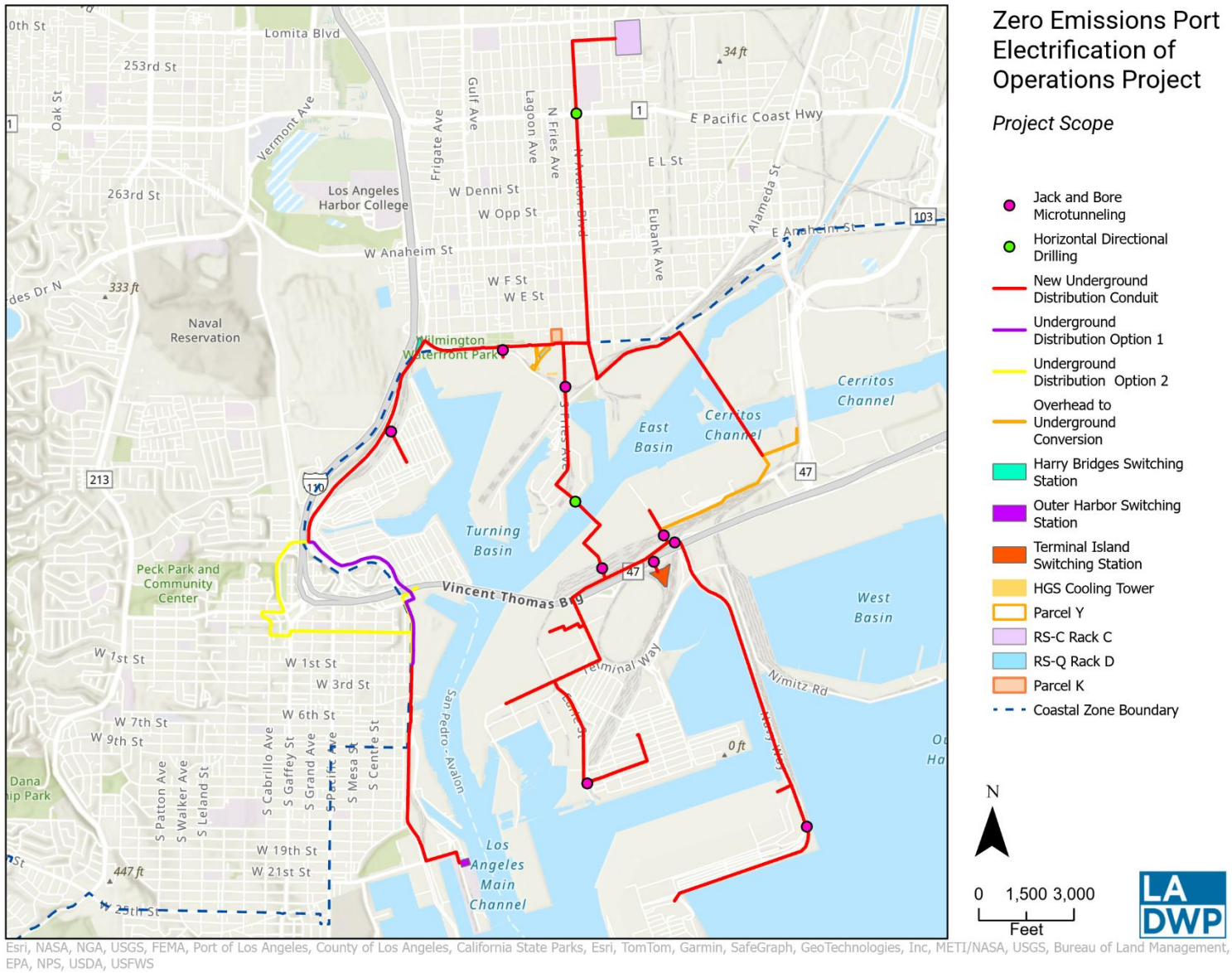


Figure 1-1 Project Scope

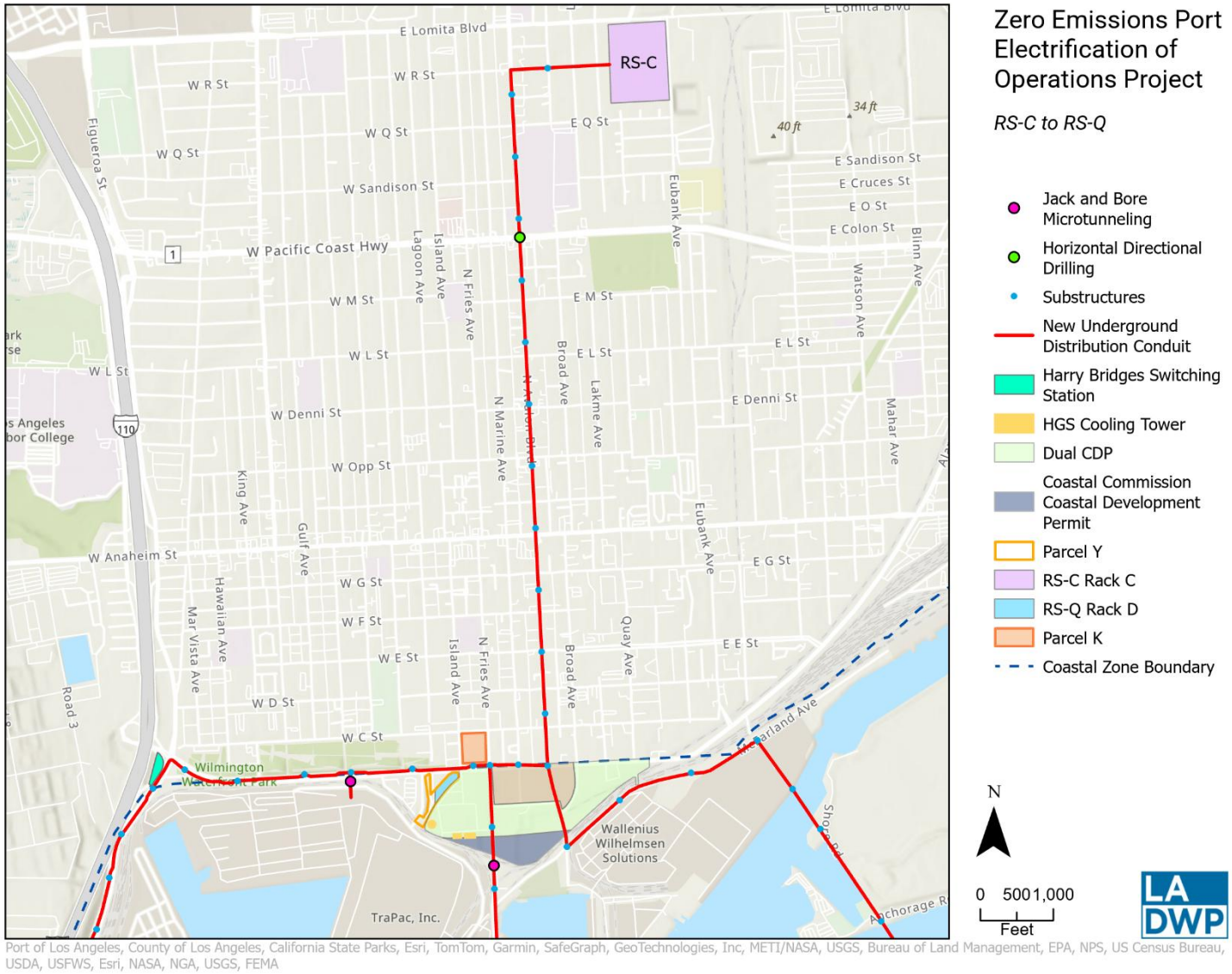


Figure 1-2 RS-C to RS-Q Overview

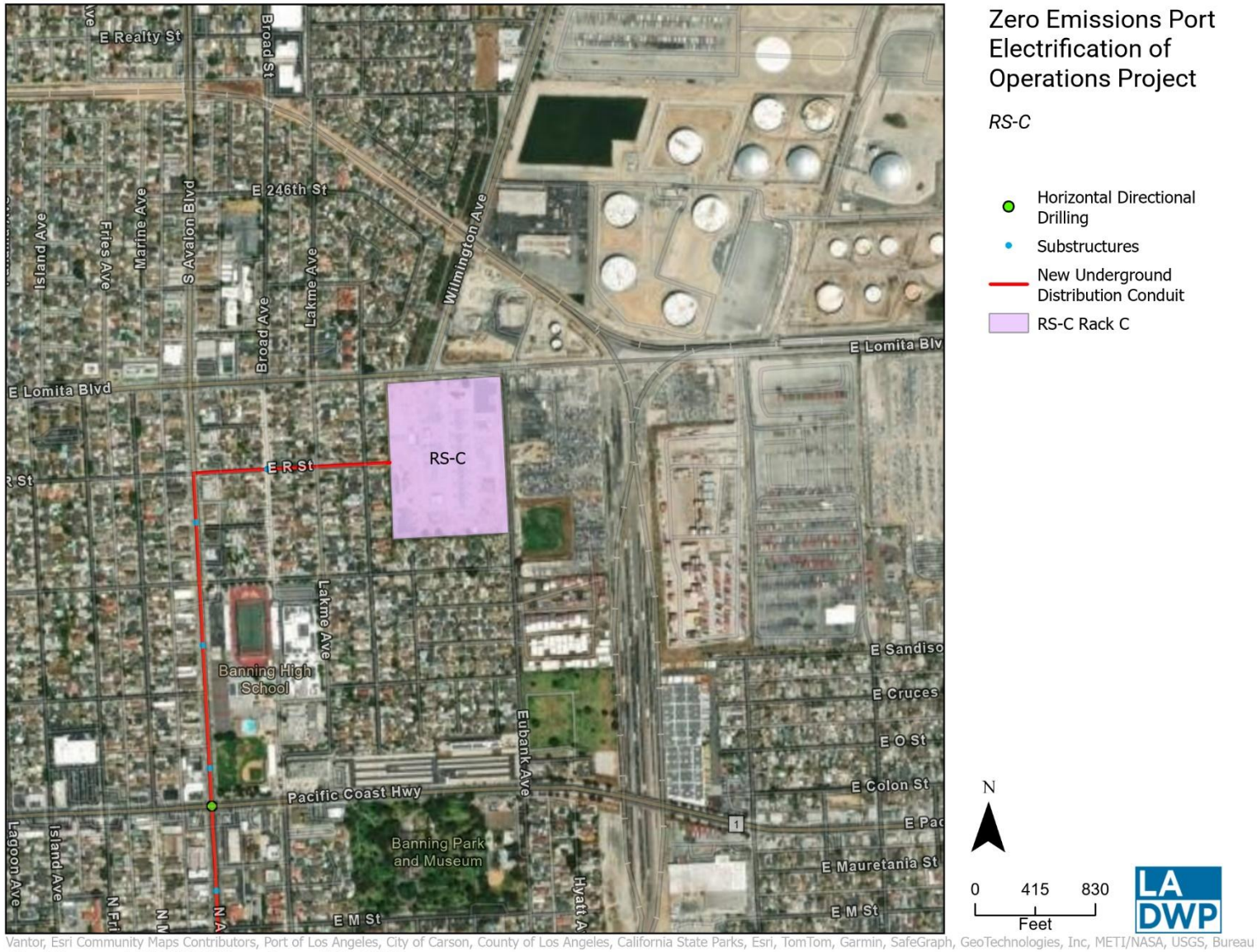


Figure 1-3 RS-C Location and Scope

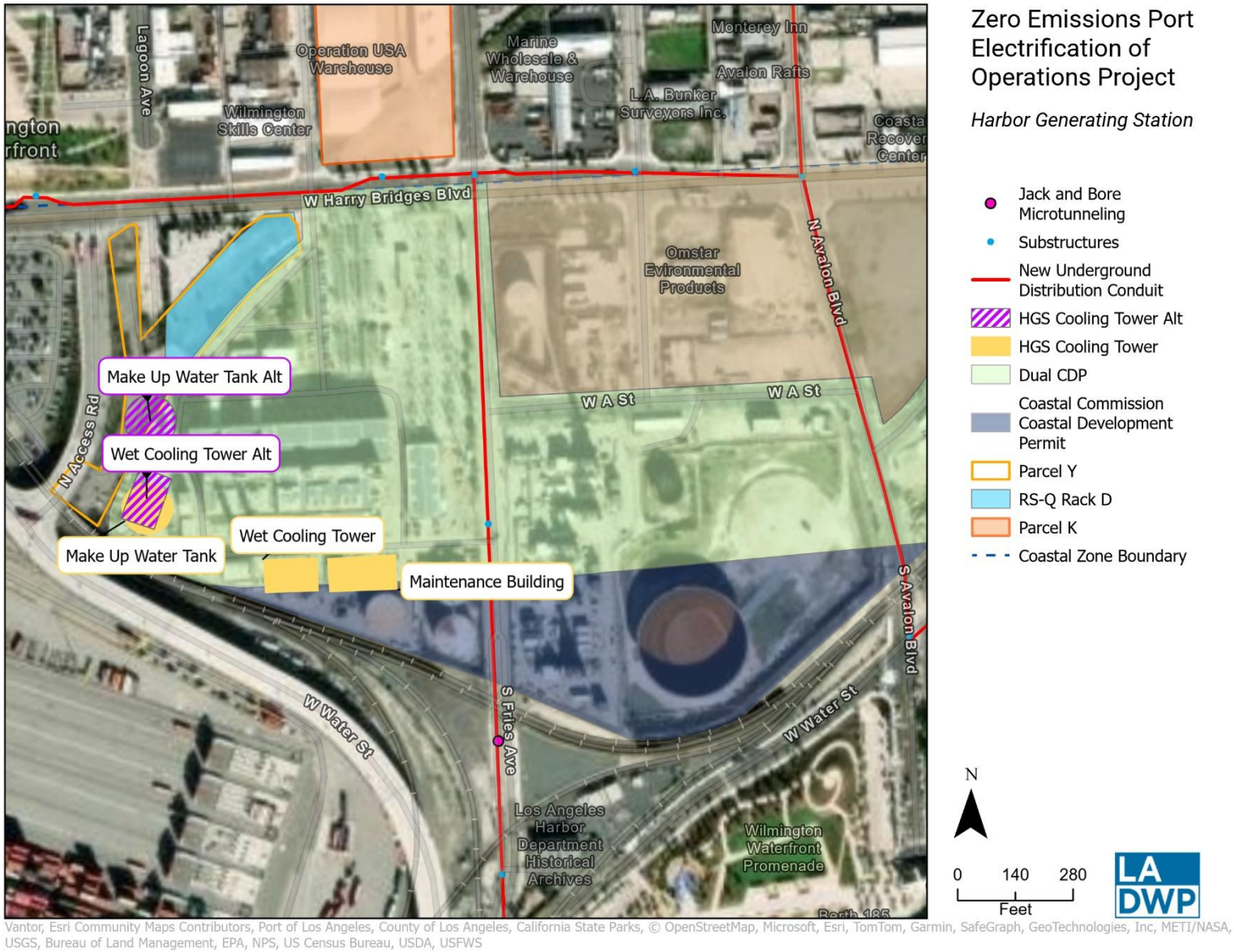


Figure 1-4 Harbor Generating Station, RS-Q, and the Switching Station Location

Figure 1-5 New Underground Distribution and Overhead to Underground Distribution Conversion Locations Within the Inner Harbor

Figure 1-6 Underground distribution and switching station locations on Terminal Island

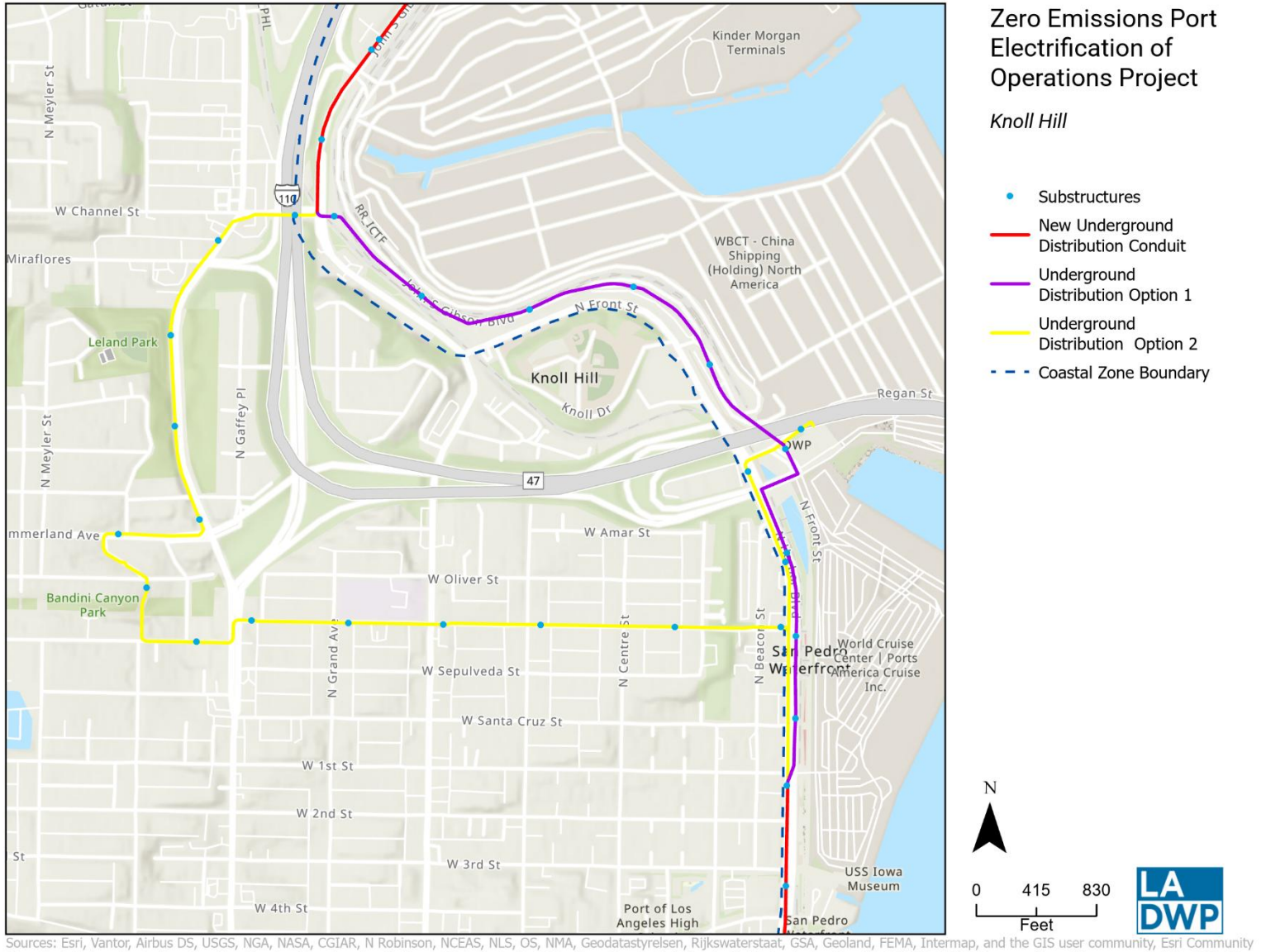
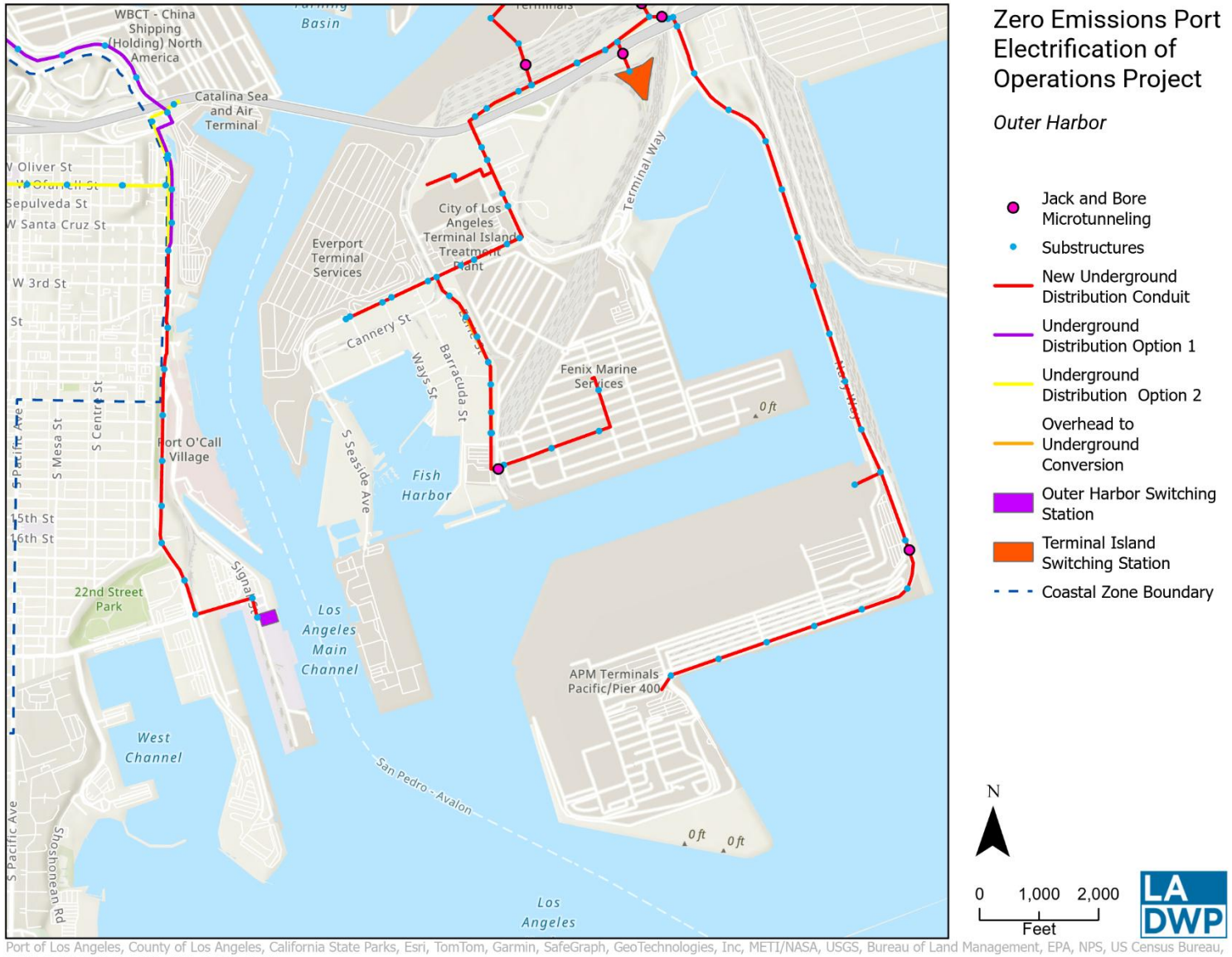


Figure 1-7 Underground distribution locations located in San Pedro



Port of Los Angeles, County of Los Angeles, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Esri, NASA, NGA, USGS, FEMA

Figure 1-8 Underground Distribution and Switching Station Locations Within the Outer Harbor, San Pedro, and Terminal Island

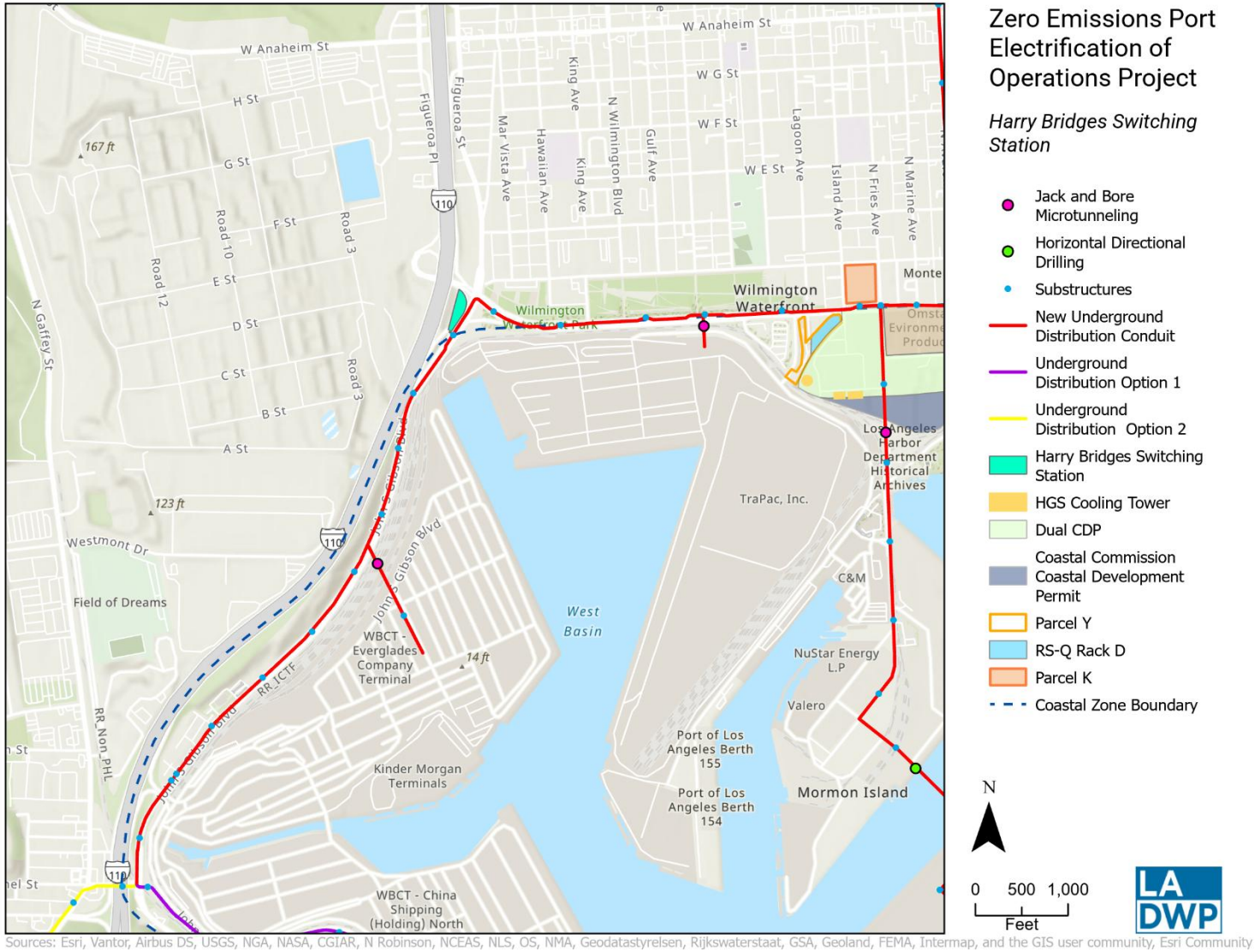


Figure 1-9 Underground Distribution and Harry Bridges Switching Station Locations Within the Inner Harbor, San Pedro, and Wilmington

Figure 1-10 Navigational Descriptions for the Port of Los Angeles Including Berth Numbers, Channel Names, and Basin Names

1.4 Background

Adopted in 2006, LAHD's CAAP is a comprehensive, far-reaching strategy for reducing port-related air pollution and related health risks, while allowing port development, job creation, and economic activity associated with that development to continue. The CAAP, which was most recently updated in 2017, is a collaboration of the Ports of Long Beach and Los Angeles that sets major goals to illustrate a variety of strategies across various sectors of port operations. The two primary goals set in the CAAP are 100% zero-emissions CHE by 2030 and 100% zero-emission drayage truck fleet by 2035, as well as an overarching goal to reduce GHG emissions from port-related sources to 80% below 1990 levels by 2050.

In pursuit of these goals, LAHD continues to work with local partners to develop, demonstrate, and deploy zero-emissions equipment and vehicles into service at the Port. LAHD has invested approximately $30 million in directly funded demonstration projects through the Technology Advancement Program in partnership with the Port of Long Beach and cost-share elements of large grant projects funded by other agencies.

In addition to the CAAP goals, regulatory agencies continue to adopt environmental rules that require increased use of zero-emission technologies in goods movement. For example, the California Air Resources Board (CARB) has passed several regulations, such as the Commercial Harbor Craft and Ocean-Going Vessels at Berth Regulations, requiring the use of zero-emission equipment and increased use of shore power. These, and other similar regulations under consideration, place a distinct and clear need at the Port for additional electric power capacity.

In 2023, the Electric Power Research Institute (EPRI) completed the "Zero-Emission Planning and Grid Assessment for the Port of Los Angeles" study on behalf of LAHD and in coordination with LADWP. This study modeled grid loading at 50% and 100% electrification scenarios at the POLA. All scenarios indicated the need for LADWP to expand the capacity of distribution lines, receiving stations, and industrial stations that serve POLA to enable CHE and drayage truck electrification.

LADWP operates the RS-Q, located at HGS, and RS-C, located in Wilmington, providing essential electricity services to the POLA and a variety of customers in the San Pedro and Wilmington regions of Los Angeles. Receiving stations act as the intermediary between high-voltage transmission lines and the distribution system by stepping down high-voltage electricity to lower voltages. This infrastructure is critical in servicing a wide range of customers, with larger customers receiving power through a 34.5 kV system via industrial stations, and smaller residential and commercial customers served by a 4.8 kV system through distributing stations. RS-Q is instrumental in supporting about 160 industrial stations and eight distributing stations. At the heart of RS-Q are three transformer banks, each typically powering a rack containing multiple 34.5 kV circuits. Rack B within RS-Q is a vital component, as it primarily supplies electricity to the entire Port and other areas in San Pedro. The existing distribution infrastructure at RS-Q is currently strained, facing challenges with circuit congestion and limited capacity. These issues pose barriers to accommodating the anticipated load growth due to electrification.

HGS is one of LADWP's four in-basin generating facilities (Figures 1-1, 1-2, 1-4, 1-5, and 1-9), located in the Wilmington area of the City of Los Angeles. Three of these generating stations are located on the coast toward the southern and western boundaries of the power system. These facilities were sited along the coast for accessibility to ocean water, which has been used to cool various processes across the thermal power generation cycle. The southern and western portions

of LADWP's service territory form transmission cul-de-sacs, while electricity imports from outside the Los Angeles Basin predominantly flow in from the north. This means that renewable power flows from the north and dispatchable, natural-gas-fired generation flows from the south.

LADWP's generating units are subject to once through cooling (OTC) regulations according to the Clean Water Act's Rule 316(b). This policy was established to reduce negative environmental impacts on marine ecosystems such as entrainment and impingement. Under an extended timeline negotiated primarily with the State Water Resources Control Board (SWRCB), LADWP is required to eliminate the use of ocean water for cooling at HGS by December 31, 2029. As the OTC deadline approaches and, with reliability being a key consideration for LADWP's clean-energy transformation, it is critical that LADWP maintains acceptable generation capacity at the coastal generating stations. LADWP is proposing to convert HGS combined cycle's (Units 1, 2, and 5) existing cooling system to wet cooling with an evaporative cooling tower.

The conversion of Unit 5 to a non-OTC cooling system (a wet cooling tower) would allow the continued operation of the combined cycle generation system (CCGS) beyond 2029, providing up to 212 megawatts (MW) net dispatchable generation capacity to ensure the reliability and resilience of the City of Los Angeles's electrical power system while additional renewable generation, energy storage, distributed energy resources, and transmission system improvements are implemented, thereby facilitating the transition to a clean--energy future. While the long-term goal of the City of Los Angeles is to achieve 100% carbon free energy by 2035, the LA100 renewable energy study conducted for the City by the Department of Energy's National Renewable Energy Laboratory has recognized the criticality of maintaining in-basin dispatchable generation resources to maintain system reliability under a range of foreseeable circumstances, such as bad weather or fires impacting transmission lines (Cochran and Denholm 2021). Maintaining reliability would include the limited use of natural-gas generation where emissions could be offset by renewable energy credits and/or the conversion of existing natural-gas combustion units or the construction of new combustion units to operate on clean-burning renewable fuels.

1.5 Objectives

The objective of the proposed project is to reduce Port-related air pollution by increasing the capacity of the electrical sub-transmission and distribution system within POLA, Wilmington, and San Pedro to accommodate the estimated 200 MVA of additional electrical power the Port will require for electrification of CHE by 2030 and beyond. Volts (V) (one kilovolt, or kV, is equal to one thousand volts) represent the electro-motive force or "pressure" used to send amperes through a conductor. MVA is a unit used for measuring large amounts of apparent power. The apparent power is the product of the electrical current and the voltage in an electrical circuit, which represents the total Real power (used by resistive loads and conductors) and Reactive power (used by inductive or capacitive loads, equipment, or devices) in an electrical circuit. To meet this objective, existing electrical substations and distribution infrastructure must be expanded to meet these electrical power needs. It is also critical to maintain dispatchable generating capacity at HGS through the construction of a wet cooling tower.

1.6 Project Components

The proposed project has eight (8) components indicated in Figure 1-1 and listed in Table 1-1 below.

Table 1-1.1 Project Components

Component	Location	Figure Number
RS-Q Rack D	Parcel Y	1-1, 1-2, 1-4, 1-5, 1-9
RS-C Rack C	Southwest corner of E Lomita Boulevard and Eubank Avenue to Terminal Island	1-1, 1-2, 1-3
16 new 34.5 kV distribution circuits	Port, San Pedro, Wilmington	1-1–1-9
Terminal Island Switching Station	Terminal Island	1-1, 1-5, 1-6, 1-8
Harry Bridges Switching Station	Southwest corner of John S Gibson Boulevard and Harry Bridges Boulevard	1-1, 1-2, 1-9
Outer Harbor Switching Station	South of Signal Street and Signal Place	1-1, 1-6, 1-8
Parcel K Demolition and Remediation	Northwest corner of Fries Avenue and Harry Bridges Boulevard	1-1, 1-2, 1-4, 1-5, 1-9
HGS Wet Cooling Tower	HGS	1-1, 1-2, 1-4, 1-5, 1-9

1.6.1 RS-Q Rack D

RS-Q Rack B currently provides electricity to San Pedro and the Port, with a capacity of 160 MVA. Port electrification is estimated to require an additional 200 MVA for CHE and terminal operations. RS-Q Rack B faces limitations in supporting future load growth due to circuit congestion and capacity constraints. Currently, Rack B has nine (9) energized circuits and one (1) spare circuit position. A new 160 MVA transformer bank and ten (10) new circuit positions, or "rack," is anticipated to be needed to support the future load growth at the Port and surrounding area.

LADWP proposes to install a new rack, Rack D, for RS-Q on Parcel Y directly to the west of HGS. Parcel Y would be transferred to LADWP by LAHD in 2026.

Additional upgrades will include a perimeter wall, grounding grid, new circuit breakers, disconnect switches, bus work, relays and relay house, and other electrical equipment to be installed for the new rack. The new rack would be remotely controlled and operated. Periodic maintenance would be required to repair or replace damaged equipment or conduct routine maintenance.

Due to the presence of contaminated soil at Parcel Y, LAHD is proposing a dig-and-haul approach to excavate contaminated soil and dispose of it at an appropriate off-site landfill. Remediation of Parcel Y is necessary to meet human health risk screening levels for commercial/industrial land use and to remove hazardous soils. All work would be conducted consistent with applicable federal, state, and local regulations and best management practices (BMPs).

1.6.2 RS-C Rack C

RS-C provides power to the Wilmington community and has the capacity to support the extension of Rack C by increasing the number of circuits out of RS-C. RS-C Rack C extension will allow for

up to four (4) additional line positions, and one (1) backup transformer bank. Four (4) of these new line positions will be used to support POLA electrification, as described below in Section 1.6.3. The new rack would be remotely controlled and operated. Periodic maintenance would be required to repair or replace damaged equipment or conduct routine maintenance.

1.6.3 34.5 kV Underground Distribution Circuits

To deliver an additional 200 MVA to POLA, LADWP would install new underground distribution lines from RS-C Rack C and RS-Q Rack D to distribution switching stations located adjacent to and within the POLA. The underground distribution alignment would fall primarily in the public utility ROW, on LADWP property, or within the POLA. These new distribution lines are described below based on which receiving station they originate from. See Figures 1-1–1-9 for the underground distribution alignments.

RS-C to RS-Q

LADWP is proposing to install approximately 12,100 feet (ft) of new underground concrete-encased conduits to bring new underground distribution lines from RS-C to RS-Q. Conduits are polyvinyl chloride (PVC) pipes that house and protect electrical cables. For the distribution pathway from RS-C to RS-Q, LADWP would install new underground concrete-encased conduit under Avalon Boulevard. The new distribution pathway would include two new circuits, each approximately 12,100 ft long. In addition to the new circuits, the Harbor City-Wilmington (HAR-WIL) C1 and Harbor City-Wilmington (HAR-WIL) C2 circuits will be replaced (11,500 ft each) and extended by 1,000 ft to Harry Bridges Boulevard.

RS-Q to Terminal Island

LADWP is proposing to install approximately 41,800 ft of new underground concrete-encased conduits to bring new underground distribution lines from RS-Q to Terminal Island.

The four circuits from Harry Bridges Boulevard to the East Basin Channel would be pulled through new conduits underneath the East Basin Channel into Terminal Island. New conduits within Terminal Island would be required to accommodate the four new circuits. Two (2) 8- to 6-inch parallel conduits duct banks totaling approximately 15,000 ft would be installed on New Dock Street, Seaside Avenue, Ferry Street, and Terminal Way. One (1) 8- to 6-inch conduit duct bank totaling approximately 1,600 ft would be installed on Terminal Way to Distributing Station (DS)-121. One (1) 8- to 6-inch conduit duct bank would be installed approximately 2,100 ft on Terminal Way to Earle Street. Within the above conduits duct banks, two (2) circuits would be installed approximately 17,300 ft from the East Basin Channel to Berths 212–224 and Pier 400. These circuits would extend 600 ft to tie into the proposed Terminal Island Switching Station. Within the remaining two (2) new conduits, two (2) new circuits totaling approximately 23,500 ft would be installed from the East Basin Channel to Berths 121–131 and Berths 302–306. Approximately 1,400 ft of conduit and circuit would be required to tie Berths 121–131 into the system. Berths 302–306 may require up to 4,000 ft of new conduit branching off of the new Earl Street circuit. Finally, two (2) existing overhead circuits, Ford-Terminal (FRD-TER-1) and Ford-Peddler 1 (FRD-PED-2), would be undergrounded, requiring approximately 4,700 ft of conduit.

To meet support POLA electrification, ongoing electrification initiatives required by 2028, additional conduits to Terminal Island may be required. This includes the installation of approximately 8,100 ft of new conduits and the crossing of the Cerritos Channel by intercepting

existing conduits under the channel. The proposed conduits would run along Avalon Boulevard, then continue through property owned by LAHD, intercept and utilize the existing Cerritos Channel Crossing conduit system, continue down Shore Road, intercept and utilize the existing Cerritos Channel Crossing conduit system, and tie in proposed conduits near Pier S Avenue.

RS-Q to Outer Harbor

LADWP is proposing to install approximately 34,500 ft of new underground concrete-encased conduits to bring new underground distribution lines from RS-Q Rack D to Berth 46/49 and the Outer Harbor Switching Station. For the distribution pathway from RS-Q to Outer Harbor, the new conduits would all run under Harry Bridges Boulevard then south under John S Gibson Boulevard and Pacific Avenue until the Pacific Avenue intersection with W Channel Street. At the intersection of John S Gibson Boulevard and Harry Bridges Boulevard, the new distribution lines would tie into the new Harry Bridges Switching Station. At the intersection of Pacific Avenue and W Channel Street, LADWP has identified two options (Figure 1-7) for the new conduit alignment to reach DS-3 and Berth 46/49 and the Outer Harbor Switching Station: the Knoll Drive option (Option 1) and Channel-Gaffey-O'Farrell option (Option 2). The selected option will be based on available space to install the new conduit while maintaining required clearances and working safely around existing underground utilities as cost-effectively as possible.

Under Option 1, the new conduits continue from Pacific Avenue onto Front Street to DS-3. New conduits from DS-3 would continue under Front Street to A Street to the Intersection of 1st Street and Harbor Boulevard. Then, the new conduits would continue south under Harbor Boulevard to Dave Arian Way, Berth 46/49, and the Outer Harbor Switching Station.

Under Option 2, the new circuit alignments may be routed from John S Gibson Boulevard to N Gaffey Street, Summerland Avenue, N Cabrillo Avenue, W Sepulveda Street, N Gaffey Street, then along W O'Farrell Street to Harbor Boulevard. From the intersection of Harbor Boulevard and O'Farrell Street, the new conduits would continue north to DS-3 and south under Harbor Boulevard to Dave Arian Way connecting to Berth 46/49 and the Outer Harbor Switching Station.

Operations

Regular inspection of distribution lines, instrumentation and controls, and support systems is critical for project operation. Routine maintenance on a distribution circuit would be performed regularly to ensure the cables operate normally. Early identification of items needing maintenance, repair, or replacement would ensure reliable operation of the distribution lines and appurtenant structures.

Annual inspections of the integrity of the distribution lines would be performed and would include the inspection of all the equipment at the substations and maintenance substructures for corrosion and misalignment. The maintenance activities listed below may require the temporary closure of a single roadway lane for the duration of the activity. No other operational activities resulting from the proposed project would occur.

Substructures (Vaults)

Installation of precast concrete electrical substructures (also referred to as vaults) will be required to pull, support, and splice together segments of cable during installation and provide a means for inspecting the integrity of the underground cable system described above during the

operational phase of the line. Approximately 135 substructures would be installed within the roadway, between approximately 850 and 1,100 ft apart, along the proposed underground distribution pathways. Substructures would be inspected annually to ensure that the cables are securely supported by brackets, insulators, and cable hangers; that cable joints/splices and ground connections are intact; and that brackets are securely attached to the walls of the substructure. Where practical and feasible, any water that has accumulated inside vaults would be removed using a water pump and vacuum truck. Electrical equipment would also be checked for corrosion or damage.

1.6.4 Switching Stations

LADWP previously prepared a distribution assessment based on the needs for increased electrical capacity at each of the twelve (12) Port terminals as identified by POLA, approximated at 200 MVA. To meet this increased demand, LADWP proposes to install three switching stations to support Port electrification. These new switching stations would be located on LAHD property on Terminal Island, the southwest Corner of John S Gibson Boulevard and Harry Bridges Boulevard, and south of Signal Street and Signal Place in the Outer Harbor. Switching stations sectionalize transmission or distribution lines to increase reliability and operational flexibility. Switching stations consist of circuit breakers, disconnect switches, electrical bus-work, insulators, conductors, and other electrical equipment supported by steel racks, concrete foundations with steel reinforcement, and electrical grounding grid to allow for segments of powerlines to be taken out of service (also known as sectionalizing) for operation and maintenance without disrupting connected powerlines and customers.

Each of the three switching station locations would be prepared by installing the shell of the station including, but not limited to the ground grid, concrete foundations, station floor, plumbing and mechanical system, conduits, cable trays and covers, and control house structure at each location. Once a foundation has been constructed, LADWP will install the required electrical equipment. This equipment includes circuit breakers, disconnect switches, busswork, communication lines, power and control cables and conductors, steel racks, relay panels, post insulators, transformers, and terminal cabinets.

All three switching stations would be operated remotely and periodically by staff on site. Maintenance of the facility would include inspecting and maintaining multiple circuit positions and repairing or replacing fatigued, broken, or damaged equipment on an as-needed basis.

Terminal Island Switching Station (also known as Reeves Switching Station)

A vacant triangular lot zoned as M3- Heavy Industrial within the POLA is the proposed location of new switching station equipment (Figure 1-6). The site is located south of the CA-47 freeway, is surrounded by railroads on all sides and is not accessible to the public. The lot would be graded in preparation for conduit trenching and foundation excavation. This switching station will be approximately 200,000 ft^2 and would be designed to serve POLA and customers in the surrounding area for electrification and projected load growth.

Harry Bridges Switching Station (also known at Basin Switching Station)

The lot identified for the Harry Bridges Switching Station (Figure 1-9) is currently a vacant lot owned by LAHD, zoned M2- Light Manufacturing. This switching station will be approximately

40,000 ft^2 and would be designed to accommodate 34.5 kV circuit positions and switching station equipment for POLA and Wilmington electrification and load growth

Outer Harbor Switching Station (also known as Cabrillo Switching Station)

The Outer Harbor Switching Station (Figure 1-8) would be located on a vacant parcel owned by LAHD, zoned M3- Heavy Industrial. The vacant lot was previously developed but does not currently have any buildings. The Outer Harbor Switching Station will be approximately 61,000 ft^2 and would be designed to accommodate additional 34.5 kV circuit positions and switching equipment for the POLA and San Pedro electrification and load growth.

1.6.5 Parcel K

Parcel K will be transferred from LAHD to LADWP as part of the agreement associated with the Wilmington Waterfront Development Project. Parcel K would be utilized as a staging and material storage site to accommodate the construction of the switching stations, underground distribution, and wet cooling tower. This parcel is located across Harry Bridges Boulevard from HGS and is situated in a central location for each of the project components. Currently, this parcel is developed with two abandoned warehouse buildings and a parking lot. Both warehouses would be demolished.

Due to the presence of contaminated soil at Parcel K, LAHD is proposing a dig-and-haul approach to excavate contaminated soil and dispose of it at an appropriate off-site landfill. Remediation of Parcel K is necessary to meet human health risk screening levels for commercial/industrial land use and to remove hazardous soil. All work would be conducted consistently with applicable federal, state, and local regulations and BMPs. Applicable regulations are described within Section 2.9, Hazards and Hazardous Materials, of this IS/MND.

1.6.6 HGS Wet Cooling Tower

Existing Facility

HGS is a natural-gas-fired generating station that operates five simple cycle gas turbines (Units 10–14) and a 2+1 CCGS consisting of two gas turbines (Units 1 and 2) and a single steam turbine (Unit 5). The CCGS has a net capacity of 212 MW. In total, HGS has a net maximum plant capacity of 432 MW. Construction of the first steam turbine at HGS began in 1941, and the facility was designed for OTC to provide cooling water via circulating water to the steam portion of the combined cycle generating unit, Unit 5. The OTC system also provides cooling water to auxiliary cooling systems. The circulating water intake tunnel conveys water from the East Basin Channel to the HGS pump bay. From there, the circulating water is pumped to the Unit 5 condenser and auxiliary cooling systems. After the cooling systems, OTC water is discharged through a single outfall in the West Basin of the Inner Los Angeles Harbor Complex, located to the southwest of HGS.

In the HGS CCGS, heat created by the two combustion turbine generators (CTGs) during power production is diverted to heat recovery steam generators (HRSGs) rather than escaping directly through the CTG exhaust stacks. In the HRSGs, this heat is used to create steam, which is delivered to Unit 5 to produce additional power. By capturing waste heat, approximately 40% additional power can be produced by the HGS CCGS using the same amount of fuel required to drive the CTGs alone. When compared to the CTGs and steam turbine generator (STG) operating in isolation, each of which would require its own fuel source, the increased efficiency of the CCGS

not only conserves fuel but also substantially reduces the production of GHGs in relation to the amount of energy produced, and, when combined with advanced pollution control systems, also substantially reduces air pollutant emissions.

To prevent fouling of the STG, the quality of the water in the HRSGs must be maintained at a high level. Therefore, the water/steam circulation system in the HRSG/STG is a closed loop, where water is converted into steam in the HRSG, the steam is used to drive the STG, and the exhaust steam exiting the STG is condensed into water, which is recycled to the HRSG. The existing OTC system for the HGS CCGS STG (Unit 5) uses colder ocean water to dissipate heat from the exhaust steam within the condenser without making physical contact with the HRSG/STG closed loop.

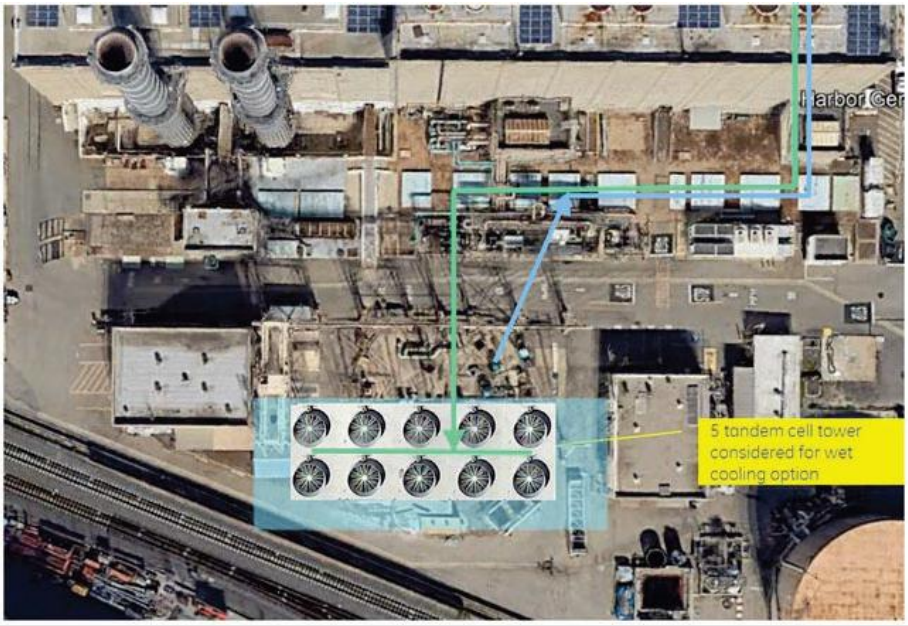


Figure 1-11 Overview of the Proposed HGS Wet Cooling Tower

Cooling Tower Process

Similar to the existing OTC system, the proposed cooling tower system would pass water through the Unit 5 condenser to dissipate heat, but, unlike in the OTC system, the cooling water would be continually recycled through the condenser rather than being discharged to the West Basin of the Inner Los Angeles Harbor Complex. However, because the temperature of the cooling process water would increase as it passes through the condenser and dissipates heat from the steam, it would first need to be cooled before being cycled back through the condenser.

A cooling tower uses a semi-open circuit in which the water is exposed to the air and cooled predominantly through the process of evaporation, whereby heat is transferred to the surrounding air. While a relatively small portion of the cooling water would be lost to the air as water vapor, the evaporative process would provide significant cooling for the remaining water stream, allowing it to be repeatedly cycled through the condenser to meet the cooling demand of the STG.

The cooling tower to be installed at HGS under the proposed project would be a mechanical draft tower, in which fans are used to assist in circulating air through the tower to dissipate heat from the cooling process water. The fans would be located at the top of the tower, inducing air flow

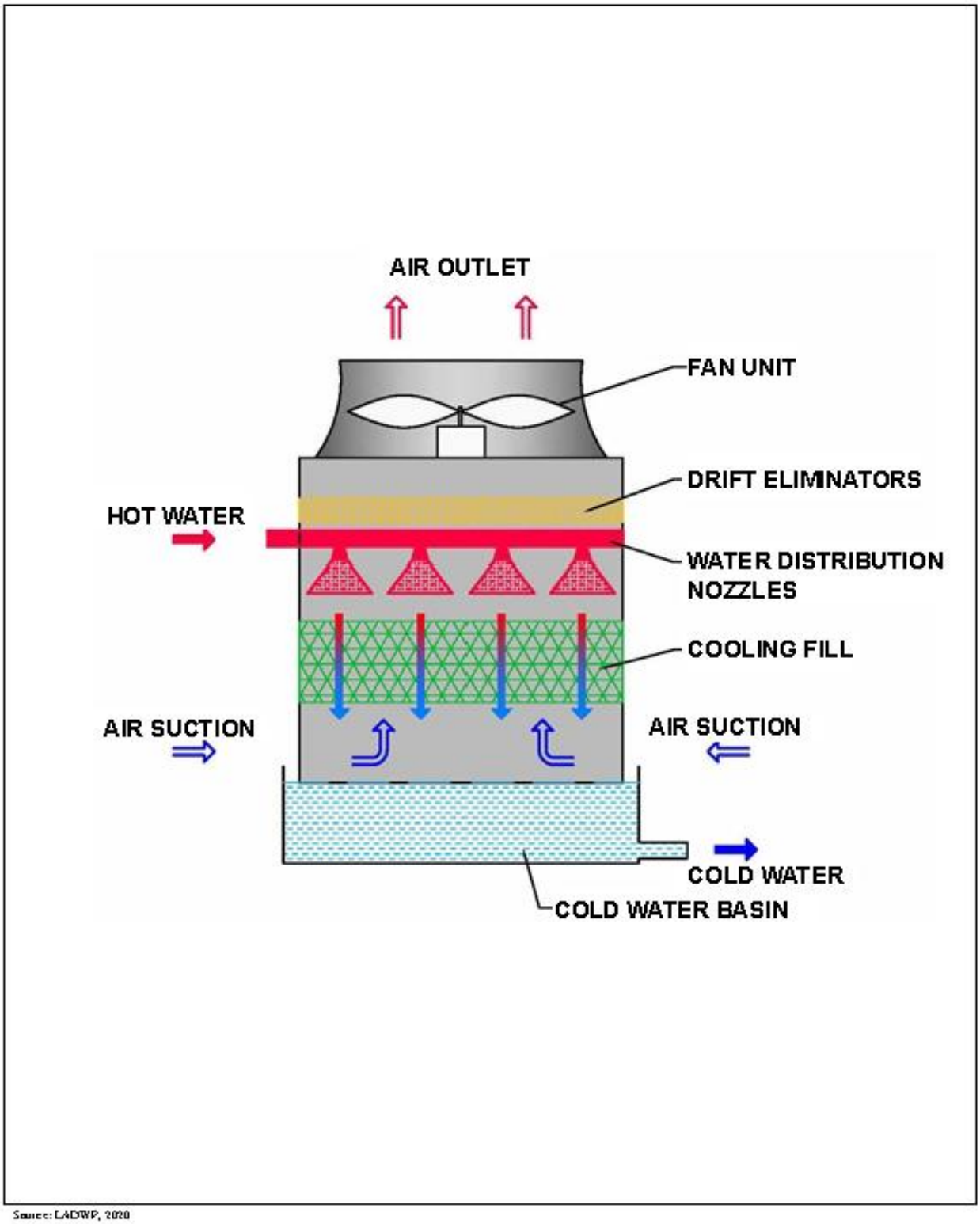
upward through the tower and inward at the base of the tower. This is known as a counter flow induced draft cooling tower. The lower side walls of the tower would consist of baffles, which would help direct air flow and provide protection from the elements. Figure 1-12 is a diagram of a counter flow induced draft cooling tower.

Circulating water exiting the condenser at an increased temperature (due to the transfer of heat from the STG exhaust steam) would be pumped to an upper level in the cooling tower and delivered to a manifold and nozzle system. The nozzles would evenly distribute the water over the surface of a structure known as the cooling fill, which would occupy the horizontal cross section of the interior of the tower. Due to the force of gravity, the water would drip down the fill in a thin film in a direction counter to the upward movement of the air flow through the tower.

The fill serves to distribute the water across a large surface area to provide greater contact with the surrounding air, which would evaporate a relatively small portion of the water, changing it from liquid to water vapor. During this process, the liquid water remaining on the fill would experience significant cooling from evaporation. This cooler water would continue its downward path through the fill and fall into a cold-water basin at the base of the tower. The cooler water would then be pumped from the basin back to the condenser, where it would again be used to condense the exhaust steam from the STG.

To estimate peak water usage rates, a 100% capacity factor across a single day was assumed, yielding a peak flowrate of approximately 2 million gallons per day (MGD). However, it is unlikely that the HGS units will run for the full duration of a day and consume this quantity of water. To capture a more realistic water usage rate averaged across 1 year, the historical 5% average capacity factor of HGS Units 1, 2, and 5 was used to calculate an average water consumption of 100,000 gallons per day (GPD).

The wet cooling tower would operate on recycled water, potable water, or a combination of both depending on the availability of recycled water in the future. Currently, 0.5 MGD of recycled water would be available for use from the Terminal Island Water Reclamation Plant (TIWRP). The wet cooling tower would likely be placed within the existing pump bay area and over the existing screen bay directly south of the HGS main powerhouse (Figure 1-11). Further engineering studies will be completed to confirm the viability of this preferred placement due to extensive underground infrastructure in this location; therefore, an alternate location for the wet cooling tower is located west of the HGS main powerhouse (Figure 1-4). This alternate placement would also move the make-up water tank to the southern end of Parcel Y west of the HGS main powerhouse. The tower would be composed of tandem cells resulting in a footprint that would require the demolition of the paint booth, machine shop, rail crane, main intake screen, and temporary structures. The pump bay would be repurposed to operate as the cold-water basin. The replacement of OTC with a wet cooling tower is an equivalent replacement and therefore would not cause changes in the plant's existing start-up and shutdown sequences.



Source: LADWP, 2020

Figure 1-12 Diagram of a Wet Cooling Tower Process

Cooling System Water Losses

Because a cooling tower relies on an open-air design to allow for direct contact between the cooling process water and the surrounding air to facilitate evaporative cooling, a certain amount of water is continually lost from the system from various processes.

The primary loss of cooling process water occurs from evaporation as water vapor escapes through the top of the tower. At a projected maximum design flow rate of 56,400 gallons per minute (GPM) recirculated through the cooling tower and based on the design inlet and outlet water temperatures for the HGS Unit 5 system, it is estimated that approximately 1,041 GPD would be lost through evaporation.

Water droplets (as opposed to water vapor resulting from evaporation) can also become entrained in the flow of air as it rises through the tower and can be carried out of the top of the tower. These suspended droplets are known as drift. However, drift eliminator devices would be installed within the proposed cooling tower above the water distribution manifold and nozzle system and below the exhaust fans. Water droplets rising in the air stream would impinge on the drift eliminators and drip back through the cooling fill and into the cold-water basin rather than escaping through the top of the tower. Based on current best available control technology for drift elimination, this would reduce the volume of water escaping the tower via drift to 0.0005% of the total cooling water flow, resulting in a loss of approximately 406 GPD from drift, assuming 24 hours of full capacity operation for the CCGS.

In addition to evaporation and drift, cooling water can be lost through the cycles of concentration of the cooling tower operations. As evaporation occurs in the tower, water molecules are removed in the form of water vapor, but minerals and other impurities from the evaporated water are left behind to be absorbed by the remaining water that falls into the cold-water basin. As the circulating water continues to recirculate through the system, the concentration of minerals and other impurities increases. If concentrations of these constituents become too great, they can cause scaling, corrosion, and other issues in the cooling tower and condenser equipment, decreasing system efficiency and increasing maintenance, which could include temporary shutdown of the cooling system and the CCGS.

Therefore, to prevent a critical level of concentration being reached, a portion of the higher-content water would be continually discharged from the cold-water basin in a process called blowdown. The operating parameters for the proposed project have established four (4) cycles of concentration (i.e., when the circulating cooling water has four times the concentration of solids as the original source water for the system) as the requirement for blowdown. Based on four (4) cycles of concentration and at the projected maximum flow rate of approximately 1,388 GPM through the proposed cooling tower, an average of 344 GPM would be lost to blowdown during operation.

Makeup Water

Based on the above-described losses from evaporation, drift, and blowdown, the total average loss of process water from the cooling tower system would be approximately 1,388 GPM. Based on projected annual operations for the CCGS, the average daily losses are estimated at 100,000 GPD. This total is based on a calculation using the historical 5% average capacity factor of HGS Units 1, 2, and 5.

This lost process water must be continually replaced with makeup water. The makeup water would not only ensure the required volume of water is available to maximize system efficiency, it would also maintain water quality by replacing the higher-concentration blowdown water with lower-concentration makeup water that has not yet been subject to the evaporation process, which, as discussed above, leads to higher concentrations of minerals and other impurities.

Maintenance Building

A new maintenance building is proposed to be constructed within the HGS located directly to the east of the proposed wet cooling tower (Figure 1-4). The new building will support HGS and surrounding powerline repair and maintenance activities. The facility would be approximately 180 ft long by 100 ft wide. The construction of the new wet cooling tower and maintenance building may require the demolition of the existing machine shop, water treatment building, maintenance office, and temporary structures. The siting and size of this maintenance building may change to another portion of the HGS to avoid demolition and existing underground utilities based on operational need.

1.7 Construction Schedule and Process

Construction of the project components would occur in a phased approach. See Figure 1-13 for the planned construction schedule. RS-C Rack C would begin construction in mid-2026, followed by RS-Q Rack D. RS-C Rack C would take approximately 18 months to complete, and RS-Q Rack D would be complete in approximately 2 years. HGS Wet Cooling Tower construction work would begin in mid-2027 with an in-service date by mid-2030. Underground distribution work would begin in early to mid-2026 along with the construction of RS-C Rack C and occur concurrently with the installation of the switching stations, both of which would have an in-service date by the end of 2030. The specific construction process for each project component is described in the subsections below. For this analysis, it is assumed that each dump truck would carry 15 cubic yards (yd^3).

The City of Los Angeles Rush Hour Ordinance limits in-street construction on weekdays to the hours of 9:00 a.m. through 3:30 p.m. Construction hours for in-street construction (underground distribution and transmission)would be Monday through Friday from 9:00 a.m. to 3:30 p.m., and Saturday from 8:00 a.m. to 6:00 p.m. Construction of all other facilities located outside of public streets shall be limited to Monday through Friday, between the hours of 7:00 a.m. and 9:00 p.m., and Saturday from 8:00 a.m. to 6:00 p.m. At least one (1) lane of vehicular traffic would be maintained to minimize traffic impacts. It is anticipated that up to two (2) traffic lanes would be closed for the installation of the transmission or distribution conduit bank and up to three (3) traffic lanes would be closed for maintenance vaults. A Traffic Control Plan would be prepared to minimize disruption to traffic flow.

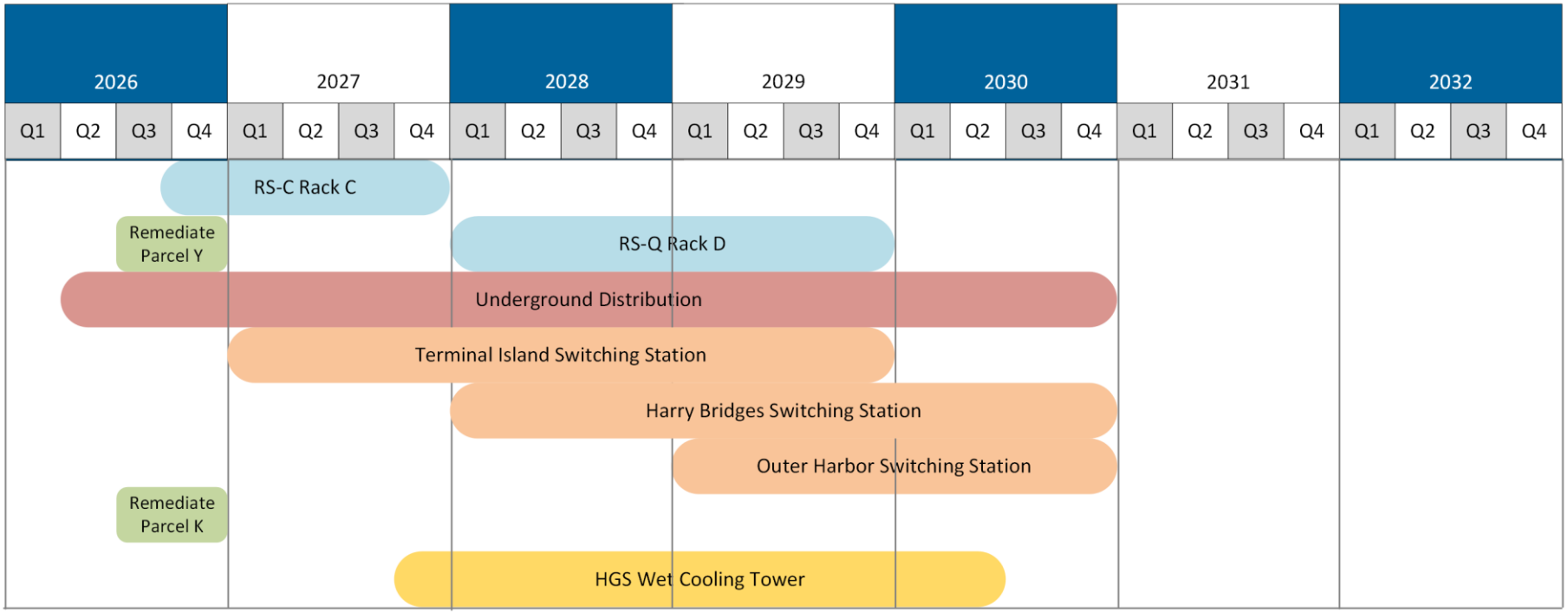


Figure 1-13 POLA Electrification Construction Schedule

Table 1-2.2 Expected Construction Equipment for each Component of the ZEPEO Project

	RS-Q Rack D	RS-C Rack C	Underground Alignment	Switching Stations	Parcel K Remediation	HGS Wet Cooling Tower
Equipment	Excavator Dump Trucks Water Truck ¾-ton Pickup Trucks Asphalt Paver Compaction Rollers Concrete Pump Trucks Backhoes Tool Trucks Stake Beds Crane Pulling Truck Tractor/Trailer with Reel Carrier Skid Steer Boom Lift Truck	Excavator Dump Trucks Water Truck ¾-ton Pickup Trucks Asphalt Paver Compaction Rollers Concrete Pump Trucks Backhoes Tool Trucks Stake Beds Crane Pulling Truck Tractor/Trailer with Reel Carrier Skid Steer Boom Lift Truck	Excavators Dump Trucks Water Truck ¾-ton Pickup Trucks Asphalt Paver Compaction Rollers Crane (250 ton hydraulic) Concrete Pump Trucks Backhoes Tool Trucks Stake Beds Drill Rig Drill Pipe Skid Power Unit	Excavator Dump Trucks Water Truck ¾-ton Pickup Trucks Asphalt Paver Compaction Rollers Concrete Pump Trucks Backhoes Tool Trucks Stake Beds Crane Pulling Truck Tractor/Trailer with Reel Carrier Skid Steer Boom Lift Truck	Excavator Dump Trucks Water Truck ¾-ton Pickup Trucks Asphalt Paver Compaction Rollers Concrete Pump Trucks Backhoes Tool Trucks Stake Beds Crane Pulling Truck Tractor/Trailer with Reel Carrier Skid Steer Boom Lift Truck	Forklifts Skiploader Vibratory Plate Compactor Trencher Wheel Loader Paver Hydraulic Crane (65 ton) Concrete Pump Truck Pickup Truck Fuel/Lube Truck Backhoe Loader Excavator Drilling Rig and Pile Hammer Bottom Dump Trucks Dump Truck Wheel Loader Vibratory Roller Compactor Crawler Excavator Motor Grader Water Truck Articulating Boom Manlift Welder

Table 1-2.2 Expected Construction Equipment for each Component of the ZEPEO Project

	RS-Q Rack D	RS-C Rack C	Underground Alignment	Switching Stations	Parcel K Remediation	HGS Wet Cooling Tower
						48-foot Flatbed Truck
Personnel (average daily workers)	40	40	30	Terminal Island: 40 Harry Bridges: 25 Outer Harbor: 25 Total: 90	40	32

1.7.1 RS-Q Rack D

Prior to construction of the new RS-Q Rack D, Parcel Y would be remediated and the site would be prepared for construction. Approximately 19,750 yd^3 of soil would be excavated, characterized, and disposed of at an appropriate facility. It is estimated that approximately 10,375 yd^3 of soil is anticipated to be characterized as California-hazardous and approximately 9,375 yd^3 of soil is anticipated to be characterized as non-hazardous. After characterization, soils would be loaded into trucks and transported to an approved, off-site waste facility for disposal. Additionally, approximately 750 ft of railroad tracks, including timber ties, would be removed and disposed of off-site along with the soil material. Once removal is complete, approximately 21,750 yd^3 of import material would be used to fill in the site prior to grading and compaction. Remediation and site preparation is estimated to take 6 months and is estimated to begin in the latter half of 2026.

RS-Q Rack D work would require the installation of many pieces of equipment, each requiring its own foundation. Equipment includes grounding grid, new circuit breakers, disconnect switches, bus ties, relays, transformer bank, capacitor bank, and 138 kV and 34.5 kV pothead structures, along with station control equipment. Site preparation activities would include vegetation (mostly non-native grasses and two palm trees) and debris removal from Parcels L and P. The site would then be graded level.

Trenching and excavation for conduits, piers, grounding connections, and foundations would follow the initial site preparation work. The 34.5 kV rack would require approximately 50 piers up to 15 ft deep. The 160 MVA load bank would require a foundation 15 ft by 30 ft and up to 6 ft deep. Nineteen (19) 34.5 kV breakers would be installed on a foundation 6 ft by 6 ft and up to 6 ft deep. One 34.5 kV capacitor switcher and one 10.8 MVA capacitor would be installed each on a small foundation up to 6 ft deep. Up to two (2) monopole bus tie structures would be installed up to 40 ft deep. A new relay house would be required for Rack D and would be constructed with a 15 ft by 45 ft footprint with a foundation up to 6 ft deep. RS-Q excavation work would total approximately 1,000 yd^3, primary hauled off site for disposal or reuse with 70 trucks.

After the conduits, piers, grounding connections, and foundations are constructed, the 138 kV cable would be pulled onto potheads adjacent to the new bank. Next, the 34.5 kV conductors, buses, relays, controls, capacitors, breakers, and communication equipment would be installed.

Underground transmission conduit encased in concrete would be trenched from RS-Q Rack E to the new RS-Q Rack D within the public ROW on Harry Bridges Boulevard. The trench for the duct bank and cable would be approximately 2,000 ft long, 2.5 ft deep, and 6 ft wide, or approximately 610 yd^3 of excavated material. One (1) maintenance vault (32 ft long, 10 ft wide, and 13 ft deep) would be installed within the public ROW on Harry Bridges Boulevard. This vault would require slight over-excavation, with total excavation dimensions of 36 ft long, 14 ft wide, and 15 ft deep, resulting in approximately 360 yd^3. Finally, the RS-Q Rack D equipment would be tested and placed into service. Underground transmission line installation excavation work would total approximately 2,500 yd^3, primary hauled off site for disposal or reuse with 170 trucks.

The construction of RS-Q Rack D is estimated to take 2 years from breaking ground to commissioning. Since multiple parts of the RS-Q work may occur concurrently, this analysis conservatively estimates 40 daily average construction personnel on site for the 2-year construction duration.

1.7.2 RS-C Rack C

RS-C would require additional electrical equipment to be installed, similar to RS-Q Rack D. Trenching and excavation for conduits, piers, grounding connections, and foundations would follow the initial site preparation work. The new 34.5 kV rack would be an extension of the existing Rack C and require approximately ten (10) piers up to 15 ft deep. The rack would utilize an existing 160 MVA load bank and its foundation. Two (2) 138 kV circuit breakers would be installed on existing foundations within the 138 kV rack. Ten (10) 34.5 kV circuit breakers would be installed on a foundation 6 ft by 6 ft and up to 6 ft deep. One (1) 34.5 kV capacitor switcher and one (1) 10.8 MVA capacitor bank would be installed each on a small foundation up to 6 ft deep. One (1) 34.5 kV duct bank within the station is approximately 850 ft long, 5 ft to 8 ft deep, and 4 ft wide. RS-C excavation would total approximately 1,100 yd^3, primary hauled off site for disposal or reuse with 70 trucks.

After the conduits, piers, grounding connections, and foundations are constructed, the 138 kV cable would be pulled onto the potheads adjacent to the new bank. Next, the 34.5 kV conductors, buses, relays, controls, capacitors, breakers, and communication equipment would be installed. Since multiple parts of the RS-C work may occur concurrently, this analysis conservatively estimates 40 daily average construction personnel on site for the 18-month construction duration.

1.7.3 34.5 kV Underground Distribution Circuits

The underground distribution lines would be installed using open-cut trenching techniques that would require an approximately 10- to 15-ft-wide temporary construction corridor. The excavation would start with the removal of the concrete/asphalt by saw-cutting and breaking.

The typical trench for duct bank (trench in which the conduits are laid within) installation would be approximately 3 ft wide and 6 ft deep; trench depths vary depending on soil stability and presence of existing substructures. The trench would be widened and shored where needed to meet the California Occupational Safety and Health Administration's safety requirements. Approximately 130,000 yd^3 would be excavated and hauled off site for reuse or disposal from trenching all proposed new conduits. If excavated material is determined to be hazardous, then the material would be hauled off site and disposed of at an appropriate hazardous waste facility. Jackhammers would be used sparingly to break up any sections of concrete that could not be reached with the saw-cutting and pavement-breaking machines.

Construction crew would trench approximately 300 ft per week. Up to three crews would perform trenching operations so that concurrent trenching would occur along various points of the transmission line alignment; a length of approximately 60 ft of trenching per day is anticipated. Areas that are trenched or excavated would be covered with steel plates every evening until the road surface is restored; this would allow for full usage of the affected roadway outside of work hours. When segments of the trench are restored, more trenching would occur farther down the street until the conduit system is installed for the entire alignment. Provisions for emergency vehicle and local access would be provided.

The underground alignment crosses existing railroad tracks in nine (9) places:

- Berths 121–131 Terminal from John S Gibson Boulevard
- Berths 136–147 Terminal from Harry Bridges Boulevard
- Fries Avenue south of HGS

- Twice on Navy Way
- Seaside Avenue toward the Terminal Island Switching Station
- Berths 302–306 Terminal from Earl Street
- Berths 212–224 Terminal
- New Dock Street

Either horizontal directional drilling or jack and boring would be necessary to micro-tunnel underneath the tracks to prevent disruptions to railroad operations. Horizontal drilling may require up to approximately 100 ft by 165 ft launching work zone. The horizontal drilling process requires two sites set up on both sides of the crossing to house the necessary drilling equipment. Sites would be cleared and leveled to facilitate drilling operations. A small entry pit, approximately 6 ft deep, would be excavated at the front of the drill rig to collect drilling fluid returns. A separation plant holding tanks and drilling fluid pumps would be set up and plumbed with the drill rig control. A control cabin would be set up to control the drill rig and track the drill bit location. Drilling of the pilot bore would commence by pushing and rotating drill pipe connected to the drill bit along a predetermined path from the drill rig entry location toward the exit side located on the far side of the crossing. Reaming tools of reasonably larger diameter would then be used to enlarge the opening from the exit location back to the drill rig location. Pipe would then be installed into the opening along the entire crossing using the pipe roller and crane.

The jack and bore method would also require setting up a launch and receiving pit. Excavation dimensions would be approximately 35 ft by 12 ft and 6 ft deep. In areas with pre-existing utilities, hand digging or hand trenching may be employed to avoid damage. Using an auger, the bore would be initiated from the jacking pit toward the receiving pit. As the auger progresses, the casing (usually made of steel) would be jacked into place from the launch pit, ensuring stability of the bore. Within the installed casing, conduits would be placed to house and protect utilities such as electrical cables and fiber optics. After the jack and bore operation, the affected landscape would be rehabilitated to its original condition. Each jack and bore operation from site preparation to completion is estimated to last six (6) weeks. For each of the nine railroad crossings, it is assumed that jack and boring will be utilized to cross each railroad. It is estimated that 1,050 yd^3 of soil would be excavated for the launching and receiving pits and would be hauled off site by approximately 70 trucks.

Either the horizontal directional drilling or jack and bore method may be necessary to cross the Pacific Coast Highway (PCH) where it intersects Avalon Boulevard. This process would follow the processes outlined above. The method used to cross PCH would be determined by the California Department of Transportation (Caltrans). For the purposes of this environmental analysis, it is assumed that horizontal directional drilling would be used since this methodology has the largest footprint that may impact duration, construction intensity, and transportation.

The two conduits brought down from Harry Bridges Boulevard to Terminal Island would be tunneled under East Basin Channel. Horizontal directional drilling, or a similar tunneling technique, as described above for the railroad crossings would be employed to cross the East Basin Channel. Launching and receiving pits would be set up on either side of the channel. The tunnel depth would be decided by geotechnical investigation into soil stability. The tunneling process from site preparation to completion is estimated to last ten (10) weeks. Approximately 10,000 yd^3 of soil would be hauled off site from the PCH and East Basin Channel crossing launching and receiving pits with approximately 650 trucks.

Approximately 8,100 ft of new conduits would be installed down Avalon Boulevard, onto LAHD property, to the Cerritos Channel. At the Cerritos Channel, the new circuits would be pulled through existing conduits under the channel. Trenching for the new circuit would be required from the north side of the Cerritos Channel to the south side of the channel on Shore Road, then would be pulled through existing conduit to Terminal Island (Figure 1-5). The new circuit would then tie into the proposed underground conduits near Pier S Avenue.

Once the conduit is in place, cable segments between two maintenance vaults would be pulled into the ducts. A cable reel would be placed at one maintenance vault, and a winch truck would be placed at the other maintenance vault. With a rope, a larger steel line would be pulled into the duct. The steel line would be attached to a cable-pulling eye for pulling. To ease pulling tensions, a lubricant would be applied to the cable as it enters the duct. Generally, three (3) cable spans between two (2) maintenance substructures would be installed per day and would require the closure of up to two (2) traffic lanes.

Maintenance Substructures

The typical excavation of the maintenance substructure would be approximately 20 ft long including perimeter shoring (if necessary), 12 ft wide, and 15 ft deep. The top of the vault would be approximately 2 ft below the street surface. The precast sections of the maintenance vault would be delivered, lifted from the transport truck, lowered, and assembled in the excavated hole with a crane. Approximately 22,5,00 yd^3 of soil would be excavated and hauled off site for reuse or disposal. Approximately 8,800 truck trips would be required to remove the soil associated with the duct bank trenching and maintenance substructure construction.

Each of the approximately 135 substructures would take approximately 72 hours total to install, which includes excavation, shoring, base work, installation of prefabricated vaults, backfilling, and plating. Installation of each vault would require a workspace the width of a road lane; utilization of flag personnel would help maintain one lane with two-way traffic flow. This would allow residents to access their homes. In some cases, street parking may be temporarily inaccessible, or sidewalk removal may be necessary on smaller residential roads to maintain one (1) lane open for traffic. Vault excavations would be covered with steel plates every evening until complete to allow for full usage of the affected roadway outside of work hours.

Approximately 150 yd^3 of soil would be excavated for each maintenance substructure and hauled away to an approved off-site location for disposal or reuse. As trucks are filled with soil, they would leave the site and be replaced by empty trucks. Assuming each truck can hold 15 yd^3, soil from each maintenance vault would fill approximately 10 trucks. Jackhammers would be used sparingly to break up any sections of concrete that could not be reached with the saw-cutting and pavement-breaking machines.

Following installation of the maintenance vault, thermal-select or controlled backfill consisting of concrete would be poured over in the area surrounding the vault and compacted. A road base backfill or slurry concrete cap would be installed, and the road surface would be restored. Each maintenance vault would have two access openings sealed with cast iron covers that would be visible from the street.

1.7.4 Switching Stations

Terminal Island Switching Station (also known as Reeves Switching Station)

The Terminal Island site would first be grubbed and graded to prepare the site for construction. Construction of each portion of the Phase 1 rack, future 200 MVA expansion would each have footprints of approximately 120 ft by 80 ft each, with an average foundation and trenching excavation depth of 8 ft. The new station bank foundation would be approximately 30 ft wide and 150 ft long with excavation up to 6 ft deep for the foundation and trenching. The switch yard is proposed to be 90 ft wide, 450 ft long, and 14 ft deep. The Terminal Island Switching Station excavation work would produce approximately 38,165 yd^3 of soil; soil would be excavated, characterized, and primarily hauled off site for disposal or reuse with 2,560 truck trips. The switching station would have a precast concrete wall constructed with wall panels on the outer perimeter of the station (around the entire site perimeter). Each of the 145 piers supporting the perimeter wall would be on average 3 ft wide and 10 ft deep. Excavation for the wall would total approximately 565 yd^3 and would be hauled off site with up to 40 trucks. This wall would provide physical security and protection to the switching station. Construction is estimated to last 18–24 months, followed by an estimated 12–18 months of electrical equipment installation.

Harry Bridges Switching Station (also known as Basin Switching Station)

The switching station slab would be 251 ft long, 51 ft wide, and 0.5 ft deep. Twenty-four (24) 3 ft wide 34.5 kV piers would be installed 10 ft deep requiring approximately the removal of 80 yd^3 of soil. The 34.5 kV rack would be approximately 72 ft long and 90 ft wide, with a foundation excavated 5 ft deep. The control house would be approximately 65 ft long and 20 ft wide, with a foundation excavated 5 ft deep. The switching station would have a precast concrete wall constructed with wall panels on the outer perimeter of the station. The Harry Bridges Switching Station excavation work would produce approximately 1,880 yd^3 of soil; soil would be excavated, characterized, and primarily hauled off site for disposal or reuse with 140 truck trips. Each of the 56 piers supporting the perimeter wall would be on average 3 ft wide and 10 ft deep. Excavation for the wall would total approximately 220 yd^3 and would be hauled off site with up to 15 trucks. This wall would provide physical security and protection to the switching station. Construction is estimated to last 12–18 months, followed by an estimated 12–18 months of electrical equipment installation.

Outer Harbor Switching Station (also known as Cabrillo Switching Station)

The switching station slab would be 200 ft long, 100 ft wide, and 0.5 ft deep. Twenty-eight (28) 3 ft wide 34.5 kV piers would be installed 10 ft deep requiring the removal of approximately 92 yd^3 of soil. The 34.5 kV rack would be approximately 72 ft long, and 123 ft wide, with a foundation excavated 5 ft deep. The control house would be approximately 65 ft long and 20 ft wide, with a foundation excavated 5 ft deep. The switching station may have precast concrete constructed with wall panels on the outer perimeter of the station if the existing wall cannot be used. The Outer Harbor Switching Station excavation work would total approximately 2,600 yd^3; soil would be excavated, characterized, and primarily hauled off site for disposal or reuse with 180 truck trips. Each of the 50 piers supporting the perimeter wall would be on average 3 ft wide and 10 ft deep. Excavation for the fence would total approximately 200 yd^3 and would be hauled off site with up to 13 trucks. This wall would provide physical security and protection for the switching station and yard. Construction is estimated to last 12–18 months, followed by an estimated 12–18 months of electrical equipment installation.

1.7.5 Parcel K

Before remediation of Parcel K can begin, two existing warehouses, approximately 43,000 ft^2 and 46,000 ft^2 in size, and existing hardscape would be demolished. Approximately 1,000 yd^3 of soil would be excavated, characterized, and disposed of. It is estimated that approximately 1,000 yd^3 of soil is anticipated to be characterized as California-hazardous. Preliminary site investigations have identified arsenic and lead as the primary contaminants of concern. After characterization, soils would be loaded into trucks and transported to an approved, off-site waste facility for disposal. Once removal is complete, approximately 1,100 yd^3 of import material would be used to fill in the site prior to grading and compaction. Equipment required for operations consists of one excavator, one loader, one backhoe, one grader, one water truck, and approximately 50 trucks to transport the material. On average, 15 construction workers are anticipated to be on site during demolition and remediation.

1.7.6 HGS Wet Cooling Tower

Phase 1: Site Preparation and Earthwork

The sites for the cooling tower, auxiliary equipment, makeup water storage tank, maintenance building, and wastewater holding tanks must be prepared to properly support the foundations for the various facilities. This may include the demolition of the maintenance office, machine shop, high rail crane, and small storage structures; over-excavation, filling, and compaction as required based on detailed geotechnical evaluations; and final grading of the site to allow for foundations to be installed. The existing OTC infrastructure would be left in place and continue to be maintained to prevent sedimentation.

Site preparation would involve several pieces of equipment, including a motor grader, backhoe loader, wheel loader, vibratory roller, compactor, excavators, cranes, and dump trucks. It is estimated that an average of approximately three (3) truck trips per day would be required to haul or deliver material. Approximately 24 construction personnel would be required daily during this phase, which is anticipated to take approximately 8 months to complete.

Phase 2: Foundations and Piles

The cooling tower would require a new foundation system to help support the load of the structure. It is anticipated that additional piles may need to be installed, and some existing piles may need to be removed. The piles, if necessary, would be driven or cast in place concrete. Once the piles are installed, forms, reinforcing steel (rebar), and structural base material would be placed, and a concrete foundation would be poured. Underground piping associated with the cold-water basin, including the cold-water discharge pipe and the blowdown discharge pipe, would also be installed during foundation work.

Foundation construction for the cooling tower would involve several pieces of equipment, including a drill rig, backhoe loader, excavator, compactor, concrete pump truck, cranes, and dump trucks. It is estimated that an average of approximately eight (8) truck trips per day would be required to deliver material, including concrete. The foundation for the proposed maintenance building would require the excavation of approximately 3,500 yd^3 of soil to be hauled off site with approximately 280 trucks. Approximately 38 construction personnel would be required daily during this phase, which is anticipated to take approximately 5 months to complete.

Phase 3: Cooling Tower and Auxiliary Equipment

The components of the cooling tower, as described above, would be constructed starting with the retrofit of the OTC pump chamber to the cool water chamber at the base of the tower. A steel structure would be erected to frame each tower cell, and the interior components of each cell, including the fill, manifold and nozzle system, drift eliminators, and plume abatement system, would be installed. Side walls, including baffles along the lower portion of the tower cells, and the roof with an exhaust fan at each cell would then be constructed. The new wet cooling tower would be approximately 50 ft in height. Auxiliary equipment, including the makeup water chemical treatment system, circulating water pumps, and a motor control center, would also be constructed during this phase.

The cooling tower construction would require several pieces of equipment, including a hydraulic crane, wheel loader, articulated aerial lift, and welders. It is estimated that an average of approximately four (4) truck trips per day would be required to deliver equipment and material. Approximately 14 construction personnel would be required daily during this phase, which is anticipated to take approximately 9 months to complete.

Phase 4: Makeup Water Storage Tank, Wastewater and Stormwater and Blowdown Holding Tanks

For aboveground tanks of relatively large volume, like the proposed makeup water storage tank, pre-stressed concrete provides the most structural integrity. There are various methods for constructing pre-stressed concrete tanks, but all involve tensioning steel cables and/or rods embedded in the concrete to provide compressive strength to counteract the anticipated load of the stored water. For aboveground tanks, the size of the blowdown holding tank (estimated 3 million gallons), either pre-stressed concrete or welded steel may provide sufficient strength.

Tank erection, depending on the type of construction, would require several pieces of equipment, including a hydraulic crane, wheel loader, concrete pump truck, excavator, and welders. It is estimated that an average of approximately five (5) truck trips per day would be required to deliver material. Approximately 18 construction personnel would be required during this phase, which is anticipated to take approximately 6 months to complete.

Phase 5: Water Infrastructure

The installation of new water lines of various types or the modification of existing water lines would be necessary to provide makeup water to the cooling tower, and collect and dispose of blowdown water. Figure 1-12 is a flow diagram that depicts the proposed water infrastructure. Depending on the need, conditions, and type of material, these lines may be installed partially aboveground or underground, but all would be located within the confines of HGS. The installation of these pipelines would require several pieces of equipment, including an excavator, backhoe loader, trencher, welder, and vibratory roller. It is estimated that an average of approximately six (6) truck trips per day would be required to deliver material and haul debris. Approximately 32 construction personnel would be required daily during this phase, which is anticipated to take approximately 4 months to complete.

Makeup Water Supply Pipelines

The pipelines providing water to the makeup water supply tank would include the recycled water line carrying water delivered to HGS from the Harbor Recycled Water Loop, and a connection to the potable water system within HGS. While the precise location of these various lines are currently unknown, the recycled water line would be routed from the existing recycled water pipeline running along the HGS southern property. A new line would be installed from the tank to the cooling tower to provide makeup water to the tower.

Phase 6: Outage, Tie-Ins, and Commissioning

To accomplish the final tie-ins of the cooling tower system to the Unit 5 condenser, an outage would be required, temporarily removing the CCGS from service. After the tie-ins are complete, the CCGS would be returned to service, and the system would be tested to confirm operational integrity. Commissioning would involve running and adjusting the cooling system with the CCGS under full operational conditions to ensure the system is functioning as required. This phase would also include final site cleanup, including any necessary repaving.

This phase would require several pieces of equipment, including a forklift, crane, wheel loader, backhoe loader, excavator, paver, vibratory plate compactor, and welders. It is estimated that an average of approximately four (4) truck trips per day would be required to deliver material and haul debris. A peak of approximately 17 construction personnel would be required during this phase, which is anticipated to take approximately 7 months to complete.

1.8 Best Management Practices (BMPs)

The following best management practices (BMPs) would be employed during construction of the proposed project, to help minimize or eliminate potential impacts to the environment. BMPs are distinguished from mitigation measures because they are based on existing regulatory requirements and/or are standard practices and procedures of LADWP and/or its contractors not unique to the proposed project.

1.8.1 Air Quality

BMP-AQ-1: The proposed project would comply with South Coast Air Quality Management District (SCAQMD) Rule 401 (Visible Emissions) and Rule 402 (Nuisance) to prevent the occurrence of public nuisances and visible dust plumes traveling off-site, and would implement Rule 403 dust control measures and Rule 1166 measures to control the emission of Volatile Organic Compounds (VOCs) from excavating, grading, handling and treating VOC-contaminated soil as required by the SCAQMD, including but not limited to the following:

- Water shall be applied to exposed surfaces at least two times per day to prevent generation of dust plumes.
- The construction contractor shall utilize at least one of the following measures at each vehicle egress from the project site to a paved public road: Pave the surface extending at least 100 ft and at least 20 ft wide; Utilize a wheel shaker/wheel spreading device consisting of raised dividers at least 24 ft long and 10 ft wide to remove bulk material from tires and vehicle undercarriages Install a wheel washing system to remove bulk material from tires and vehicle undercarriages. All trucks hauling soil, sand, and other

loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).
- Construction activity on exposed or unpaved dirt surfaces shall be suspended when wind speed exceeds 25 miles per hour (mph).
- A community liaison shall be identified concerning on-site construction activity including resolution of issues related to dust generation.
- Non-toxic soil stabilizers shall be applied according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
- Streets shall be swept at the end of the day if visible soil is carried onto adjacent public paved roads. If feasible, water sweepers with reclaimed water shall be used.

BMP-AQ-2: Prior to demolition all structures will be tested for the presence of asbestos. If any asbestos-containing materials are found, it will be removed in accordance with the SCAQMD's Rule 1403 prior to demolition.

1.8.2 Biological Resources

Because project construction activities would be continuous during the 6.75-year construction period, nesting bird season (which generally occurs from February through August, and as early as January for raptors) could not be avoided. Therefore, the following BMPs shall be employed to avoid and minimize impacts to nesting birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC):

- BMP-BIO-1: A pre-construction nesting bird survey shall be conducted by a qualified biologist within 3 days prior to the start of construction activities during the nesting season to determine whether active nests are present within or directly adjacent to the construction zone. All nests found shall be recorded.
- BMP-BIO-2: In the event an active nest is detected, a qualified biologist shall monitor the nest to determine if a nest avoidance buffer zone is necessary to restrict construction activities in proximity to the nest to protect the nest from failing. Any buffer zone, within which construction activities may not occur, shall be established in coordination with the qualified biologist, who shall take into account existing baseline conditions (e.g., topography, buffering buildings or other structures, etc.). In addition, observed avian response to ambient conditions (e.g., existing traffic noise and human activity) shall factor into the requirement for and size of a nest avoidance buffer.
- BMP-BIO-3: The qualified biologist shall monitor all active nests, including those with and without an established buffer, at least once per week to determine whether birds are being disturbed. If signs of disturbance or stress are observed, the qualified biologist shall implement adaptive measures to reduce disturbance. These measures could include establishing or increasing buffer distances or placing visual screens or sound dampening structures between the nest and construction activity until fledging is confirmed. The qualified biologist shall monitor each active nest until they determine that nestlings have fledged and dispersed, or the nest is no longer active.
- BMP-BIO-4: Should an active nest of any federal or state-listed bird species be detected during pre-construction surveys or subsequent construction monitoring, construction activity in the immediate area shall not commence or shall cease if already underway, and the applicable federal and/or state agency (e.g., United States Fish and Wildlife Service [USFWS], California Department of Fish and Wildlife [CDFW], etc.) shall be notified. Work in other areas of the project site may continue until the active nests has been evaluated.

1.8.3 Cultural Resources

BMP-CUL-1**:** All field supervisors and all construction workers shall participate in training on cultural resources awareness prior to the initiation of project construction on project sites that involve ground-disturbing activities. The training shall include a description of the types of cultural resources (including tribal cultural resources and human remains) that could inadvertently be encountered during ground-disturbing activities, the sensitivity of the resources, the legal basis for protection of the resources, and the penalties for unauthorized collection of or knowingly damaging the resources. The training shall address the proper procedures in the event of an inadvertent discovery of a cultural resource, including the immediate halting of work in the area of the discovery, notification of appropriate individuals of the discovery, the establishment of appropriate protective buffer zones around the discovery, and the continued avoidance of the protected area until the resource has been evaluated by qualified individuals and an appropriate treatment plan has been developed and implemented. These procedures shall be documented in a Cultural Resources Monitoring Plan (CRMP) that shall establish, in the event of inadvertent discovery of cultural resources, monitoring procedures (including potential Native American monitors), notification procedures, key staff, and preliminary treatment measures for potential discoveries. The CRMP shall be written to ensure compliance with appropriate state and federal laws. The training presentation and CRMP shall be available to additional supervisory or construction personnel who may join after project construction has begun.

1.8.4 Stormwater and Erosion Control

BMP-WQ-1: A Storm Water Pollution Prevention Plan (SWPPP), which will include erosion and sedimentation BMPs, shall be developed and implemented for construction activities. The SWPPP may include, but would not be limited to, the following:

- Minimizing the extent of disturbed areas and duration of exposure;
- Stabilizing and protecting disturbed areas;
- Keeping runoff velocities low; and
- Retaining sediment within the construction area.

BMP-WQ-2: Construction erosion and sediment control BMPs may include, but are not limited, to the following:

- Temporary desilting basins;
- Silt fences;
- Gravel bag barriers;
- Temporary soil stabilization with mattresses and mulching;
- Temporary drainage inlet protection; and
- Diversion dikes and interceptor swales.

1.8.5 Transportation

BMP-TRA-1: Residences and businesses near the underground distribution alignment would be notified prior to the start of construction (e.g., via flyers) of lane closures and parking restrictions in their vicinity. The notices would include a telephone number for comments or questions related to construction activities.

BMP-TRA-2 LADWP would coordinate with all applicable agencies regarding construction schedules and worksite traffic control and detour plans, including but not limited to the City of Los Angeles Department of Transportation, the City of Los Angeles Department of Public

Works, Bureau of Engineering, the City of Los Angeles Fire Department, and the City of Los Angeles Police Department.

1.9 Required Permits and Approvals

Several approvals and/or permits would be required to implement the proposed project. The environmental document for the proposed project would be used to facilitate compliance with federal and state laws and the granting of permits by various state and local agencies having jurisdiction over one or more aspects of the project. These approvals and permits may include, but may not be limited to, the permits listed in Table 1-3.

Table 1-3. Anticipated Project Permits or Approvals

Agency or Department	Permit
City of Los Angeles Department of Public Works, Bureau of Engineering	Excavation Permit
City of Los Angeles Department of Transportation	Approval of Traffic and Signal Control Plan
City of Los Angeles Harbor Department	Coastal Development Permit Review Utility Easements
California Coastal Commission	Coastal Development Permit Review
Caltrans	Encroachment Permit
State of California State Water Resources Control Board	Construction Stormwater General Permit

SECTION 2
INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines (2025) to determine if the proposed project may have a significant effect on the environment.

CEQA INITIAL STUDY FORM

Project Title:
Zero Emissions Port Electrification of Operations and Grid Reliability Project

Lead Agency Name and Address:
Los Angeles Department of Water and Power
Environmental Planning and Assessment
111 North Hope Street, Room 1044
Los Angeles, California 90012

Contact Person and Phone Number:
Marshall Cyr
Environmental Planning and Assessment
Los Angeles Department of Water and Power
213.367.3541

Project Sponsor's Name and Address:
Los Angeles Department of Water and Power
111 North Hope Street, Room 1044
Los Angeles, California 90012

Project Location:
The proposed project is located within the Port, HGS, and the neighborhoods of Wilmington and San Pedro. The Port is bounded to the north by Harry Bridges Boulevard, to the east by the Schuyler F. Heim Bridge and Navy Way, to the south by the San Pedro Breakwater, and to the west by Harbor Boulevard. See Section 1.3, Location and Setting.

General Plan Designation:
The underground alignment would be located entirely within the existing road ROW. The properties adjacent to the underground alignment include the following designations: public facilities, low residential, medium residential, commercial, industrial, and open space within the City of Los Angeles. RS-Q, RS-C, and HGS are located on LAHD- or LADWP-owned land designated for Public Facilities. The three switching stations are located within or adjacent to the POLA and are designated for General/Bulk Cargo (Outer Harbor and Terminal Island), or public facilities and light manufacturing (Harry Bridges).

Zoning:
The properties along the underground alignment are zoned Public Facilities (PF), One Family (R1), Residential Estate (RE), Multiple Dwelling (R3 and R4), Limited Commercial (C1), Commercial Zone (C2), and Open Space (OS) within the City of Los Angeles; RS-Q, RS-C, and HGS are located on LADWP-owned land designated for Public Facilities. The three switching

stations are located within or adjacent to the POLA and are designated for M3- Heavy Industrial or M2- Light Manufacturing.

Description of Project:

LADWP and LAHD propose to increase the capacity of electricity distribution within the Port by installing sixteen (16) new 34.5 kV underground distribution circuits. Electricity is currently brought into the Port through RS-Q located at the HGS; however, RS-Q does not have sufficient capacity to meet the additional 200 MVA needed for the established electrification goals. To accommodate the estimated increase in load, LADWP is proposing to expand the capacity of RS-Q and RS-C, install new underground distribution lines, install three switching stations, and construct a wet cooling tower for the HGS.

Refer to Section 1, Project Description, of this IS for the complete project description.

Surrounding Land Uses and Setting:

All work would be conducted from, and located within, existing road ROW, LADWP-owned land designated for Public Facilities, and LAHD-owned land designated as Open Space or Public Facilities. These activities would occur with the City of Los Angeles Community Plan Areas of Wilmington, San Pedro, and the Port.

Other Public Agencies Whose Approval Is Required:

- City of Los Angeles Department of Public Works, Bureau of Engineering
- City of Los Angeles
- City of Los Angeles Department of Transportation
- City of Los Angeles Harbor Department
- California Coastal Commission
- Caltrans
- State of California State Water Resources Control Board

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?

Pursuant to California Public Resources Code Section 21080.3.1, LADWP contacted all tribes provided by the Native American Heritage Commission List: Gabrieleño Band of Mission Indians - Kizh Nation, Gabrieleño/Tongva San Gabriel Band of Mission Indians, Gabrielino Tongva Indians of California, Gabrielino/Tongva Nation, Gabrielino-Tongva Tribe, Juaneño Band of Mission Indians Acjachemen Nation 84A, Santa Rosa Band of Cahuilla Indians, and Soboba Band of Luiseno Indians. No tribes requested to consult with LADWP on the potential impact of the proposed project. Additional discussion can be found in Section 2.18, Tribal Cultural Resources, of this IS/MND.

Environmental Factors Potentially Affected

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

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

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Jane Hauptman

Signature

December 12, 2025

Date

2.1 Aesthetics

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact. The proposed project footprint consists entirely of developed areas within an industrial port complex. It is not within or near any protected or designated scenic vistas. After construction, the portions of the project on public roadways would be underground and would therefore have no permanent impact on the visual character of the area. The switching stations would be located within areas containing extensive industrial development and equipment. Project components within Parcels, L, P, and Y, the LADWP facility at 900 E Lomita Boulevard in Wilmington, and the HGS would be consistent with the industrial nature and existing development of the sites. The project component that would be most readily visible is the new cooling tower at the HGS, which would be approximately 50 ft tall. However, there are two existing towers/stacks at the HGS that are over 150 ft tall. Additionally, there are a variety of towers, stacks, and other tall structures of industrial nature within the project area and viewshed. As such, the new cooling tower would not be out of character or scale with its surroundings and there would be no impact.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The nearest eligible state scenic highway is State Route (SR) 1/Coast Highway, is located approximately 7 miles east of the project site at its closest point (measured from the HGS) (Caltrans 2025). None of the project components would be visible from the eligible state scenic highway and would therefore have no impact on scenic resources within a state scenic highway.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage 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. As described in Section 2.1(a) above, the proposed project is within a highly urbanized industrial port complex. The HGS, Parcel Y, and RS-C are zoned PF (Public Facilities) with a land use designation of PF. Parcel K is zoned M2, Light Industrial with a land use designation of Light Manufacturing. The three switching stations are located within or adjacent to the POLA and are designated for Heavy Industrial or Light Manufacturing. There are no applicable regulations related to scenic resources for these zoning designations. The Port Master Plan (LAHD 2018) also does not include regulations related to scenic quality. Also, as described in Section 2.1(a), the project components would not be out of character with the surrounding industrial area. Lastly, as described in Section 2.1(b), the project would not damage any scenic resources within a state scenic highway. As such, the project would have a less-than-significant impact related to conflict with regulations governing scenic quality.

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

Less than Significant Impact. Project construction is not anticipated to occur at night; therefore, no new sources of substantial light or glare would be added that would adversely affect day or nighttime views in the area during construction. The proposed project would occur entirely within a highly developed industrial setting that contains various sources of light and glare, including extensive nighttime lighting. Once constructed, the distribution circuits would be underground and have no lighting associated with them. The switching stations and new racks would be remotely operated and would contain lighting as required for safety and security. RS-C Rack C would be located within an existing LADWP facility, which already contains lighting for safety and security. Likewise, the cooling tower and maintenance building would be located within the existing HGS, which already contains lighting for safety and security. Similar lighting would accompany the proposed project facilities. As such, the proposed project would have a less-than-significant impact related to creating a new source of substantial light or glare.

2.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY 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 Dept. 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 forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

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

No Impact. The project site is not located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as mapped by the Farmland Mapping and Monitoring Program. There are two (2) small strips of Unique Farmland 0.02 miles north of the RS-C Rack C and 1 mile northwest of the nearest underground distribution circuit, but it would not be impacted by the proposed project (CDOC 2025a). Therefore, the proposed project would not convert Farmland to non-agricultural uses, and no impact would occur.

b) *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. The project site is not under a Williamson Act contract (CDOC 2025b), and no effects would occur related to conflicts with Williamson Act contracts. The properties along the underground alignment are zoned as Public Facilities (PF), One-Family (R1), Residential Estate (RE), Multiple Dwelling (R3 and R4), Limited Commercial (C1), Commercial Zone (C2), and Open Space (OS) within the City of Los Angeles. RS-Q, RS-C, and HGS are located on LADWP-owned land designated for Public Facilities. The three switching stations are located withing the POLA and are designated for Heavy Industrial and Light Manufacturing. Because the project site is within the City of Los Angeles, it is located within an Urban Agriculture Incentive Zone. The Urban Agriculture Incentive Zone Ordinance was adopted by the City pursuant to State Assembly Bill (AB) 551 to encourage agriculture in urban areas through the reductions in property taxes for qualifying properties used for agricultural purposes for at least 5 years. However, the project sites are all within urban industrial areas either within the public ROW or on properties owned by LAHD or LADWP, which are not conducive to urban agriculture. As such, urban agricultural activities would not be suitable for areas within the project site. Therefore, there would be no impacts related to conflicts with existing agricultural zoning or Williamson Act contracts.

c) *Would the project 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. No forest land, timberland, or Timberland Production areas (as defined in PRC Sections 12220[g], 4526, and 51104[g]) are located within or adjacent to the project site. Therefore, the proposed project would not conflict with existing zoning for forest land, timberland, or Timberland Production areas, and no impact would occur.

d) *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. As discussed above in Section 2.2(c), no forest land is located on the project site. As such, no forest land would be lost or converted by the proposed project, and no impact would occur.

e) Would the project 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. As discussed above, the project sites are all within urban industrial areas either within the public ROW or on properties owned by LAHD or LADWP. No Farmland or forest land exists in the vicinity of the project site. As such, the proposed project would not result in changes to the existing environment that could result in conversion of Farmland or forest land to non-agricultural or non-forest uses. No impact would occur.

2.3 Air Quality

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

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact with Mitigation Incorporated. The project area is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County, and is within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD).

SCAQMD administers the SCAB's air quality management plan (AQMP), which is a comprehensive document outlining an air pollution control program for attaining the California

Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The 2022 AQMP was adopted by the SCAQMD Governing Board in December 2022 (SCAQMD 2022). The 2022 AQMP was developed to address the attainment of the 2015 national 8-hour ozone (O_3) ambient air quality standard (70 parts per billion) for the SCAB and Coachella Valley. The 2022 AQMP provides actions, strategies, and steps needed to reduce air pollutant emissions and meet the O_3 standard by 2037 (SCAQMD 2022).

The purpose of a consistency finding with regard to the 2022 AQMP is to determine if a project is consistent with the assumptions and objectives of the 2022 AQMP and if it would interfere with the region's ability to comply with federal and state air quality standards. SCAQMD has established criteria for determining consistency with the currently applicable AQMP in Chapter 12, Sections 12.2 and 12.3, of the SCAQMD CEQA Air Quality Handbook. These criteria are as follows (SCAQMD 1993):

- Consistency Criterion No. 1: Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP
- Consistency Criterion No. 2: Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase

To address the first criterion, project-generated criteria air pollutant emissions have been estimated and analyzed for significance and are addressed in Section 2.3(b). Detailed results of this analysis are included in Appendix A, Air Quality and Greenhouse Gas Emissions Technical Report. As presented in Section 2.3(b), the project would not generate construction criteria air pollutant emissions that exceed SCAQMD's thresholds with implementation of mitigation measure (MM) AQ-1, and the project would not generate operational criteria air pollutant emissions that exceed SCAQMD's thresholds without mitigation. Therefore, with mitigation the project would be consistent with Criterion No. 1.

The second criterion, regarding the potential of the project to exceed the assumptions in the AQMP or increments based on the year of project buildout and phase, is primarily assessed by determining consistency between the project's land use designations and its potential to generate population growth. In general, projects are considered consistent with, and not in conflict with or obstructing implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (SCAQMD 1993). SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, and employment by industry) developed by the Southern California Association of Governments (SCAG) for its 2020–2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2020). SCAQMD uses this document, which is based on general plans for cities and counties in the SCAB, to develop the AQMP emissions inventory (SCAQMD 2022). Although the more recent SCAG RTP/SCS was approved in April 2024, this project uses the 2020 RTP/SCS as a reference for air quality impact analysis because it provides consistency with the relevant AQMP from 2022. The SCAG RTP/SCS and associated Regional Growth Forecast are generally consistent with the local plans; therefore, the 2022 AQMP is generally consistent with local government plans.

The project would occur within the public roadway ROWs as well as within industrial parcels. The proposed project would be consistent with the existing zoning of the project sites and does not

propose a change in land use designation. In addition, because the project is not anticipated to result in residential population growth or generate an increase in employment that would conflict with existing employment-population projections, it would not conflict with or exceed the assumptions in the 2022 AQMP. Accordingly, the project is consistent with the SCAG RTP/SCS forecasts used in development of the SCAQMD AQMP.

In summary, based on the considerations presented for the two criteria above, impacts relating to the project's potential to conflict with or obstruct implementation of the 2022 AQMP would be less than significant with mitigation.

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

Less than Significant Impact with Mitigation Incorporated. By its nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution to air quality. If a project's emissions would exceed the applicable significance thresholds, it would have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003a).

A quantitative analysis was conducted to determine whether the project might result in emissions of criteria air pollutants that may cause exceedances of the NAAQS or CAAQS or cumulatively contribute to existing nonattainment of ambient air quality standards. Criteria air pollutants include O_3, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (coarse particulate matter, or PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (fine particulate matter, or $PM_{2.5}$), and lead. Pollutants that are evaluated herein include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which include NO_2, which are important because they are precursors to O_3, as well as CO, sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$.

Regarding NAAQS and CAAQS attainment status,[1] the SCAB is designated as a nonattainment area for federal and state O_3 and $PM_{2.5}$ standards (CARB 2022a). The SCAB is also designated as a nonattainment area for state PM_{10} standards; however, it is designated as an attainment area for federal PM_{10} standards. The SCAB is designated as an attainment area for federal and state CO and NO_2 standards, as well as for state SO_2 standards.

The project would result in emissions of criteria air pollutants for which the U.S. Environmental Protection Agency (EPA) and CARB have adopted ambient air quality standards (i.e., the NAAQS and CAAQS). Projects that emit these pollutants have the potential to cause, or contribute to, violations of these standards. The SCAQMD CEQA Air Quality Significance Thresholds, as revised

[1] An area is designated as in attainment when it is in compliance with the NAAQS and/or the CAAQS. The NAAQS and CAAQS are standards for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. These standards are set by the U.S. Environmental Protection Agency and CARB, respectively. Attainment = meets the standards; attainment/maintenance = achieves the standards after a nonattainment designation; nonattainment = does not meet the standards.

in March 2023, set forth quantitative emission significance thresholds for criteria air pollutants, which, if exceeded, would indicate the potential for a project to contribute to violations of the NAAQS or CAAQS. Table 2.3-1 lists the revised SCAQMD Air Quality Significance Thresholds (SCAQMD 2023).

Table 2.3-1. South Coast Air Quality Management District Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	Construction (Pounds per Day)	Operation (Pounds per Day)
VOCs	75	55
NO_x	100	55
CO	550	550
SO_x	150	150
PM_{10}	150	150
$PM_{2.5}$	55	55
Lead[a]	3	3
TACs and Odor Thresholds		
TACs[b]	Maximum incremental cancer risk ≥10 in 1 million Cancer burden >0.5 excess cancer cases (in areas ≥1 in 1 million) Chronic and acute hazard index ≥1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	

Source: SCAQMD 2023.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; TAC = toxic air contaminant; SCAQMD = South Coast Air Quality Management District.
Greenhouse gas (GHG) emissions thresholds for industrial projects, as added in the March 2015 revision to the SCAQMD Air Quality Significance Thresholds, were not included in this table because they are addressed in the GHG emissions analysis (Section 2.8) and not the air quality analysis.

[a] The phase-out of leaded gasoline started in 1976. Because gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

[b] TACs include carcinogens and noncarcinogens.

The project would result in a cumulatively considerable net increase for O_3, which is a nonattainment pollutant, if the project's construction or operational emissions would exceed the SCAQMD thresholds for VOC or NO_x shown in Table 2.3-1. These emission-based thresholds for O_3 precursors are intended to serve as a surrogate for an O_3 significance threshold (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly, and the effects of an individual project's emissions of O_3 precursors (i.e., VOCs and NO_x) on O_3 levels in ambient air cannot be determined through air quality models or other quantitative methods.

The California Emissions Estimator Model (CalEEMod) Version 2022.1.1.35 was used to estimate emissions from construction of the project.[2] Project operations would result in mobile, area,

[2] CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with construction and operational activities from a variety of land use projects, including warehouses (CAPCOA 2022).

energy, and cooling tower criteria air pollutant emissions. It is estimated that this would involve approximately 30 annual trips for inspections or repair work. Particulate matter emission would result from the operation of the proposed cooling tower. The following discussion quantitatively evaluates project-generated construction and operational emissions and impacts that would result from implementation of the project.

Construction Emissions

Construction of the project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (e.g., off-road construction equipment and soil disturbance) and off-site sources (e.g., vendor trucks, haul trucks, and worker vehicle trips). Specifically, entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. Internal combustion engines used by construction equipment, haul trucks, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, NOx, CO, PM_{10}, and $PM_{2.5}$. Construction emissions can vary substantially from day to day depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather.

Emissions from the construction phases of the project were estimated using project-specific information and CalEEMod default values when project-specific information was not available. The construction was modeled beginning in April 2026 and concluding in December 2030. The analysis contained herein is based on the following schedule assumptions (duration of phases is approximate):

- Underground Distribution/Alignment: April 2026–December 2030
- RS-Q Rack D Construction: October 2026–December 2027
- Parcel K and Y: July 2026–December 2026
- Terminal Island Switching Station: January 2027–December 2029
- Harry Bridges Switching Station: January 2028–December 2030
- Outer Harbor Switching Station: January 2029–December 2030
- HGS Phase 1: June 2027–February 2028
- HGS Phase 2, Foundations and Piles: February 2028–July 2028
- HGS Phase 3, Cooling Tower and Auxiliary Equipment: July 2028–April 2029
- HGS Phase 4, Makeup Water Storage, Wastewater and Stormwater Holding Tank Assembly: April 2029–October 2029
- HGS Phase 5, Water Infrastructure: October 2029–February 2030
- HGS Phase 6, Outage, Tie-Ins, and Commissioning: February 2030–July 2030
- RS-C Rack C Improvement: October 2026–December 2027
- Railroad Crossings: January 2030–September 2030
- Channel Crossing: September 2030–November 2030
- Cerritos Channel Crossing: November 2030–December 2030

Construction modeling assumptions for equipment and vehicles are provided in Table 2.3-2. Equipment mix and horsepower were based on project-specific information and CalEEMod default values, including equipment load factor. For the analysis, it was generally assumed that heavy-duty construction equipment would be operating at the site five (5) to six (6) days per week.

Table 2.3-2. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips				Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Daily Haul Truck Trips	On-Site Trucks	Equipment Type	Quantity	Usage Hours
Underground Distribution/Alignment	180	78	14	0	Excavators	3	8
					Other General Industrial Equipment	3	8
					Pavers	3	8
					Rollers	3	8
					Cranes	3	8
					Tractors/Loaders/ Backhoes	8	8
RS-Q Rack D Construction	80	6	2	0	Excavators	1	10
					Pavers	1	10
					Rollers	2	10
					Tractors/Loaders/ Backhoes	10	10
					Skid Steer Loaders	1	10
					Cranes	1	10
					Pumps	1	10
					Aerial Lifts	1	10
					Other General Industrial Equipment	1	10
Parcel K and Y	60	4	52	0	Excavators	2	10
					Graders	2	10
					Tractors/Loaders/ Backhoes	4	10

Table 2.3-2. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips				Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Daily Haul Truck Trips	On-Site Trucks	Equipment Type	Quantity	Usage Hours
Switching Stations (Terminal Island, Harry Bridges, and Outer Harbor, each)	80	20	2	0	Excavators	1	10
					Pavers	1	10
					Rollers	2	10
					Tractors/Loaders/ Backhoes	10	10
					Skid Steer Loaders	1	10
					Cranes	1	10
					Other General Industrial Equipment	1	10
HGS Phase 1	48	16	2	0	Tractors/Loaders/ Backhoes	1	10
					Skid Steer Loaders	1	8
					Bore/Drill Rigs	2	10
					Off-Highway Trucks	2	8
					Rollers	1	5
					Plate Compactors	1	5
					Excavators	2	10
					Graders	1	5
					Cranes	1	5
HGS Phase 2	76	30	6	0	Tractors/Loaders/ Backhoes	1	10
					Off-Highway Trucks	1	8

Table 2.3-2. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips				Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Daily Haul Truck Trips	On-Site Trucks	Equipment Type	Quantity	Usage Hours
					Other Material Handling Equipment	1	5
					Cranes	2	8
					Excavators	1	10
					Bore/Drill Rigs	1	10
					Plate Compactors	1	5
HGS Phase 3	28	12	2	0	Other General Industrial Equipment	1	8
					Tractors/Loaders/ Backhoes	1	8
					Cranes	1	8
					Welders	3	5
HGS Phase 4	36	20	2	0	Welders	1	5
					Cement Mortar Mixers	1	10
					Cranes	1	8
					Tractors/Loaders/ Backhoes	1	1
					Other Material Handling Equipment	1	5
					Excavators	1	10
HGS Phase 5	64	6	2	0	Excavators	1	5
					Welders	1	3

Table 2.3-2. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips				Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Daily Haul Truck Trips	On-Site Trucks	Equipment Type	Quantity	Usage Hours
					Trenchers	2	5
					Tractors/Loaders/ Backhoes	1	5
					Cranes	1	8
HGS Phase 6	34	12	2	0	Tractors/Loaders/ Backhoes	2	10
					Pavers	1	5
					Off-Highway Trucks	1	8
					Plate Compactors	1	5
					Welders	2	5
					Forklifts	1	10
RS-C Rack C	80	6	2	0	Excavators	1	10
					Pavers	1	10
					Rollers	2	10
					Tractors/Loaders/ Backhoes	10	10
					Skid Steer Loaders	1	10
					Other General Industrial Equipment	1	10
Railroad Crossings Pit Prep (RR Crossings 1–9, each)	30	14	4	0	Excavators	1	10
					Cranes	1	6
					Cranes	1	8

Table 2.3-2. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips				Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Daily Haul Truck Trips	On-Site Trucks	Equipment Type	Quantity	Usage Hours
					Generator Sets	1	10
					Tractors/Loaders/ Backhoes	1	10
					Rubber-Tired Loaders	1	10
					Welders	1	10
					Paving Equipment	1	10
					Sweepers/Scrubbers	1	10
					Concrete/Industrial Saws	1	10
					Plate Compactors	1	10
					Rollers	1	10
					Forklifts	1	10
					Air Compressors	1	10
Railroad Crossings Pipe Install (RR Crossings 1–9, each)	30	14	0	0	Excavators	1	10
					Bore/Drill Rigs	1	10
					Generator Sets	1	10
					Pumps	1	10
					Pumps	1	4
					Cranes	1	8
Channel Crossing Pit Prep	30	14	4	0	Excavators	1	10
					Cranes	1	6
					Cranes	1	8

Table 2.3-2. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips				Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Daily Haul Truck Trips	On-Site Trucks	Equipment Type	Quantity	Usage Hours
					Generator Sets	1	10
					Tractors/Loaders/ Backhoes	1	10
					Rubber-Tired Loaders	1	10
					Welders	1	10
					Paving Equipment	1	10
					Sweepers/Scrubbers	1	10
					Concrete/Industrial Saws	1	10
					Plate Compactors	1	10
					Rollers	1	10
					Forklifts	1	10
					Air Compressors	1	10
Channel Crossing Install	30	14	4	0	Excavators	1	10
					Bore/Drill Rigs	1	10
					Generator Sets	1	10
					Pumps	1	10
					Pumps	1	4
					Cranes	1	8
Cerritos Channel Crossing	30	14	4	0	Excavators	1	10
					Trenchers	2	6

Table 2.3-2. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips				Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Daily Haul Truck Trips	On-Site Trucks	Equipment Type	Quantity	Usage Hours
					Tractors/Loaders/ Backhoes	1	10
					Other General Industrial Equipment	1	10

Notes: See Appendix A for details.
Equipment in parentheses are the representative equipment modeled in CalEEMod.
Vendor trucks include water trucks, utility trucks, pipe trucks, pickup trucks, slurry trucks, gang trucks, and cooling and cutting water trucks. Haul trucks include dump trucks.

As described in Section 1.8, Best Management Practices, BMPs would be employed during construction of the proposed project to help minimize or eliminate potential impacts to the environment. SCAQMD Rule 401 (Visible Emissions) and Rule 402 (Nuisance) to prevent the occurrence of public nuisances and visible dust plumes traveling off-site, and would implement Rule 403 dust control measures and Rule 1166 measures to control the emission of VOCs from excavating, grading, handling and treating VOC-contaminated soil as required by the SCAQMD. Within CalEEMod, it was assumed that active work areas would be watered at least twice daily to prevent generation of dust plumes in compliance with BMP-AQ-1 and SCAQMD rules.

Table 2.3-3 shows the estimated maximum daily construction emissions associated with the construction phases of the project.

Table 2.3-3. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions – Unmitigated

Year	VOCs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Summer						
2026	6.20	57.24	86.88	0.16	8.27	3.23
2027	11.54	98.68	166.30	0.27	9.91	4.54
2028	14.08	122.08	208.14	0.34	12.03	5.46
2029	17.84	153.87	266.14	0.43	13.97	6.46
2030	12.26	104.76	182.39	0.31	9.92	4.42
Winter						
2026	8.57	78.45	122.49	0.21	10.12	4.17
2027	11.51	99.24	162.79	0.27	9.91	4.54
2028	14.39	124.27	208.31	0.35	12.03	5.46
2029	17.78	152.93	260.31	0.43	14.18	6.49
2030	12.23	105.21	179.30	0.31	10.23	4.48
Maximum	*17.84*	*153.87*	*266.14*	*0.43*	*14.18*	*6.49*
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	Yes	No	No	No	No

Source: Appendix A.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

As shown in Table 2.3-3, daily construction emissions would not exceed the SCAQMD significance thresholds for VOCs, CO, SOx, PM_{10}, or $PM_{2.5}$ and would exceed the SCAQMD significance threshold for NO_x. Therefore, the project impacts would be potentially significant during construction and require mitigation.

Mitigation Measures

Construction of the project involves many separate construction components as detailed in Table 2.3-2. The exceedance of the NOx significance threshold is a result of overlapping construction

activities during the project construction. By minimizing exhaust emissions from some of the construction components, as described in MM-AQ-1, NOx emissions would be reduced to below significance.

MM-AQ-1 Construction Equipment Exhaust Minimization. Prior to the commencement of construction activities for the Cooling Tower (HGS Phases 1–6), Terminal Island Switching Station, Harry Bridges Switching Station, and Outer Harbor Switching Station, the Los Angeles Department of Water and Power shall document evidence from internal crews, the Los Angeles Harbor Department, or project contractors, that for off-road equipment with engines rated at 70 horsepower or greater, no construction equipment shall be used that is less than Tier 3.

An exemption from this requirement may be granted under the following two conditions:

(1) The Los Angeles Department of Water and Power, the Los Angeles Harbor Department, or project contractors shall demonstrate that at least three construction fleet owners/operators in Los Angeles County were contacted and that those owners/operators confirmed Tier 3 Final equipment or better could not be located within Los Angeles County during the desired construction schedule.

(2) The proposed replacement equipment has been evaluated using the California Emissions Estimator Model or other industry standard emission estimation method and documentation has been provided to the Los Angeles Department of Water and Power to confirm that necessary project-generated emissions reductions are achieved.

Level of Significance After Mitigation

Table 2.3-4 shows the estimated maximum daily construction emissions associated with the construction phases of the project after application on MM-AQ-1.

Table 2.3-4. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions – Mitigated

Year	VOCs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Summer						
2026	6.20	57.24	86.88	0.16	8.27	3.23
2027	7.89	65.94	114.12	0.17	8.79	3.51
2028	8.96	74.29	127.80	0.20	10.44	4.00
2029	11.83	95.66	162.65	0.27	12.18	4.82
2030	12.26	64.22	107.75	0.19	8.73	3.33

Table 2.3-4. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions – Mitigated

Year	VOCs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Winter						
2026	8.57	78.45	122.49	0.21	10.12	4.17
2027	7.86	66.50	110.61	0.17	8.79	3.51
2028	8.97	74.75	123.85	0.20	10.44	4.00
2029	11.91	96.05	159.46	0.26	12.43	4.87
2030	8.06	65.33	106.66	0.19	9.09	3.43
Maximum	*11.91*	*96.05*	*162.70*	*0.27*	*12.43*	*4.87*
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No

Source: Appendix A.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

As shown in Table 2.3-4, with application of MM-AQ-1, the daily construction emissions would not exceed the SCAQMD significance thresholds for VOCs, NOx, CO, SOx, PM_{10}, or $PM_{2.5}$. Therefore, the project construction impacts would be less than significant with mitigation.

Cumulative localized impacts would potentially occur if a construction project were to occur concurrently with another off-site project. Construction schedules for potential future projects near the project site are currently unknown; therefore, potential construction impacts associated with two or more simultaneous projects would be considered speculative.[3] However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would also be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD. Based on the previous considerations, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant with mitigation.

Operational Emissions

Project operations would result in mobile, area, energy, and cooling tower criteria air pollutant emissions. It is estimated that this would involve approximately thirty (30) annual trips. Particulate matter emission would result from the operation of the proposed cooling tower. Daily mass emissions were estimated based on the maximum concentration of total dissolved solids in cooling tower water allowable to maintain operational integrity, 5,000 milligrams per liter (parts

[3] The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145). This discussion is nonetheless provided in an effort to show good-faith analysis and comply with CEQA's information disclosure requirements.

per million by weight), and a drift rate of 0.0005%. Table 2.3-5 shows the estimated maximum daily operational emissions associated with the project.

Table 2.3-5. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Time of Year	VOCs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Summer						
Mobile	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Area	0.70	0.01	0.98	<0.005	<0.005	<0.005
Energy	0.01	0.21	0.18	<0.005	0.02	0.02
Cooling Tower	N/A	N/A	N/A	N/A	5.10	0.03
Total	0.71	0.22	1.16	<0.005	5.12	0.05
Winter						
Mobile	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Area	0.54	N/A	N/A	N/A	N/A	N/A
Energy	0.01	0.21	0.18	<0.005	0.02	0.02
Cooling Tower	N/A	N/A	N/A	N/A	5.10	0.03
Total	0.55	0.21	0.18	<0.005	5.12	0.05
Maximum	*0.71*	*0.22*	*1.16*	*<0.005*	*5.12*	*0.05*
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No

Source: Appendix A.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

As shown in Table 2.3-5, daily operational emissions would not exceed the SCAQMD significance thresholds for VOCs, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$. Therefore, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant during operation.

Summary

Based on the previous considerations, the proposed project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant with mitigation.

Health Effects of Criteria Air Pollutants

The following discussion is provided to connect the project's potential air quality impacts to potential health consequences. The potential health effects associated with project-generated criteria air pollutant emissions are included as additional information and do not require a separate significance conclusion.

Construction of the project would generate criteria air pollutant emissions; however, estimated construction emissions would not exceed the SCAQMD mass-emission daily thresholds with the incorporation of mitigation, as shown in Tables 2.3-3 through 2.3-5. As previously discussed, the SCAB has been designated as a federal nonattainment area for O_3 and $PM_{2.5}$ and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$.

Health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2025). VOCs and NO_x are precursors to O_3, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SCAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur because exceedances of the O_3 ambient air quality standards tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative because of the lack of quantitative methods to assess this impact. Because construction of the project would not result in O_3 precursor emissions (i.e., VOCs or NOx) that would exceed the SCAQMD thresholds after mitigation is applied, as shown in Table 2.3-3 through 2.3-5, the project is not anticipated to substantially contribute to regional O_3 concentrations and their associated health impacts.

Health effects associated with NO_x include lung irritation and enhanced allergic responses (CARB 2025). Construction of the project would not generate NOx emissions that would exceed the SCAQMD mass daily thresholds after mitigation is applied (see Table 2.3-4); therefore, construction of the project is not anticipated to contribute to exceedances of the NAAQS and CAAQS for NO_2 or contribute to associated health effects. In addition, the SCAB is designated as in attainment of the NAAQS and CAAQS for NO_2, and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2025). CO tends to be a localized impact associated with congested intersections. CO hotspots will be discussed in Section 2.4.3 as a less-than-significant impact. Thus, the project's CO emissions would not contribute to the health effects associated with this pollutant.

Health effects associated with PM_{10} and $PM_{2.5}$ include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2025). As with O_3 and NO_x, and as shown in Table 2.3-3 through 2.3-5, the project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed SCAQMD's thresholds. Accordingly, the project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause an increase in related health effects for these pollutants.

In summary, the project would not result in any potentially significant contribution to local or regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Impacts would be less than significant with mitigation.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. The project would not expose sensitive receptors to substantial pollutant concentrations, as evaluated below.

Sensitive Receptors

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, older people, and people with cardiovascular and chronic respiratory diseases. According to SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The nearest sensitive-receptor land uses are residences located adjacent to the project alignment as it passes through residential neighborhoods.

Localized Significance Thresholds

SCAQMD recommends an LST analysis to evaluate localized air quality impacts to sensitive receptors in the immediate vicinity of the project site as a result of project activities. The impacts were analyzed using methods consistent with those in SCAQMD's Final LST Methodology (SCAQMD 2009). The project is located within Source Receptor Area (SRA) 4 (South Coastal LA County). The project's construction activities would not disturb more than 3 acres at one time; therefore, for the purposes of the LST analysis, emissions thresholds based on a 3-acre site were utilized. This is a conservative approach, as LSTs increase with the size of project site. Therefore, this analysis applies the SCAQMD LST values for a 3-acre site within SRA 4 with a receptor distance of 25 meters (82 feet), which is the shortest available distance provided in SCAQMD's methodology.

Project construction activities would result in temporary sources of on-site criteria air pollutant emissions associated with off-road equipment exhaust and fugitive dust generation. According to the Final LST Methodology, "off-site mobile emissions from the project should not be included in the emissions compared to the LSTs" (SCAQMD 2009). Trucks and worker trips associated with the project are not expected to cause substantial air quality impacts to sensitive receptors along off-site roadways because emissions would be relatively brief in nature and would cease once the vehicles have passed through the main streets. On-site emissions from mobile trips were limited to 0.25 miles of estimated on-site activity in the LST analysis. The maximum daily on-site emissions generated by construction of the project in each construction year are presented in Table 2.3-6 and compared to the SCAQMD LSTs for SRA 4 to determine whether project-generated on-site emissions would result in potential LST impacts.

Table 2.3-6. Construction Localized Significance Threshold Analysis

Time of Year	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day (On Site)			
Summer				
2026	50.04	71.12	3.18	1.92
2027	60.79	92.29	2.38	1.92
2028	68.70	103.64	2.24	1.98

Table 2.3-6. Construction Localized Significance Threshold Analysis

Time of Year	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day (On Site)			
2029	89.0	134.67	2.82	1.49
2030	59.25	88.80	1.82	1.60
Winter				
2026	70.31	105.57	3.91	2.58
2027	60.88	92.84	2.38	1.91
2028	68.81	104.23	2.51	2.03
2029	89.15	135.80	2.83	2.49
2030	60.69	90.29	1.86	1.63
Maximum	89.15	135.80	3.91	2.58
SCAQMD LST Criteria[a]	*96*	*1,071*	*9.3*	*6*
Threshold Exceeded?	No	No	No	No

Source: SCAQMD 2009; Appendix A.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
Represents maximum emissions from summer and winter.
[a] LSTs are shown for a 3-acre disturbed area, corresponding to a distance to a sensitive receptor of 25.

As shown in Table 2.3-6, proposed construction activities would not generate emissions greater than the site-specific LSTs for NO_2, CO, $PM_{10,}$ and $PM_{2.5}$. Thus, impacts would be less than significant.

Carbon Monoxide Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed "CO hotspots." The transport of CO is extremely limited, as it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections operating at an unacceptable level of service (LOS) (LOS E or worse is unacceptable). Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots. The project would result in a temporary, short-term increase in traffic during construction. As described herein, during operation, maintenance activities would be minimal and would be similar to those that occur under existing conditions with an estimated 30 vehicle trips per year. No permanent workers would be required to operate or maintain the project. Activities associated with long-term operations and maintenance would, therefore, be minimal.

At the time that the SCAQMD Handbook (SCAQMD 1993) was published, the SCAB was designated as nonattainment under the CAAQS and NAAQS for CO. In 2007, the SCAQMD was designated in attainment for CO under both the CAAQS and NAAQS as a result of the steady

decline in CO concentrations in the SCAB due to turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities. SCAQMD conducted CO modeling for the 2003 AQMP (SCAQMD 2003b) for the four worst-case intersections in the SCAB.[4]

The 2003 AQMP projected 8-hour CO concentrations at the four most congested intersections in the SCAB for 1997 and from 2002 through 2005. From 2002 through 2005, the maximum 8-hour CO concentration was 3.8 parts per million at the Sunset Boulevard and Highland Avenue intersection (in 2002) and the maximum 8-hour CO concentration was 3.4 parts per million at the Wilshire Boulevard and Veteran Avenue intersection (also in 2002).

At the time the 2003 AQMP was prepared, the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in the SCAB, with an average daily traffic volume of about 100,000 vehicles per day. Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic was more than 100,000 vehicles per day. Because the project is not anticipated to increase daily traffic volumes at any study intersection to more than 100,000 vehicles per day, a CO hotspot is not anticipated to occur. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing. Based on these considerations, the project would result in a less-than-significant impact to air quality with regard to potential CO hotspots.

Toxic Air Contaminants

Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. Health effects from carcinogenic air toxics are usually described in terms of cancer risk. SCAQMD recommends an incremental cancer risk threshold of 10 in 1 million. “Incremental cancer risk” is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have noncarcinogenic effects. SCAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) noncarcinogenic effects. The greatest potential for TAC emissions during construction would be diesel particulate matter (DPM) emissions from heavy equipment operations and use of heavy-duty trucks. DPM emissions may cause carcinogenic and/or chronic health effects.

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 200 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs

In 2000, CARB approved a comprehensive diesel risk reduction plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. These regulations and programs have timetables by which

[4] SCAQMD’s CO hotspot modeling guidance has not changed since 2003.

manufacturers must comply and existing operators must upgrade their diesel-powered equipment. CARB has adopted several Airborne Toxic Control Measures (ATCMs) that reduce diesel emissions, including the following measures:

- Diesel Particulate Matter Control Measure for On-Road Heavy-Duty Diesel-Fueled Residential and Commercial Solid Waste Collection Vehicles (13 CCR 2020, 13 CCR 2021)
- ATCM for Diesel Particulate Matter from Portable Engines Rated 50 horsepower and greater (17 CCR 93116)
- ATCM for In-Use Diesel-Fueled Transport Refrigeration Units (TRUs) and TRU Generator Sets, and Facilities where TRUs operate (13 CCR 2477 and Article 8)
- ATCM to limit diesel-fueled commercial motor vehicle idling (13 CCR 2485)
- ATCM for In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.)
- ATCM for In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025)

Exhaust PM_{10} is typically used as a surrogate for DPM, and as shown in Table 2.3-3, which presents total PM_{10} from fugitive dust and exhaust, project-generated construction PM_{10} emissions are anticipated to be minimal and well below the SCAQMD threshold. Nevertheless, a construction health risk assessment was performed to estimate the Maximum Individual Cancer Risk and the Chronic Hazard Index for proximate residential receptors because of project construction. Results of the construction health risk assessment under unmitigated conditions are presented in Table 2.3-7.

Table 2.3-7. Construction Health Risk Assessment Results – Unmitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk	Per Million	9.38	10	Less than Significant
Chronic Hazard Index	Index Value	0.0045	1.0	Less than Significant

Source: SCAQMD 2023.
Note: UTME = Universal Transverse Mercator East; m = meter; UTMN = Universal Transverse Mercator North; CEQA = California Environmental Quality Act.
See Appendix A.

As shown in Table 2.3-7, project construction activities would result in a Residential Maximum Individual Cancer Risk of 9.38 in 1 million which is below the significance threshold of 10 in 1 million. Project construction would result in a Residential Chronic Hazard Index of 0.0045 which is below the 1.0 significance threshold. The project's construction TAC health risk impacts would be less than significant.

Cumulative Health Risk

The SCAQMD does not have an established cumulative health risk approach, but has initiated a public process (including four working group meetings as of January 2024) for the development of additional guidance for public agencies when they evaluate cumulative air quality impacts from increased concentrations of TACs for projects subject to the requirements of CEQA.

Notably, as part of this public process, SCAQMD has not included most construction activity in its cumulative health risk analysis recommendations since construction is typically short-term. However, the draft applicability framework of the SCAQMD's cumulative health risk concept includes long-term construction, with transportation projects such as high-speed rail provided as the example. The draft applicability framework does not define what number of years equates to long-term construction. Because construction of the project is assumed to have a duration of 4.58 years, it may or may not qualify as a short-term project under the final SCAQMD guidance, if/once issued. Nonetheless, as described above, the project itself would result in health risk impacts from construction that would be less than significant. Therefore, it is anticipated that the project would also not result in a cumulatively considerable health risk impact from construction.

Overall, based on the preceding considerations, potential cumulative health risk associated with project development would be less than significant.

Valley Fever

Coccidioidomycosis, more commonly known as "valley fever," is an infection caused by inhalation of the spores of the Coccidioides immitis fungus, which grows in the soils of the southwestern United States. Los Angeles County is not considered a highly endemic county ("highly endemic" meaning more than 20 cases annually of valley fever per 100,000 people) based on the incidence rates reported through 2023. The latest report from the California Department of Public Health indicates that Los Angeles County had 1,409 cases in 2023, or 14.5 cases per 100,000 people (CDPH 2024). Even if the fungus is present at the site, construction activities may not result in increased incidence of valley fever. Valley fever spores can be released when filaments are disturbed by earthmoving activities, although receptors must be exposed to and inhale the spores to be at increased risk of developing valley fever, and exposure to valley fever does not guarantee that an individual will become ill.

To reduce fugitive dust from the project and minimize adverse air quality impacts, the project would employ dust control measures in accordance with SCAQMD Rules 401 and 403, which limit the amount of fugitive dust generated during construction. These requirements are consistent with California Department of Public Health recommendations for the implementation of dust control measures, including regular application of water during soil-disturbance activities, to reduce exposure to valley fever by minimizing the potential that the fungal spores become airborne (CDPH 2013). Further, regulations designed to minimize exposure to valley fever hazards are included in Title 8 of the California Code of Regulations and these would be complied with during the project's construction phase (California Department of Industrial Relations 2017).

In summary, the project would not result in a significant impact attributable to valley fever exposure based on its geographic location and compliance with applicable regulatory standards and dust control measures, which will serve to minimize the release of and exposure to fungal spores. Therefore, impacts associated with valley fever exposure for sensitive receptors would be less than significant.

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

Less than Significant Impact. The evaluation of other emissions is focused on the potential for the project to generate odors. The occurrence and severity of potential odor impacts depend on

numerous factors: the nature, frequency, and intensity of the source; the wind speed and direction; and the sensitivity of the receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and would generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding facilities (SCAQMD 1993). The project entails the electric utility equipment installation and a water-cooling tower and would not create any new sources of odors during operation. Therefore, project operations would result in less-than-significant odor impacts.

2.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The following analysis relies on a biological resources assessment conducted by Dudek biologist Tommy Molioo in April 2025, and a supplemental field visit by Dudek biologist Eilleen Salas in November 2025. The biological resources assessment included a review of the latest available relevant literature, published research, maps, soil data, data on biological baselines, sensitive habitats, and species distributions to determine those resources that have the potential to occur within the project site and surrounding 100-foot buffer (the study area). A field reconnaissance was conducted to characterize the environmental conditions, vegetation communities/land covers, and any plants or wildlife (including their habitats) that occur within the study area. During the field survey, vegetation communities were mapped according to the CDFW List of Vegetation Alliances and Associations (or Natural Communities List), which is based on A Manual of California Vegetation, Second Edition (Sawyer et al. 2009). Dudek compiled a general inventory of plant and wildlife species detected by sight, calls, tracks, scat, or other field indicators, and made a determination concerning the potential for special-status species to occur within the study area. Additionally, Dudek conducted a preliminary investigation of the extent and distribution of jurisdictional waters of the United States regulated by the U.S. Army Corps of Engineers (USACE), jurisdictional waters of the state regulated by the Regional Water Quality Control Board (RWQCB), and CDFW jurisdictional streambed and associated riparian habitat.

Dudek searched CDFW's California Natural Diversity Database (CDFW 2025), the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants (CNPS 2025), and the USFWS occurrence data (USFWS 2025a) to identify special-status biological resources from the region. The California Natural Diversity Database and CNPS Inventory of Rare and Endangered Plants were searched based on the U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map for San Pedro, California, where the study area is located, as well as the surrounding three USGS 7.5-minute quadrangle maps (i.e., Redondo Beach, Torrance, and Long Beach). Potential and/or historical drainages and aquatic features were investigated based on a review of USGS topographic maps (1:24,000 scale), aerial photographs, the National Wetlands Inventory database (USFWS 2025b), and the Natural Resources Conservation Service Web Soil Survey (USDA 2025).

The project site is located in an entirely urbanized setting consisting of a mix of residential development, POLA shipping and transportation areas, and industrial development associated with LADWP facilities. The existing conditions on the majority of the project site consist of developed areas with concrete and asphalt, and disturbed habitat with scattered non-native ruderal (weedy) species and limited ornamental vegetation, particularly at Parcel Y and Parcel K. The project site lacks any natural or undisturbed areas or soils; however, scattered native species such as mulefat (*Baccharis salicifolia*) were observed during the biological reconnaissance on Parcel Y and sparingly within the proposed triangular lot for the Terminal Island Switching Station,.

Additionally, within the proposed triangular lot on Terminal Island, the vegetation generally consists of non-native grasses such as ripgut brome (*Bromus diandrus*) and compact brome (*Bromus madritensis*) with Canadian horseweed (*Erigeron canadensis*) throughout. The non-native grassland community was very dense with minimal to no bare ground. Several small mammal burrows were seen throughout the project site. Two burrows were over 4 inches in diameter. No sign of burrowing owl (*Athene cunicularia*) were seen at either burrow. Two catch basins were recorded within the project boundaries (Figure 2.4-1, Biological Resources). The first catch basin is centrally located within the non-native grassland. The catch basins were installed for flood control purposes during rain events. The second catch basin was along a ditch located southwest of the project site. The ditch is located along the western project boundary. This man-made ditch likely collects run-off from the slightly more elevated triangular lot, and the north and south ends, and drains into the catch basin. Mulefat was mapped along the southern point. However, no obvious ordinary high-water mark was observed, although some pooling was seen along the northern area. Heavy rainfall occurred an entire week prior to the site visit, and no other pooling was observed on site.

Wildlife observed or detected during the survey consists of common upland species typically found in coastal urban areas, including American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), and northern rough-winged swallow (*Stelgidopteryx serripennis*). Other species expected to occur include house finch (*Haemorhous mexicanus*), California ground squirrel (*Spermophilus beecheyi*), and western fence lizard (*Sceloporus occidentalis*).

SOURCE: Esri World Imagery; Open Street Map 2023

DUDEK

0 145 290 Feet

FIGURE 2.4-1

Biological Resources

Zero Emissions Port Electrification of Operations Project

SOURCE: Esri World Imagery; Open Street Map 2023

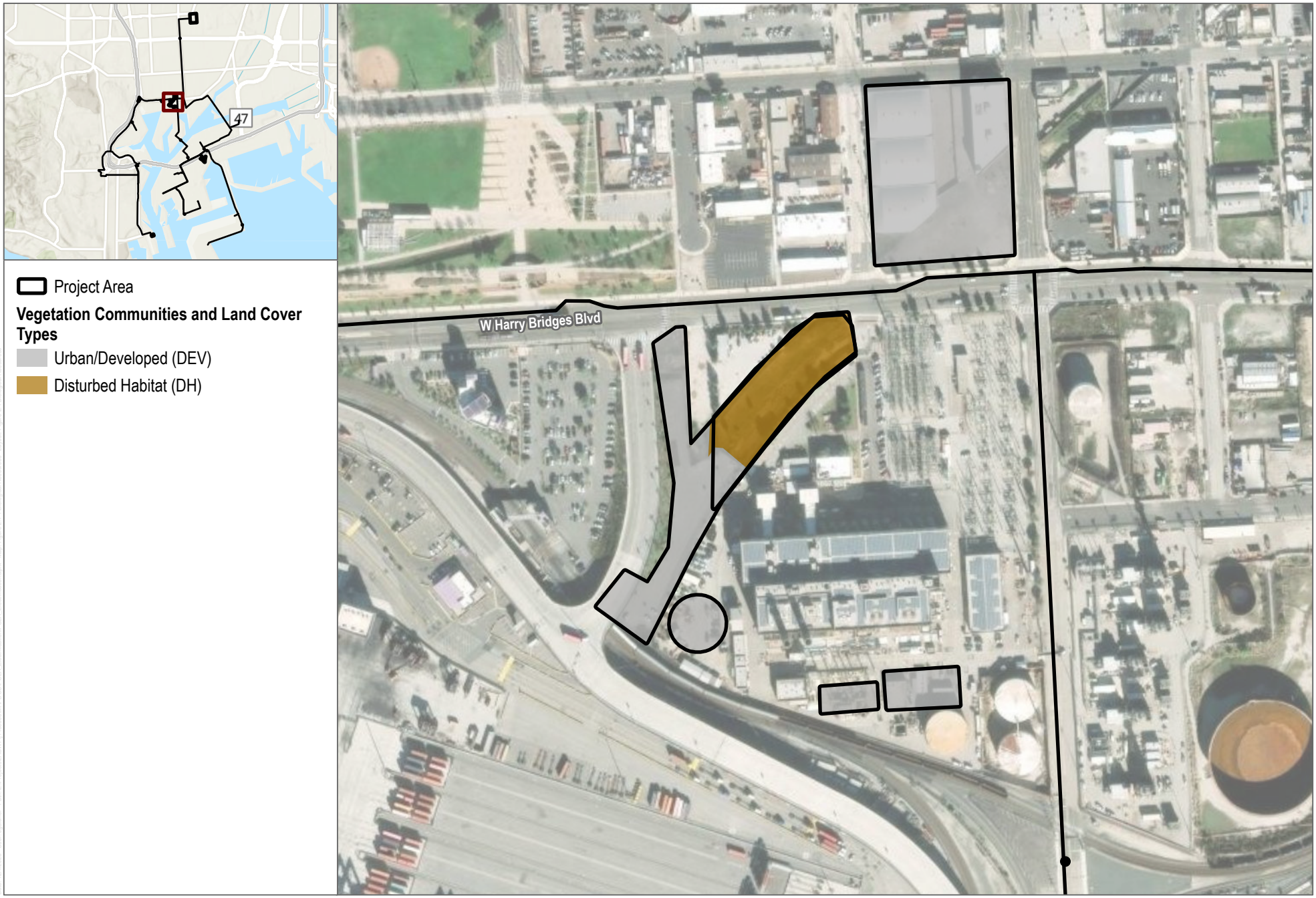
DUDEK

0 145 290 Feet

FIGURE 2.4-2

Biological Resources

Zero Emissions Port Electrification of Operations Project



SOURCE: Esri World Imagery; Open Street Map 2023

DUDEK

0 145 290 Feet

FIGURE 2.4-3

Biological Resources

Zero Emissions Port Electrification of Operations Project

SOURCE: Esri World Imagery; Open Street Map 2023

DUDEK

0 145 290 Feet

FIGURE 2.4-4

Biological Resources

Zero Emissions Port Electrification of Operations Project

SOURCE: Esri World Imagery; Open Street Map 2023

DUDEK

0 145 290 Feet

FIGURE 2.4-5

Biological Resources

Zero Emissions Port Electrification of Operations Project

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

Less than Significant Impact. The project site occurs entirely within a developed industrial setting, surrounded by residential and commercial development in urbanized areas of the cities of San Pedro and Wilmington and the POLA. The vast majority of the site contains concrete and asphalt with buildings, shipping yards, industrial power generation, and associated roads and parking lots. There are no native or natural vegetation communities on any portion of the project site or associated components, and any vegetated areas observed occur in isolated patches of disturbed habitat or as ornamental landscaping. Additionally, the observed topsoil within the entirety of the project site has been significantly altered and compacted as a result of the existing developments, limiting the potential for any native habitats supporting rare plant species to occur. Based on a review of the CNPS Rare Plant Inventory, and observed existing conditions on the project site, there is no potential for any special-status plant species to occur. Therefore, the project would result in no impact to special-status plants.

Additionally, due to the lack of native vegetation and undisturbed habitat on the project site, as well as the urbanized context of the project site and surrounding areas, the potential for special-status wildlife species is significantly reduced. The project site lacks native dune or sandy soils, native scrub, or riparian species to support special-status wildlife species known to occur in the area such as El Segundo blue butterfly (*Euphilotes battoides allyni*) and coastal California gnatcatcher (*Polioptila californica californica*), among others. Based on the habitat requirements of special-status wildlife known to occur in the vicinity of the site and lack of suitable habitat on site, there is no potential for any special-status wildlife species to occur on the project site. Therefore, the project would have no impact on special-status wildlife.

However, the disturbed and landscaped portions of the site associated with Parcel Y, Parcel K, the triangular lot on Terminal Island, and the HGS provide potentially suitable nesting habitat for a number of common avian species protected under the MBTA and CFGC while nesting. Therefore, project-related impacts to nesting birds could occur if project activities commence during the avian nesting season of February through August, which would be considered significant. However, by implementing standard construction measures related to the MBTA, BMPs BIO-1 through BIO-4 (see Section 1.8 of this IS/MND), related to pre-construction surveys and providing qualified biological monitors as necessary, indirect impacts to nesting birds protected under the MBTA and by CFGC would be less than significant.

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

No Impact. The project site occurs within an entirely upland area that is completely developed with industrial uses and scattered disturbed areas. A small, disturbed area associated with Parcel Y and the triangular lot on Terminal Island contains scattered mulefat, which is a facultative species that grows in uplands and wetlands equally. There are no waterways or natural drainages within the project site that support riparian habitat, nor are there any natural undeveloped areas that could support sensitive natural communities. Therefore, the project would result in no impact to riparian habitats or sensitive natural communities.

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

No Impact. The project site occurs primarily within developed areas in an urbanized setting. Although the POLA occurs immediately adjacent to the project site with intertidal waters regulated by Section 10 of the Rivers and Harbors Act, the project would be contained entirely to developed upland areas or located within existing or new tunnels under Cerritos Channel or East Basin. The only area on the project site containing a water source occurs at an intake structure for seawater at the HGS; however, this structure would not be impacted by the project. The catch basins within the triangular lot on Terminal Island are man-made and isolated from natural waterways. The ditch located along the southern boundary of the triangular lot on Terminal Island is isolated, does not display an ordinary high-water mark or defined bed and bank, and would not be considered a potentially regulated feature. There are no other natural or modified drainage features on the project site nor are there any wetlands or waters that could be subject to USACE, RWQCB, or CDFW jurisdiction. Therefore, the project would have no impact on state or federally protected waters or wetlands.

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

No Impact. The project site is located within an urbanized portion of the communities of San Pedro and Wilmington and the POLA, completely surrounded by development. There are opportunities for wildlife movement within the intertidal waters of the POLA, outside of the project site limits. While avian species could use portions of the project site for foraging or stopover, there are no undeveloped habitat areas or concrete-lined flood control channels within the project site that could facilitate local wildlife movement. Therefore, there is no potential for any portion of the project site to be used as a wildlife corridor or linkage for local or migratory wildlife movement. The project would have no impact on any wildlife corridor or linkage.

e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

No Impact. The project site occurs within the communities of San Pedro and Wilmington and the POLA, which are governed by the Los Angeles Municipal Code (LAMC). Chapter IV Article 6 of the LAMC pertains to the protection of native tree and shrub species that measure 4 or more inches in diameter and 4.5 ft in height, including various oak trees (*Quercus lobata*, *Q. agrifolia*), Southern California black walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), California bay (*Umbellularia californica*), Mexican elderberry (*Sambucus mexicana*), and toyon (*Heteromeles arbutifolia*). None of these species was observed on the project site during the survey. Additionally, the project is not proposing to remove any ornamental or street trees that occur on the project site. Therefore, the project would have no impact on any local policies or ordinances.

f) Would the project 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. The project site is not located within the boundaries of an adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP) and therefore project implementation would have no impact on any HCP or NCCP in the region.

2.5 Cultural Resources

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

The evaluation of potential impacts on cultural resources is based on a Historic Resources Technical Report prepared by Michael Baker International in 2025 (Appendix C) and an Archaeological Resources Management Report prepared by Dudek in 2025 (Appendix D). The reports included a California Historical Resources Information System records search conducted at the South Central Coastal Information Center (SCCIC), a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF), a literature review, archival research, a review of the geomorphological context of the project area, a reconnaissance-level archaeological resources pedestrian survey, a built environment pedestrian survey, and a California Register of Historical Resources (CRHR) and local register evaluation of three built environment resources located within the project area.

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

The Standards for Rehabilitation guided the design review approach for the project components. The analysis herein is based on the Historic Resources Technical Report for the project, prepared by Michael Baker International (Appendix C). Potential direct and indirect impacts for each project component are analyzed below.

RS-Q Rack D

Less than Significant Impact. LADWP proposes installing a new rack, Rack D, for RS-Q on Parcel Y directly to the west of the HGS. These parcels will be transferred to LADWP by the LAHD in 2025. Additional upgrades will include a perimeter wall, grounding grid, new circuit breakers, disconnect switches, bus work, relay and relay house, and other electrical equipment to be installed for the new rack. Parcel Y site preparation activities would include remediation of contaminated soil, vegetation (mostly non-native grasses and two palm trees), debris, and abandoned rail spur removal. The site would then be graded level.

Table 2.5-1 lists the historical resources within the area of potential impacts (API) of this project component.

Table 2.5-1. Historical Resources within the API of the RS-Q Rack D Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
P-19-187021[a]/ P-19-188178	161 North Island Avenue, Wilmington	Harbor Steam Plant	3S: Appears eligible for listing in the National Register as a separate listing	No

Note: [a] Both P-19-187021 and P-19-188178 record the same resource, the Harbor Steam Plant.

Direct Impacts

No historical resources were identified within the project area of this project component (RS-Q Rack D).

Indirect Impacts

The Harbor Steam Plant is a historical resource as defined by CEQA. The plant is directly adjacent to RS-Q and is therefore within the project API. The proposed expansion of RS-Q includes construction of a new rack (Rack-D) with supporting equipment and a relay house, to the immediate west of the plant site, but outside its boundaries. It would not destroy historic materials, features, or spatial relationships that characterize the HGS [Harbor Steam Plant] site. The project would not affect integrity of location, design, materials, workmanship, feeling, or association. The only aspect of integrity that could potentially be affected is setting. The existing RS-Q facility, constructed in 1962, is situated immediately adjacent to the Harbor Steam Plant, just outside its boundary, to the northeast. As such, the addition of another rack component to the west on Parcel Y would slightly change the setting, but fits within the spatial relationships, and form and functions of the surrounding area. Therefore, while the project component would alter the setting of the HGS, this alteration would not materially impair the Harbor Steam Plant such that it could not convey its historical significance. Additionally, the necessary cleanup, removal of the non-eligible abandoned rail tracks, and site prep and grading outside the boundaries of the Harbor Steam Plant will not alter the historical resource, nor its setting. Therefore, implementation of the proposed RS-Q Rack D project component would result in a less-than-significant indirect impact to the historical resource.

Impact Summary

Overall, implementation of the RS-Q Rack D project component would result in a less-than-significant impact to historical resources.

RS-C Rack C

Less than Significant Impact. RS-C provides power to the Wilmington community and has the capacity to support the extension of Rack C, increasing the number of circuits out of RS-C. The RS-C Rack C extension will allow for up to four (4) additional line positions and one backup transformer bank.

Table 2.5-2 lists the historical resources within the API of this project component.

Table 2.5-2. Historical Resources within the API of the RS-C Rack C Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
N/A	1635 N. Eubank Avenue	LADWP Receiving Station C	3S: Appears eligible for NRHP. 3CS: Appears eligible for the CRHR. 5S3: Appears to be individually eligible for local listing or designation. Assumed eligible for this project.	Yes

Direct Impacts

LADWP RS-C building is a historical resource as defined by CEQA. The building is an Art Deco style LADWP receiving station building constructed in 1941. This building is already situated within the boundary of RS-C and surrounded by Rack C and its infrastructure components. The project component, the expansion of Rack C, will not encroach on the building or require alteration or demolition of the building, nor will it destroy historic materials, features, or spatial relationships that characterize the RS-C building. The project would not affect integrity of location, design, materials, workmanship, feeling, or association. The only aspect of integrity that could potentially be affected is setting. However, while the expansion of existing Rack C would slightly change the setting, it fits within the spatial relationships, and form and functions of RS-C. Therefore, while the project component would alter the setting of the RS-C building, this alteration would not materially impair it such that it could not convey its historical significance. Therefore, the proposed RS-C Rack C project component would result in a less than significant direct impact to the historical resource.

Indirect Impacts

No historical resources were identified within the project API, outside the project component area (RS-C Rack C).

Impact Summary

Overall, implementation of the RS-C Rack C project component would result in a less-than-significant impact to historical resources.

Distribution Circuits

Less than Significant Impact. To deliver the additional 200 MVA to POLA, LADWP would install new underground distribution lines from RS-C Rack C and RS-Q Rack D to distribution switching stations located adjacent to and within POLA. The underground distribution alignment would fall primarily in the public utility ROW, on LADWP property, or within POLA. The underground alignment crosses existing railroad tracks in seven (7) places (Berths 121–131 Terminal from John S. Gibson Boulevard; Berths 136–147 Terminal from Harry Bridges Boulevard; Fries Avenue; two [2] locations on Navy Way; Berths 302–306 Terminal from Earl Street; Berths 212–224 Terminal; and New Dock Street), as well as Pacific Coast Highway at the intersection of Avalon Boulevard, and the East Basin Channel. Either horizontal directional drilling or jack and boring will be necessary to microtunnel underneath the tracks to prevent disruptions to railroad operations and beneath Pacific Coast Highway. At Cerritos Channel, new circuits would be pulled through existing conduits under the channel.

Installation of precast concrete electrical substructures (also referred to as vaults) will be required to pull, support, and splice together segments of cable during installation and provide a means for inspecting the integrity of the underground cable system described above during the operational phase of the line. Approximately 135 substructures would be installed within the roadway, between approximately 850 and 1,100 feet apart, along the proposed underground distribution pathways.

Table 2.5-3 lists the historical resources within the API of this project component.

Table 2.5-3. Historical Resources within the API of the Distribution Circuits Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
P-19-167314	Port of Los Angeles: Terminal Island	Terminal Island	7N: Needs to be reevaluated. Assumed eligible for the project.	Yes
P-19-187021/ P-19-188178[a]	161 North Island Avenue, Wilmington	Harbor Steam Plant	3S: Appears eligible for listing in the NRHP as a separate listing.	No
P-19-188903	Port of Los Angeles: Signal Street at	Port of Los Angeles Municipal Pier No. 1	3B: Appears eligible for NRHP both individually and as a contributor to an NRHP eligible historic district through survey evaluation.	Yes

Table 2.5-3. Historical Resources within the API of the Distribution Circuits Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
	22nd Street, San Pedro		The potential historic district includes seven individually eligible resources: Municipal Pier No. 1 Municipal Warehouse No. 1 Transit Shed 1 at Berths 58-60 Transit Shed at Berth 57 Immigration Station (Trani's Dockside Station) Pan American Petroleum Company Marine Loading Station Facility at Berth 70 (Westway Terminal Building) Pan Am Airways Terminal Facility at Berth 56 (California Fish and Game Building) Non-contributors to the potential Municipal Pier No. 1 historic district include the tank farm (and perimeter wall) and loading docks on the northeastern end of the pier.	
P-19-189469	Port of Los Angeles: Berth 70	Pan American Oil Company Pump House (Westway Office Building)	3S: Appears eligible for individual listing in the NRHP. 3CS: Appears eligible for individual listing in the CRHR through survey evaluation. 5S3: Appears to be individually eligible for local listing or designation through survey evaluation.	No
P-19-189471	311 E 22nd Street, San Pedro, CA 90731	U.S. Immigration Station (Trani's Dockside Station)	3S: Appears eligible for individual listing in the NRHP. 3CS: Appears eligible for individual listing in the CRHR through survey evaluation.	No
P-19-189472	Port of Los Angeles: Berth 57	Transit Shed Berth 57	3S: Appears eligible for individual listing in the NRHP.	No

Table 2.5-3. Historical Resources within the API of the Distribution Circuits Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
			3CS: Appears eligible for individual listing in the CRHR through survey evaluation.	
P-19-189473	Port of Los Angeles: Berths 58-60	Transit Shed 1 at Berths 58-60	3S: Appears eligible for individual listing in the NRHP. 3CS: Appears eligible for individual listing in the CRHR through survey evaluation.	No
P-19-190918	264 and 270 E. 22nd Street San Pedro, CA 90731	Commercial Building	3S: Appears eligible for individual listing in the NRHP. 3CS: Appears eligible for individual listing in the CRHR through survey evaluation. 5S3: Appears to be individually eligible for local listing or designation through survey evaluation.	No
P-19-190919	Port of Los Angeles: Berth 56	Pan Am Airways Terminal Facility	3S: Appears eligible for individual listing in the NRHP. 3CS: Appears eligible for individual listing in the CRHR through survey evaluation. 5S3: Appears to be individually eligible for local listing or designation through survey evaluation.	No
P-19-192284	Port of Los Angeles: Berth 164 (Mormon Island)	Berth 164	3D: Appears eligible for NRHP as a contributor to a NRHP eligible multi-component resource through survey evaluation.	No
P-19-192622	300 South Ferry Street	U.S. Customs Building	3S: Appears eligible for individual listing in the NRHP. 3CS: Appears eligible for individual listing in the CRHR through survey evaluation. 5S3: Appears eligible for local listing or designation through survey evaluation.	No

Table 2.5-3. Historical Resources within the API of the Distribution Circuits Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
P-19-192707	500 Pier A Street & Fries Avenue, Berth 161, Wilmington, CA	Harbor Construction & Maintenance Yard, Administration Building	SCCIC Records search noted 7R: Identified in Reconnaissance Level Survey or in an Area of Potential Effect (APE): Not evaluated. LAHD Inventory notes appears eligible for NRHP as a contributor to a historic district. Assumed eligible for this project.	No
P-19-192713	Port of Los Angeles: Berth 161	Harbor Construction and Maintenance Yard, Heavy Equipment Repair	SCCIC Records search noted 7R: Identified in Reconnaissance Level Survey or in an Area of Potential Effect (APE): Not evaluated. LAHD Inventory notes appears eligible for NRHP as a contributor to a historic district. Assumed eligible for this project.	No
N/A	339 N. Pacific Avenue	Apartment Building	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	423 N. Pacific Avenue	Barton Hill Elementary School	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	440 N. Avalon Boulevard	Bernard N. Meyer Building (American Merchant Marine Veterans)	5S3: Appears eligible for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	647 S. Fries Avenue	Bureau of Sanitation Sewage Pump Station No. 666	Appears eligible for the NRHP (per LAHD Inventory list).	No

Table 2.5-3. Historical Resources within the API of the Distribution Circuits Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
N/A	390 N. Seaside Avenue	Bureau of Sanitation Sewage Pump Station No. 669	Appears eligible for the NRHP (per LAHD Inventory list).	No
N/A	544 N. Avalon Boulevard	California Bank, Seaboard Branch	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	301 N. Avalon Boulevard	Commercial Building	LAHCM No. 1266	No
N/A	632 N. Avalon Boulevard	Commercial Building	LAHCM No. 1245	No
N/A	817 N. Avalon Boulevard	Commercial Building	3CS: Appears eligible for CRHR and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	906 N. Avalon Boulevard	California Bank, Seaboard Branch	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	1303 N. Avalon Boulevard	Commercial Building	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	1626 N. Avalon Boulevard	Commercial Building	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	1640 N. Avalon Boulevard	Commercial Building	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other	No

Table 2.5-3. Historical Resources within the API of the Distribution Circuits Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
			survey evaluation. Assumed eligible for this project.	
N/A	1702 N. Avalon Boulevard	Commercial Building	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	272 S. Fries Street	Commercial Building	5S3: Appears to be individually eligible for local listing or designation. Assumed eligible for the project.	No
N/A	W. Elberon Avenue at N. Gaffey Street	Elberon Avenue Bridge	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	Near W. Elberon Avenue at N. Gaffey Street	Elberon Public Stairway	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	1057 N. Avalon Boulevard	Gas Station	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	1635 N. Eubank Avenue	LADWP Receiving Station C	3S: Appears eligible for NRHP. 3CS: Appears eligible for the CRHR. 5S3: Appears to be individually eligible for local listing or designation. Assumed eligible for this project.	Yes
N/A	Leland Park, 863 S. Hebert, San Pedro	Leland Park Historic District	5S3: Appears to be individually eligible for local listing or designation. Assumed eligible for the project.	Yes

Table 2.5-3. Historical Resources within the API of the Distribution Circuits Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
N/A	227 N. Avalon Boulevard	Masonic Temple	LAHCM No. 342; *SurveyLA* status code QQQ (more research needed for CRHR.	No
N/A	N. Avalon Boulevard	Mexican Fan Palm Trees	LAHCM No. 914	No
N/A	Harbor Boulevard and W. Second Street	Rancho San Pedro Public Housing	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	638 S. Beacon Street	San Pedro Municipal Building	LAHCM No. 732	No
N/A	575 W. Ofarrell Street	St. Peter Catholic Church	3S/3CS/5S3: Appears eligible for NRHP, CRHR, and for local listing though *SurveyLA* or other survey evaluation. Assumed eligible for this project.	No
N/A	1050-1054 Ways Street	Star-Kist Plant	Appears eligible for the NRHP (per LAHD Inventory list).	No
N/A	John Gibson Jr. Park	USS Los Angeles Naval Monument	LAHCM No. 188	No

Note: [a] Both P-19-187021 and P-19-188178 record the same resource, the Harbor Steam Plant.

Direct Impacts

There are four (4) historical resources as defined by CEQA in the Distribution Circuits project component area: Terminal Island Historic District (TIHD), Municipal Pier 1 Historic District (MP1HD), Leland Park Historic District (LPHD), and LADWP RS-C building.

TIHD – The project would install new underground distribution lines from RS-C Rack C and RS-Q Rack D to distribution switching stations located adjacent to and within POLA. The underground distribution alignment would fall primarily in the public utility ROW, on LADWP property, or within POLA. Within TIHD, construction associated with this project component would be within a portion of Earl Street and Seaside Avenue along the outer border of the district.

The project component will not destroy historic materials, features, or spatial relationships that characterize the district. The project would not permanently affect any of the seven (7) aspects of integrity. Project activities would alter the setting temporarily during the

construction phase, but POLA has always been a bustling place. This temporary alteration would not materially impair it such that it could not convey its historical significance. Therefore, implementation of the proposed project component would result in a less-than-significant direct impact to the historical resource.

MP1HD – The project would install new underground distribution lines from RS-C Rack C and RS-Q Rack D to distribution switching stations located adjacent to and within POLA. The underground distribution alignment would fall primarily in the public utility ROW, on LADWP property, or within POLA. Within MP1HD, construction associated with this project component would be within a 0.07-mile portion of the 0.40-mile-long Signal Street, which bisects the MP1HD. This portion of Signal Street is at the entrance to MP1HD and passes by two (2) contributing buildings (U.S. Immigration Station and Transit Shed Berth 57), and on non-contributing feature (a former tank farm site with perimeter wall). The project component will not destroy historic materials, features, or spatial relationships that characterize the district. The project would not permanently affect any of the seven (7) aspects of integrity. Project activities would alter the setting temporarily during the construction phase, but POLA has always been a bustling place. This temporary alteration would not materially impair it such that it could not convey its historical significance. Therefore, implementation of the proposed project component would result in a less-than-significant direct impact to the historical resource.

LPHD – The project would install new underground distribution lines from RS-C Rack C and RS-Q Rack D to distribution switching stations located adjacent to and within POLA. The underground distribution alignment would fall primarily in the public utility ROW, on LADWP property, or within POLA. Within LPHD, construction associated with this project would be within North Gaffey Street. Today, Gaffey Street bisects the park; however, the street was not constructed until after the park's period of significance (1920–1937) and is therefore not a contributing feature to the historic district. The project component will not destroy historic materials, features, or spatial relationships that characterize the district. The project would not permanently affect any of the seven (7) aspects of integrity. Project activities would alter the setting temporarily during the construction phase. However, this temporary alteration would not materially impair it such that it could not convey its historical significance. Therefore, implementation of the proposed project component would result in a less than significant direct impact to the historical resource.

LADWP RS-C – The project would install new underground distribution lines from RS-C Rack C and RS-Q Rack D to distribution switching stations located adjacent to and within POLA. The underground distribution alignment would fall primarily in the public utility ROW, on LADWP property, or within POLA. RS-C is the starting point for this project component, which will connect the new underground distribution lines from RS-C Rack C to other areas as noted. The RS-C building is an Art Deco style LADWP receiving station building constructed in 1941. This building is already situated within the boundary of RS-C and surrounded by Rack C and its infrastructure components. The project component will not require alteration or demolition of the building, nor will it destroy historic materials, features, or spatial relationships that characterize the RS-C building. The project would not permanently affect any of the seven aspects of integrity. Project activities would alter the setting temporarily during the construction phase. However, this temporary alteration would not materially impair it such that it could not convey its historical significance. Therefore, implementation of the proposed project component would result in a less than significant direct impact to the historical resource.

Indirect Impacts

There are forty (40) historical resources as defined by CEQA adjacent to the Distribution Circuits project component area, therefore, within the project component API (see Table 2.5-1 above).

The project would install new underground distribution lines from RS-C Rack C and RS-Q Rack D to distribution switching stations located adjacent to and within POLA. The underground distribution alignment would fall primarily in the public utility ROW, on LADWP property, or within POLA. These forty (40) historical resources are adjacent to the path of the new underground distribution lines, but the project component has little to no potential to impact them. The project component will not destroy historic materials, features, or spatial relationships that characterize these resources. The project would not permanently affect any of the seven (7) aspects of integrity. Project activities would alter the setting temporarily during the construction phase. However, this temporary alteration would not materially impair any resource such that it could not convey its historical significance. Therefore, implementation of the proposed project component would result in a less-than-significant impact to the historical resources.

Impact Summary

Overall, implementation of the project Distribution Circuits project component would result in a less-than-significant impact to historical resources.

Three New Switching Stations

Less than Significant Impact. LADWP proposes installing three (3) switching stations to support Port electrification. These new switching stations would be located on Terminal Island, the southwest corner of John S. Gibson Boulevard and Harry Bridges Boulevard, and south of Signal Street and Signal Place in the Outer Harbor. Switching stations sectionalize transmission or distribution lines to increase reliability and operational flexibility. Switching stations consist of circuit breakers, disconnect switches, electrical buswork, insulators, conductors, and other electrical equipment supported by steel racks, concrete foundations with steel reinforcement, and electrical grounding grid to allow for segments of powerlines to be taken out of service (also known as sectionalizing) for operations and maintenance without disrupting connected powerlines and customers.

Each of the three switching station locations would be prepared by installing the shell of the station including but not limited to the ground grid, concrete foundations, station floor, plumbing and mechanical system, conduits, cable trays and covers, and control house structure at each location. Once a foundation has been constructed, LADWP will install the required electrical equipment. This equipment includes circuit breakers, disconnect switches, buswork, communication lines, power and control cables and conductors, steel racks, relay panels, post insulators, transformers, and terminal cabinets.

Terminal Island Switching Station

No Impact. A vacant triangular lot zoned as M3- Heavy Industrial within the POLA is the proposed location of new switching station equipment. The site is surrounded by railroads on all sides and is not accessible to the public. The lot would be graded in preparation for conduit trenching and foundation excavation. This switching station will be approximately 200,000 square feet.

There are no historical resources within the API of this project component (Table 2.5-4).

Table 2.5-4. Historical Resources within the API of the Terminal Island Switching Station Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in the Project Area?
N/A	N/A	N/A		N/A

Direct Impacts

No historical resources were identified within the project area of this project component (Terminal Island Switching Station).

Indirect Impacts

No historical resources were identified within the project API, adjacent to the project component area (Terminal Island Switching Station).

Impact Summary

Overall, implementation of the project Terminal Island Switching Station project component would result in no impacts to historical resources.

Harry Bridges Switching Station

No Impact. The lot identified for the Harry Bridges Switching Station is currently a vacant lot owned by LAHD, zoned M2-Light Manufacturing. This switching station will be approximately 40,000 square feet and would be designed to accommodate 34.5 kV circuit positions and switching station equipment.

There are no historical resources within the API of this project component (Table 2.5-5).

Table 2.5-5. Historical Resources within the API of the Harry Bridges Switching Station Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource within Project Area?
N/A	N/A	N/A	N/A	N/A

Direct Impacts

No historical resources were identified within the project area of this project component (Harry Bridges Switching Station).

Indirect Impacts

No historical resources were identified within the project API, adjacent to the project component area (Harry Bridges Switching Station).

Impact Summary

Overall, implementation of the Harry Bridges Switching Station project component would result in no impacts to historical resources.

Outer Harbor Switching Station

Less than Significant Impact. The Outer Harbor Switching Station would be located on a vacant parcel owned by the LAHD, zoned M3- Heavy Industrial. The vacant lot was previously developed but does not currently have any buildings. The switching station may have precast concrete constructed with wall panels on the outer perimeter of the station if the existing wall cannot be used. The Outer Harbor Switching Station will be approximately 61,000 square feet and would be designed to accommodate additional 34.5 kV circuit positions and switching station equipment for the POLA and San Pedro electrification and load growth.

Table 2.5-6 provides the historical resources within the API of this project component.

Table 2.5-6. Historical Resources within the API of the Outer Harbor Switching Station Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
P-19-188161	Port of Los Angeles: Berth 72	Municipal Wholesale Fish Market	3S: Appears eligible for individual listing in the NRHP.	No
P-19-188903	Port of Los Angeles: Signal Street at 22nd Street, San Pedro	Port of Los Angeles Municipal Pier No. 1	3B: Appears eligible for NRHP both individually and as a contributor to an NRHP eligible historic district through survey evaluation. The potential historic district includes seven individually eligible resources, which are also listed separately in this table: Municipal Pier No. 1; Municipal Warehouse No. 1; Transit Shed 1 at Berths 58-60;	Yes

Table 2.5-6. Historical Resources within the API of the Outer Harbor Switching Station Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
			Transit Shed at Berth 57; Immigration Station (Trani's Dockside Station); Pan American Petroleum Company Marine Loading Station Facility at Berth 70 (Westway Terminal Building); Pan Am Airways Terminal Facility at Berth 56 (California Fish and Game Building). Non-contributors to the potential Municipal Pier No. 1 historic district include the tank farm (and perimeter wall) and loading docks on the northeastern end of the pier.	
P-19-189469	Port of Los Angeles: Berth 70	Pan American Oil Company Pump House (Westway Office Building)	3S: Appears eligible for individual listing in the NRHP. 3CS: Appears eligible for individual listing in the CRHR through survey evaluation. 5S3: Appears to be individually eligible for local listing or designation through survey evaluation.	No
P-19-189471	311 E 22nd Street, San Pedro, CA 90731	U.S. Immigration Station (Trani's	3S: Appears eligible for individual listing in the NRHP. 3CS: Appears eligible for individual listing in	No

Table 2.5-6. Historical Resources within the API of the Outer Harbor Switching Station Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
		Dockside Station)	the CRHR through survey evaluation.	
P-19-189472	Port of Los Angeles: Berth 57	Transit Shed Berth 57	3S: Appears eligible for individual listing in the NRHP. 3CS: Appears eligible for individual listing in the CRHR through survey evaluation.	No
P-19-189473	Port of Los Angeles: Berths 58-60	Transit Shed 1 at Berths 58-60	3S: Appears eligible for individual listing in the NRHP. 3CS: Appears eligible for individual listing in the CRHR through survey evaluation.	No
P-19-190919	Port of Los Angeles: Berth 56	Pan Am Airways Terminal Facility	3S: Appears eligible for individual listing in the NRHP. 3CS: Appears eligible for individual listing in the CRHR through survey evaluation. 5S3: Appears to be individually eligible for local listing or designation through survey evaluation.	No

Direct Impacts

There is one (1) historical resource as defined by CEQA in the Outer Harbor Switching Station project component area: Municipal Pier 1 Historic District (MP1HD).

MP1HD – The MP1HD is an approximately 2,600-foot-long by 600-foot-wide continuous earthen pier that extends south down the length of Signal Street from 22nd Street at POLA. The district includes seven (7) contributors and two (2) non-contributing features. The seven (7) contributors are also individually eligible (see Table 2.5-6 above). The non-contributing features include the tank farm (and perimeter wall) and loading docks on the northeastern end of the pier. The tank farm was removed after 2012 (NETR 2025a, 2025b: 2012, 2014).

The project would include construction of a switching station slab, 34.5 kV rack, control house, and a precast concrete perimeter wall (potential project feature) within the boundary of the district, but within the boundaries of a non-contributing feature of the MP1HD, i.e., the site of a no-longer extant tank farm and perimeter wall in the northeastern pier area. This northeastern pier area has undergone multiple periods of change since it was originally developed in the early twentieth century, and many new facilities have been constructed and removed on the site over the past fifty (50) years, which has degraded the integrity of the facility and reduced its ability to convey direct associations with MP1HD (Brewster 2010). Additionally, the switching station infrastructure is compatible in height to the features of the former tank farm that occupied the site until circa 2012. As a result, the construction of the new switching station within the site would not constitute a significant new intrusion into the district.

The project component will not destroy historic materials, features, or spatial relationships that characterize the district. The project would not affect integrity of location, design, materials, workmanship, feeling, or association. The only aspect of integrity that could potentially be affected is setting. The new switching station on the site of the former tank farm would slightly alter the overall setting of the north end of the district. However, even if the non-contributing perimeter wall around the project area has to be partially or full removed, a precast concrete replacement wall would be installed around the station, which will preserve the current setting with the four adjacent contributing features (U.S. Immigration Station building; Pan American Petroleum Company Marine Loading Station Facility at Berth 70; Transit Shed at Berth 57; Transit Shed 1 at Berths 58-60). This end part of the pier has historically undergone change and this resulting alteration of setting would not materially impair the MP1HD such that it could not convey its historical significance. Project activities would also alter the setting temporarily during the construction phase, but POLA has always been a bustling place. This temporary alteration would not materially impair it such that it could not convey its historical significance. Therefore, the implementation of the proposed project component would result in a less-than-significant impact to historical resources.

Indirect Impacts

There are five (5) historical resources as defined by CEQA adjacent to the Outer Harbor Switching Station project component area, and therefore, within the project component API. Four (4) of these resources are also contributors to the MP1HD as discussed above (U.S. Immigration Station building; Pan American Petroleum Company Marine Loading Station Facility at Berth 70; Transit Shed at Berth 57; Transit Shed 1 at Berths 58-60). The fifth is the Municipal Wholesale Fish Market, located just north of the northeastern boundary of the MP1HD.

The project would include construction of a switching station slab, 34.5 kV rack, control house, and a precast concrete perimeter wall (potential project feature) on the site of a no-longer extant tank farm in the northeastern portion of MP1HD. This northeastern pier area has undergone multiple periods of change since it was originally developed in the early twentieth century, and many new facilities have been constructed and removed on the site over the past fifty (50) years (Brewster 2010). Additionally, the switching station infrastructure is compatible in height to the features of the former tank farm that occupied the site until circa 2012. As a result, the construction of the new switching station within the site would not constitute a significant new intrusion into the general MP1HD area where these resources are located.

The project component will not destroy historic materials, features, or spatial relationships that characterize the resources. The project would not affect integrity of location, design, materials, workmanship, feeling, or association. The only aspect of integrity that could potentially be affected is setting. The new switching station on the site of the former tank farm would slightly alter the overall setting of the north end of the district. However, even if the non-contributing perimeter wall around the project area has to be partially or fully removed, a precast concrete replacement wall would be installed, which will preserve the current setting with the five (5) adjacent individually eligible resources. This portion of the MP1HD area has historically undergone change and this resulting alteration of setting would not materially impair the resources such that they could not convey their historical significance. Project activities would also alter the setting temporarily during the construction phase, but POLA has always been a bustling place. This temporary alteration would not materially impair these resources such that they could not convey their historical significance. Therefore, implementation of the proposed project component would result in a less-than-significant impact to historical resources.

Impact Summary

Overall, implementation of the Outer Harbor Switching Station component would result in a less-than-significant impact to historical resources.

Parcel K Demolition and Remediation

Less than Significant Impact. Parcel K will be transferred from the LAHD to LADWP as part of the agreement associated with the Wilmington Waterfront Development Project. Parcel K would be utilized as a staging and material storage site to accommodate the construction of the switching stations, underground distribution, and wet cooling tower. Currently, this parcel is developed with two (2) abandoned warehouse buildings and a parking lot. The project requires remediation of contaminated soil and the demolition of both warehouses.

Table 2.5-7 lists the historical resources within the API of this project component.

Table 2.5-7. Historical Resources within the API of the Parcel K Demolition and Remediation Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource in Project Area?
P-19-187021[a]/ P-19-188178	161 North Island Avenue, Wilmington	Harbor Steam Plant	3S: Appears eligible for listing in the National Register as a separate listing	No

Note: [a] Both P-19-187021 and P-19-188178 record the same resource, the Harbor Steam Plant.

Direct Impacts

No historical resources were identified within the project area of this project component (Parcel K Remediation).

Indirect Impacts

The Harbor Steam Plant is a historical resource as defined by CEQA. The plant is directly across Harry Bridges Boulevard from Parcel K and is therefore within the project API. The Parcel K project component includes demolition of two ineligible buildings and contaminated soil remediation prior to its use as a staging area and material storage site for construction activities related to the switching stations, underground distribution, and wet cooling tower project components. The Parcel K project component would not destroy historic materials, features, or spatial relationships that characterize the HGS site. The project would not affect integrity of location, design, materials, workmanship, feeling, or association. The only aspect of integrity that could potentially be affected is setting. The removal of existing buildings and hardscape features on Parcel K, across from the Harbor Steam Plant, would alter the setting. However, this alteration would not materially impair the Harbor Steam Plant such that it could not convey its historical significance. Therefore, implementation of the proposed Parcel K Demolition and Remediation project component would result in a less than significant impact to the historical resource.

Impact Summary

Overall, implementation of the Parcel K Demolition and Remediation project component would result in a less than significant impacts to historical resources.

Harbor Generating Station Wet Cooling Tower

Less than Significant Impact. The proposed HGS Wet Cooling Tower would be placed within the existing pump bay area and over the existing screen bay. The approximately 50-foot-tall tower would be composed of tandem cells resulting in an area that would require the demolition of the Paint Booth, Machine Shop, and Rail Crane and Main Intake Screen structures. The pump bay would be repurposed to operate as the cold-water basin. The replacement of OTC with a wet cooling tower is an equivalent replacement and therefore would not cause changes in the plant's existing startup and shut down sequences.

Additionally, a new maintenance building and Makeup Water Tank are proposed to be constructed for this project component. The maintenance building will be located directly to the east of the proposed wet cooling tower. The new building will support the HGS and surrounding powerline repair and maintenance activities. The facility would be approximately 180 feet long by 100 feet wide. The construction of the new maintenance building may require the demolition of the existing Water Treatment building, existing non-contributing Maintenance Office, and miscellaneous temporary storage structures.

A Makeup Water Tank would be constructed to the west of the new wet cooling tower, outside the boundary of the historic Harbor Steam Plant site. The new tank would be similar in size and materials to other extant tanks on the Harbor Steam Plant site.

Construction-related project activities include over-excavation, filling, and compaction as required based on detailed geotechnical evaluations, and final grading of the site to allow foundations to be installed. The existing OTC infrastructure would be left in place and continue to be maintained to prevent sedimentation.

Table 2.5-8 lists the historical resources within the API of this project component.

Table 2.5-8. Historical Resources within the API of the Harbor Generating Station Cooling Tower Project Component

Primary Number	Address	Description	Evaluation / OHP Status Code	Is Resource Within Project Area?
P-19-187021/ P-19-188178[a]	161 North Island Avenue, Wilmington	Harbor Steam Plant	3S: Appears eligible for listing in the National Register as a separate listing	Yes

Note: [a] Both P-19-187021 and P-19-188178 record the same resource, the Harbor Steam Plant.

Direct Impacts

There is one (1) historical resource (as defined by CEQA) in the HGS Wet Cooling Tower project component area: the Harbor Steam Plant site.

The Harbor Steam Plant site is a LADWP power-generating facility eligible under National Register of Historic Places (NRHP) Criteria A and C and CRHR Criteria 1 and 3, and as a Los Angeles Historic Cultural Monument (LAHCM) under Criteria 1 and 3 with a period of significance of 1941–1949, the temporal span of the site's initial construction era. It includes three (3) primary buildings, six (6) secondary ancillary buildings, four (4) secondary ancillary structures, and four (4) secondary linear features (see Table 4 and Figure 20 in Appendix C). The buildings with primary significance to the site include the Art Deco style main plant building, control house, and security gate kiosk. As previously described, the Harbor Steam Plant site has undergone continuous change to accommodate facility upgrades and ensure continued operations. By 1952, several original auxiliary buildings, east of the main plant building, had been demolished to allow for facility expansion. By 1962, the warehouse was constructed in this cleared area. By 1993, a $150 million renovation of the main plant building transitioned the plant from burning fuel oil to natural fuel. The old stacks were removed and two (2) modern stacks on the south elevation, on the west side of the building, were added.

In order for the plant to continue operations and meet regulatory requirements, this project component would require demolition of the extant Paint Booth and Machine Shop buildings, and the extant Rail Crane/Main Intake Screen and non-contributing temporary storage structures, to build a Wet Cooling Tower, which would be placed within the existing pump bay area and over the existing screen bay. The extant Water Treatment Building, non-contributing temporary storage structures, and the non-contributing extant Maintenance Office Building may require demolition to construct the new Maintenance Building. This new construction would essentially be in the same footprint as the removed buildings and structures. A new Water Makeup Tank would be constructed to the west, outside the border of the Harbor Steam Plant site. The new tank would be similar in size and materials to other extant tanks on the plant site.

The Harbor Steam Plant site is characterized by a spatial hierarchy comprising a formal public-facing frontage with utilitarian support infrastructure situated to the rear. The three (3) contributing buildings with primary significance to the site—the Art Deco-style main plant building, control house, and entrance security kiosk—comprise the formal entrance sequence. In contrast, the original utilitarian components, including industrial support structures and equipment infrastructure, remain predominantly positioned to the rear (south) of the site, and

behind the main plant. This deliberate arrangement reflects both historical functional requirements and enduring design principles, reinforcing the site's architectural significance and operational efficiency.

These secondary utilitarian support infrastructure features to be removed will be replaced with utilitarian secondary support infrastructure necessary to maintain plant operations and will be in keeping with the mass and scale of the site. This upgrade of equipment and buildings is in keeping with the history of change at the site to maintain operations, and its placement preserves the spatial hierarchy of the site as described above. As a result, the project component activities would not materially impair the plant site such that it could not convey its historical significance. Additionally, the construction of the new Water Makeup Tank, while technically outside the historic boundary of the Harbor Steam Plant to the west, fits within the style, scale, and spatial hierarchy of the site with other tanks situated around the periphery of the site. The construction of the new Water Makeup Tank adjacent to the plant site would not constitute a significant new intrusion into the site.

While the project does not have the potential to affect the integrity of location or association for the Harbor Steam Plant site, it does have the potential to affect the other five (5) aspects of integrity. The removal of original support buildings and structures, and the addition of a new water tank adjacent to the historic boundary of the site, has the potential to impact the integrity of design, materials, workmanship, setting, and feeling. Each will be addressed below.

Design is the combination of elements that create the form, plan, space, structure, and style of a property. As discussed above, the site spatial design will not be significantly impacted by the project. The spatial hierarchy of the Art Deco-style public frontage buildings is not interrupted and the removal and replacement of secondary utilitarian support infrastructure to the rear of the site is in keeping with the historic site use. The secondary buildings and structures to be removed are utilitarian in style and materials and do not contain the significant decorative Art Deco-style features of the primary buildings. The Harbor Steam Plant would maintain integrity of design.

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. Historic materials will be impacted by the project with the removal of three (3) of the six (6) extant secondary buildings and one (1) of four (4) secondary structures:

1. Machine Shop building – constructed 1943
2. Paint Shop building – constructed 1943
3. Water Treatment Building – constructed 1943–1949
4. Rail Crane/Main Intake Screen structure – constructed 1943

The secondary buildings and structures to be removed and replaced are utilitarian in design and use and their upgrade is necessary for the continued operation of the plant for its historic use. They are also utilitarian in style and materials and do not contain the significant decorative Art Deco style features of the three (3) primary buildings. The three (3) buildings of primary significance to the site that comprise the public facing entrance area, along with three (3) secondary buildings and three secondary structures in the rear area, will remain in place. While integrity of materials will be reduced, it would not reduce the ability of the Harbor Steam Plant to convey its historical significance. The Harbor Steam Plant would maintain integrity of materials.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. As mentioned above, the buildings and structures to be removed and replaced for this project component are utilitarian in design and materials and as such do not contain or showcase the workmanship of the Art Deco style decorative components that are character-defining features of the primary buildings at the Harbor Steam Plant. The Harbor Steam Plant would maintain integrity of workmanship.

Setting is the physical environment of a historical resource. This project component would introduce change of setting to the site with the removal and replacement of original buildings and structures. However, as discussed above, the site has undergone significant but necessary changes since its construction to support continued operations. POLA and the surrounding areas have also changed since construction of the Harbor Steam Plant in the 1940s. The proposed site alterations, situated primarily to the rear of the site, will cause only minimal change to the setting of the Harbor Steam Plant site. This resulting alteration would not materially impair the Harbor Steam Plant such that it could not convey its historical significance. Project activities would also alter the setting temporarily during the construction phase, but POLA has always been a bustling place. This temporary alteration would not materially impair it such that it could not convey its historical significance. The Harbor Steam Plant would maintain integrity of setting.

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. As mentioned for integrity of setting, this project component would introduce change to the site with the removal and replacement of original buildings and structures. However, as discussed above, the site has undergone significant but necessary changes since its construction to support continued operations. The proposed site alterations, situated primarily to the rear of the site, will cause only minimal change to the feeling of the Harbor Steam Plant site. The removed support infrastructure will be replaced, as it historically has been with updated infrastructures, and the resulting alteration of setting would not materially impair the Harbor Steam Plant such that it could not convey its historical significance. Walking around the site will still elicit the feeling of the Port of Los Angeles and LADWP in the 1940s with its Art Deco design. The grandeur of the main plant building will still be felt when anywhere on site, or driving by it. The site retains integrity of feeling.

After implementation of the project component, the Harbor Steam Plant site would retain sufficient contributing features and historical integrity to reflect its historical significance. Therefore, implementation of the proposed project component would result in a less than significant direct impact to the historical resource.

Indirect Impacts

No historical resources were identified within the project API, outside the project component area (HGS Wet Cooling Tower).

Impact Summary

Overall, implementation of the HGS Cooling Tower project component would result in a less-than-significant impact to historical resources.

Summary of Impacts

Impacts Assessment – Criteria of Substantial Adverse Change

CEQA Section 15064.5(b) states that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

> (1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
>
> (2) The significance of an historical resource is materially impaired when a project:
>
> > (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
> >
> > (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code; or
> >
> > (C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA."

Under CEQA, a substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. As detailed above, project component activities would result in less-than-significant impacts to historical resources. As such, implementation of the project will not result in a substantial adverse change to a historical resource.

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

The analysis herein is based on the Archaeological Resources Management Report for the project, prepared by Dudek in 2025 (Appendix D).

Records Search

The SCCIC records search included a review of all previously recorded investigations and cultural resources within a 0.25-mile radius of the project site. Overall, the records search indicates that 160 cultural resources have been previously recorded within a 0.25 mile-radius of the project site, nineteen (19) of which intersect the project site (see Table 2 of Appendix D). These include four (4) prehistoric archaeological resources, two (2) historic-era archaeological resources, and

thirteen (13) historic-era built environment resources. The six (6) archaeological resources that intersect with the project area include P-19-000145 (traces of a campsite), P-19-000146 (shell midden), P-19-000149 (shell midden), P-19-000150 (shell midden), Mexican Hollywood (P-19-003801), and P-19-174912 (former location of the Diego Sepulveda home). There is evidence to indicate that the four (4) prehistoric resources (shell middens) have been destroyed by subsequent development, while P-19-174912, designated California Registered Historical Landmark No. 380, presents the former location of the Diego Sepulveda home, which is no longer extant. Several subsurface investigations have been conducted within the boundaries of Mexican Hollywood (P-19-003801). Based on these investigations, the USACE evaluated the resource and determined it eligible for listing in the NRHP under Criteria A and D.

Native American Heritage Commission Sacred Lands File Search

A review of the NAHC SLF was requested for the project area and a 1-mile radius. The SLF consists of a database of known Native American resources. These resources may not be included in the SCCIC database. NAHC replied via email on May 16, 2024, stating that the SLF search was completed with negative results. The NAHC additionally provided a list of fourteen (14) Native American individuals and/or tribal organizations that should be contacted for more information on potential tribal sensitivities regarding the currently Project. To date, Dudek has not conducted subsequent outreach or other coordination with the entities identified by NAHC.

Archival Research

Archival research consisted of an online review of historical aerial photographs and historical topographic maps. Historical topographic maps of the project area are available for the years 1896 through 2022 (NETR 2025b). The earliest map, from 1896, depicts the project area as largely undeveloped, situated within the community of Wilmington and encompassed by the unmodified Wilmington Lagoon, reflecting the natural landscape prior to development of POLA. Bixby Slough is shown to the west, and the Watson Lakes to the east. By 1923, development associated with POLA is clearly visible, along with the largely artificial landform of Terminal Island, which had been developed within the former footprint of the Wilmington Lagoon. A grid of modern streets (e.g., Broad Avenue, Marine Avenue, Fries Avenue, Island Avenue, Lagoon Avenue) and numerous structures are also depicted within and surrounding the project area. On the 1953 historical topographic map, a “LADWP substation” (RS-C) is depicted within the project area, as is the HGS. There are no significant changes within the project area as depicted from 1953 to the last available map dated 2022 (NETR 2025b).

Historical aerial photographs of the project area are available from 1952 to 2022 (NETR 2025a). The 1952 historical aerial depicts the project area with many of the current roadways, as well as POLA, RS-C, the HGS, and Terminal Island, already developed. The surrounding vicinity is also developed with residential housing and industrial facilities. There are no significant changes to the project area as depicted in the remaining historical aerial photographs, the last of which is from 2022 (NETR 2025a).

Overall, the review of historical topographic maps and aerial photographs indicates that the entire project site has undergone extensive ground disturbance associated with the construction and expansion of POLA. Activities including grading, dredging and fill placement, roadway development, and the construction of residential, commercial, and industrial facilities, have substantially altered the original landforms. Additionally, this archival review also demonstrates

that Terminal Island is largely man-made, created in the early 1900s through large-scale dredging of the Wilmington Lagoon and the subsequent deposition of dredged and imported fill.

Geomorphological Context

According to the U.S. Department of Agriculture Natural Resources Conservation Service (USDA 2025), the project area consists of Urban land, industrial; Urban land-Typic Xerorthents, coarse substratum-Typic Haploxeralfs complex, 0% to 5% slopes; Urban land-Aquic Xerorthents-Xerorthents, dredged spoil complex, 0% to 2% slopes; Urban land, 0% to 2% slopes, dredged fill substratum; Calcic Haploxerepts-Longshore-Urban land complex, 10% to 35% slopes; and water.

Urban land, industrial occurs at elevations ranging from -10 feet to 200 feet and are associated with human-transported materials, human-altered materials, or "native" soils that have been heavily modified by development (USDA 2019). Urban land-Typic Xerorthents, coarse substratum-Typic Haploxeralfs complex, 0% to 5% slopes, occurs in terraces, deriving predominantly from human-transported material over mixed alluvium, and are found in areas with elevations ranging from 10 to 190 feet above mean sea level (amsl). Urban land-Aquic Xerorthents-Xerorthents, dredged spoil complex, 0% to 2% slopes, occurs in tidal marshes, deriving predominantly from dredge spoils and/or human-transported material over mixed alluvium, and are found in areas with elevations ranging from 0 to 40 feet amsl. Urban land, 0% to 2% slopes, dredged fill substratum occurs in spits or islands and occurs at elevations ranging from 0 to 20 feet amsl. Calcic Haploxerepts-Longshore-Urban land complex, 10% to 35% slopes, occurs in terraces, deriving predominantly from colluvium and/or residuum weathered from sandstone, and are found in areas with elevations ranging from 10 to 400 feet (USDA 2019).

Overall, Urban land soils generally occur in areas that have been subject to substantial ground disturbance associated with modern development, including grading, dredging, and the introduction of imported fill. These activities typically disrupt or remove native soil horizons, thereby reducing the potential for the presence of intact archaeological resources, particularly those that may have existed near the surface and prior to historic contact.

Pedestrian Survey

Dudek archaeologist Roshanne Bakhtiary conducted a reconnaissance-level archaeological resources pedestrian survey of the project area on April 15, 2025. Standard archaeological procedures and techniques consistent with the Secretary of the Interior's Standards and Guidelines for an archaeological resources inventory were employed during the survey. Where visible, the ground surface was examined for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock, imported marine shell), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as rodent/reptile burrows, cut banks, and drainages were also visually inspected for exposed subsurface materials. All fieldwork was documented using field notes and an Apple iPad equipped with Esri Field Maps. Location-specific photographs were taken using an eighth-generation Apple iPad equipped with an eight (8) mega-pixel (MP) 1080p resolution camera and georeferenced PDF maps of the project area. All field notes, photographs, and records related to the current study are on file at Dudek's Mission Viejo, California, office.

The project area is located within POLA, the HGS, and portions of the Wilmington and San Pedro neighborhoods, and is situated largely within the public ROW. The vast majority of the ground surface within the project area was completely obscured by structures, hardscape, gravel, and landscaping (Appendix D, Exhibit 1). This accounted for approximately 98% of the project area. Moderate ground surface visibility constituted only about 2% of the project area, limited primarily to Parcel Y and isolated landscaping areas adjacent to the public ROW (Appendix D, Exhibit 2).

The previously recorded locations of P-19-000145, P-19-000146, P-19-000149, P-19-000150, Mexican Hollywood (P-19-003801), and P-19-174912 were all revisited and inspected for the presence of exposed subsurface cultural materials. No archaeological resources were observed or successfully relocated during the reconnaissance-level pedestrian survey of the project area.

Less than Significant Impact with Mitigation Incorporated.

The SCCIC records search identified six (6) archaeological resources that intersect the project site, including P-19-000145 (traces of a campsite), P-19-000146 (shell midden), P-19-000149 (shell midden), P-19-000150 (shell midden), Mexican Hollywood (P-19-003801), and P-19-174912 (former location of the Diego Sepulveda home). P-19-000145, P-19-000146, P-19-000149, and P-19-000150 represent unevaluated prehistoric archaeological resources that were likely destroyed or materially altered during the development of POLA and its associated roadways and facilities. The NAHC SLF search results were negative for Native American cultural resources within a 1-mile radius of the project site.

No archaeological resources were observed or successfully relocated during the pedestrian survey. Additionally, Dudek's archival review indicates that the project site has been subject to extensive ground disturbance associated with the construction and expansion of POLA, including large-scale grading, dredging and fill placement, roadway construction, and the development of residential, commercial, and industrial facilities. This review also confirms that Terminal Island is largely man-made and underlain by urban land soils that reflect substantial disturbance and the introduction of imported fill, conditions that have largely removed native soil horizons and greatly reduced the potential for the presence of intact subsurface archaeological deposits. Given that the proposed conduit trenches involve limited ground disturbance (approximately 3 feet in width and 6 feet in depth) and will occur within areas previously subject to extensive disturbance, the likelihood of encountering intact archaeological deposits that would contribute to a resource's significance is unlikely. Regardless, a moderate potential remains for the inadvertent discovery of archaeological resources during Project implementation, particularly within portions of the project area that intersect the previously mapped boundary of Mexican Hollywood (P-19-003801).

If unknown archaeological resources possessing the characteristics outlined in CEQA as significant exist and are inadvertently encountered during implementation (i.e., construction) of the project, there is potential for a substantial adverse change in the significance of an archaeological resource to occur. Therefore, this would result in a potentially significant impact regarding a substantial adverse change in the significance of an unknown archaeological resource pursuant to CEQA Guidelines Section 15064.5. As such, mitigation measures are required to address impacts related to the inadvertent discovery of archaeological resources during construction. MM-CUL-1 (see the Mitigation Measures subsection at the end of this section for full text of mitigation measures) requires the implementation of cultural resources sensitivity training for construction crews prior to initiation of ground-disturbing activities for the project. MM-CUL-2 requires archaeological monitoring during initial ground-disturbing

activities and sets forth requirements for the treatment of inadvertently discovered archaeological resources until a qualified archaeologist can assess and evaluate the discovery pursuant to CEQA. With implementation of MM-CUL-1 and MM-CUL-2, potentially significant impacts to unknown archaeological resources would be reduced to less than significant with mitigation incorporated.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact with Mitigation Incorporated. No prehistoric or historic-era burials, including those interred outside of formal cemeteries, were identified within the project site as a result of the SCCIC records search, NAHC SLF search, archival research, or pedestrian survey. Based on the nature of the construction activities proposed for the project (primarily trenching within highly disturbed contexts), the likelihood of disturbing human remains is low. However, the possibility of encountering human remains within the project site exists. In the event that human remains are inadvertently encountered during project construction activities, impacts to these resources would be potentially significant.

Thus, mitigation is required to address impacts related to the inadvertent discovery of human remains, as outlined in MM-CUL-3. Adherence to this measure will ensure that impacts to human remains resulting from project implementation would be less than significant with mitigation incorporated.

Mitigation Measures

MM-CUL-1: Prior to the initiation of ground-disturbing work, construction crews shall be made aware of the potential to encounter archaeological resources and the requirement for archaeological resources monitors to be present during initial ground-disturbing activities in designated areas. This training may occur as part of a Worker Environmental Awareness Program. Topics addressed should include definitions and characteristics of archaeological resources and Tribal Cultural Resources, regulatory requirements and penalties for intentionally disturbing archaeological resources, and the procedures to follow in the event of an inadvertent discovery. The Archaeological Resources Monitoring Map (Appendix D) shall be provided to the internal LADWP crews, construction contractor, or LAHD so that field crews are aware of locations where monitoring is required.

MM-CUL-2: An archaeological monitor shall be present during all initial ground-disturbing activities for the Project in areas identified in Appendix D, Archaeological Resources Monitoring Map. Archaeological monitoring may be adjusted (increased, decreased, or discontinued) at the recommendation of an archaeological principal investigator (meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology) and based on inspection of exposed cultural material and the observed potential for soils to contain intact archaeological deposits or otherwise significant archaeological material. The archaeological monitor shall be provided a copy of this technical report and its pertinent appendices to inform their monitoring efforts. The archaeological monitor shall have the authority to temporarily halt work to inspect areas for potential cultural material or deposits.

In the event that unanticipated archaeological deposits or features are exposed during construction activities, all construction work occurring within 50 feet of the find shall immediately stop until the archaeological principal investigator is provided access to the project area and can assess the significance of the find and determine whether additional study is warranted. The work exclusion buffer may be adjusted as appropriate to allow work to feasibly continue at the recommendation of the archaeological principal investigator. Should it be required, temporary flagging shall be installed around the resource to avoid any disturbance from construction equipment. The potential for avoidance should be the primary consideration of this initial process. The significance of the find shall be assessed as outlined by the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; California Public Resources Code Section 21082). If the archaeological principal investigator observes the discovery to be potentially significant under CEQA, additional efforts, such as the preparation of an archaeological treatment plan, testing, and/or data recovery, are warranted prior to allowing construction to proceed in this area.

Daily monitoring logs shall be completed by the on-site archaeological monitor. Within 60 days following completion of construction, the archaeological principal investigator shall provide an archaeological monitoring report to the Los Angeles Department of Water and Power. This report shall include the results of the archaeological monitoring program (even if negative), including a summary of any findings or evaluation/data recovery efforts, and supporting documentation that demonstrates that all mitigation measures defined in the environmental document were appropriately met. Appendices shall include archaeological monitoring logs and documentation relating to any newly identified or updated cultural resources. This report shall be submitted to the South Central Coastal Information Center once considered final.

MM-CUL-3: In accordance with Section 7050.5 of the California Health and Safety Code and the requirements of the California Code of Regulations (CCR) Section 15064.5(e), if human remains are found, the Los Angeles County Coroner (County Coroner) shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, The County Coroner shall notify the Native American Heritage Commission (NAHC) in within 24 hours. In accordance with California Public Resources Code Section 5097.98, the NAHC must immediately notify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD shall complete inspection after being granted access to the site and make recommendations for the treatment and disposition, in consultation with the Los Angeles Department of Water and Power, of the human remains and associated grave goods.

2.6 Energy

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

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

Less than Significant Impact. The project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Construction and operational use of electricity, natural gas, and petroleum related to the proposed project is discussed below.

Construction Energy Use

Electricity

Temporary electric power for as-necessary construction equipment would be provided by LADWP. The amount of electricity used during construction would be minimal because typical demand would be generated by electrically powered hand tools. The electricity used for construction activities would be temporary and minimal; therefore, project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity.

Natural Gas

Construction activities are not anticipated to require the consumption of natural gas to power equipment or heavy machinery. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the subsection "Petroleum." Any minor amounts of natural gas that may be consumed during construction would be temporary and negligible and would not result in a significant drain on natural gas resources. Therefore, construction of the proposed project would result in a less-than-significant impact related to wasteful, inefficient, or unnecessary consumption of natural gas.

Petroleum

Petroleum fuels would be the primary energy resource consumed during construction activities by heavy-duty equipment, on-road delivery trucks, haul trucks, and generators, which are usually diesel powered, as well as on-road vehicles used by the construction crews, which are usually gasoline powered. The same fuels typically are used for vehicles that transport equipment and workers to and from a construction site. The project is anticipated to start in 2026 and is anticipated to conclude in 2030. As a result, construction-related fuel consumption would be finite, short-term, and consistent with construction activities of a similar character. This energy use would not be considered wasteful, inefficient, or unnecessary and impacts would be less than significant.

The estimated diesel fuel usage from construction equipment and trucks and estimated gasoline fuel usage from worker vehicles are shown in Table 2.6-1.

Table 2.6-1. Project Construction Petroleum Demand

Phase	Off-Road Equipment (Diesel)	Trucks (Diesel)	Worker Vehicles (Gasoline)
	Gallons		
Construction	100,583	322,966	336,122
		Total Petroleum Consumed	1,508,656

Note: See Appendix A for details.

As shown in Table 2.6-1, the project is estimated to consume approximately 1,508,656 gallons of petroleum during the construction phase over an approximately 4.6-year period.[5] Notably, the project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation, which applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) 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 fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the best achievable control technology requirements. Because the project would not be unusual as compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state, project construction would not result in wasteful, inefficient, or unnecessary consumption of petroleum.

Operational Energy Use

As discussed in Section 2.3, Air Quality, project operations would result in minimal mobile, area, energy emissions. It is estimated that this would involve approximately thirty (30) annual vehicle

[5] For context, in 2023, California consumed about 648 million barrels of oil (EIA 2023). There are 42 U.S. gallons in a barrel, so California consumes approximately 74.5 million gallons of petroleum per day, adding up to an annual consumption of 27 billion gallons of petroleum.

trips associated with long-term operations and maintenance. However, the objective of the project is to reduce port-related air pollution by increasing the capacity of electrical distribution within POLA to accommodate the estimated 200 MVA of additional electrical power the Port will require for electrification of CHE and plugging in ships at berth. CHE includes land-side equipment such as terminal tractors, forklifts, top loaders, empty container handlers, non-road vehicles, rubber-tired gantry cranes, and wharf cranes. To support these goals, LADWP proposes to expand the capacity of the electric receiving and distribution system within POLA with this project. More specifically, LADWP proposes to increase the capacity of electricity distribution within POLA by installing sixteen (16) new 34.5 kV underground distribution circuits. Electricity is currently supplied to POLA through RS-Q located at the HGS; however, RS-Q and RS-C (located in Wilmington) will need to increase their electrical capacity to provide the additional 200 MVA needed for the established electrification goals. To accommodate the estimated increase in load, LADWP is proposing to expand the capacity of RS-Q and RS-C, install three (3) new switching stations, and construct a wet cooling tower for the HGS.

While the project facilitates increased use of electricity within POLA, these actions result in increased energy efficiency through the associated reduction of fossil-fueled-fired equipment. Therefore, operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy and no impact would occur.

Renewable Energy Potential

As described above, the project entails the construction of electric utility infrastructure equipment, increasing the capacity of electrical distribution within POLA to accommodate the estimated 200 MVA of additional electrical power the Port will require for electrification of CHE and plugging in ships at berth. Therefore, consideration of on-site renewable energy sources such as biomass, geothermal, hydroelectric renewable energy, wind power, and photovoltaic power is not appropriate or feasible for the project.

Summary

As supported by the preceding analyses, project construction and operation would not result in the inefficient, wasteful or unnecessary consumption of energy. Impacts would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. The proposed project would follow applicable energy standards and regulations during the construction phases. In addition, the proposed project would be built and operated in accordance with all existing, applicable regulations at the time of construction. In addition, the project would directly support implementation of the San Pedro Bay Ports Clean Air Action Plan through increased electrification supporting infrastructure. As such, impacts related to the project's potential to conflict with plans for renewable energy and energy efficiency would be less than significant.

2.7 Geology and Soils

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

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

a) Would the project 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.

Less Than Significant Impact. There are numerous earthquake faults in the project vicinity, two of which are Alquist-Priolo Earthquake Fault Zone faults (CGS 2024). The proposed underground distribution alignment crosses the Palos Verdes Hills Fault within Terminal Island and on John S Gibson Boulevard. The Palos Verdes Fault is an active northwest–southeast-trending right-lateral strike-slip fault that involves onshore and offshore sections, extending from northern Santa Monica Bay, across the Palos Verdes Peninsula, and offshore again across the San Pedro Shelf and Slope (Brothers et al. 2015). The proposed new underground conduit also crosses the THUMS-Huntington Beach Fault on Navy Way. The THUMS-Huntington Beach Fault is a normal fault that, based on conflicting studies, may dip east and be downthrown on the east or may dip west and be downthrown on the west (USGS 2004). The construction and operation of underground distribution circuits is feasible from a geotechnical standpoint provided the fault zone and ground motion are considered during design and construction in this location. The underground distribution conduits would be designed and installed pursuant to existing federal, state, and local engineering and design standards related to seismic criteria.

The proposed project would not involve the construction of any habitable structures, nor would the proposed project increase the population in the project area. Construction activities would be temporary, lasting for several days at a time with construction personnel working sequentially along the underground distribution conduit alignment. Operational activities along the transmission lines would not differ from those of other existing underground distribution lines in the project area. For these reasons, the proposed project would not increase the risk of loss, injury, or death involving fault rupture within the project area, and impacts would be less than significant.

ii) Strong seismic ground shaking?

Less Than Significant Impact. The components of the proposed project are located within the seismically active Southern California region and, like all locations within the area, are subject to strong seismic ground shaking. However, as discussed in Section 2.7(a)(i) above, the proposed project would be designed and constructed in compliance with the current applicable federal,

state, and local codes related to seismic hazards. As such, the proposed project would result in a less-than-significant impact related to strong seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction is the process in which saturated silty to cohesionless soils below the groundwater table temporarily lose strength during strong ground shaking because of increased pore pressure during conditions such as those caused by an earthquake. Earthquake waves cause water pressure to increase in the sediment and the sand grains to lose contact with each other, leading the sediment to lose strength and behave like a liquid.

Liquefaction potential of older alluvium is considered low; however, artificial fill, which makes up most of the POLA area, is susceptible to liquefaction (CDOC 1998). Most of the proposed project is located within designated liquefaction areas, except for the proposed RS-C Rack C construction and portions of the underground distribution circuits from RS-C to RS-Q and along John S Gibson Boulevard (CDOC 2020). However, as discussed above, all components of the proposed project would be designed and constructed in compliance with applicable federal, state, and local codes to minimize impacts related to seismic ground failure, including liquefaction. The impact would be less than significant.

iv) Landslides?

No Impact. Landslides are characterized as deep-seated ground failures, in which a large section of a slope detaches and slides downhill. The proposed project is not located in landslide or hillside areas (CGS 2024). Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. No impact would occur.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The proposed project would be primarily within existing paved areas (e.g., roadways, paved facilities, and the POLA). In the absence of proper soil management, project construction could result in wind and water erosion and associated sediment transport. However, soil exposed through excavation would be entirely contained within trenches or excavated foundations. Additionally, because project construction would involve ground disturbance in excess of 1 acre, construction would be completed in accordance with the requirements outlined in the National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit (2022-0057-DWQ), effective September 8, 2022 (NPDES Construction General Permit), which includes the development of a stormwater pollution prevention plan (SWPPP). The SWPPP would identify potential water quality pollutants, including sediment, and require the implementation of BMPs for erosion and sediment control. The soil removed during excavation activities and not used for backfill would be hauled off site for proper disposal or reuse. In consideration of the project scope and through compliance with the Construction General Permit, substantial erosion or loss of topsoil would not occur. The impact would be less than significant.

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

Less Than Significant Impact. As discussed in Section 2.7(a)(iv), there would be no impact related to landslides. As discussed in Section 2.7(a)(ii), impacts related to liquefaction would be less than significant. This would include lateral spreading, which is a type of liquefaction-induced ground failure on mildly sloping ground.

Subsidence is the lowering of surface elevation due to changes occurring underground, such as extraction of large amounts of groundwater. The proposed project is not anticipated to require groundwater dewatering. Groundwater that seeps into trenches or tunnels during construction would be pumped out to accommodate construction activities.

Collapsible soils consist of unconsolidated, low-density materials that may collapse and compact under the addition of excessive water or loading. The proposed project would not include the types of uses or activities that would contribute to the loss of subsurface support. Additionally, cable line trenches would be backfilled with higher-density soil-cement slurry, which is not subject to collapse. Therefore, the impact would be less than significant.

d) *Would the project 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. Expansive soils are fine-grained soils (generally high-plasticity clays) that can undergo a significant increase in volume with an increase in water content as well as a significant decrease in volume with a decrease in water content. Changes in the water content of highly expansive soils can result in severe distress for structures constructed on or against the soils. Clay minerals in geologic deposits within the project area and previously imported fill soils could have expansive characteristics (LADWP 2024). However, project design and construction would be completed in compliance with the 2022 California Building Code (superseding Table 18-1-B of the Uniform Building Code) pertaining to expansive soils, such that any potential impacts resulting from expansive soil would be minimized. Therefore, the proposed project would not create substantial direct or indirect risks to life or property and impacts would be less than significant.

e) *Would the project 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. The proposed project would not include septic tanks or other alternative wastewater disposal systems. No impact would occur.

f) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less than Significant Impact with Mitigation Incorporated. According to surficial geological mapping by Dibblee et al. (1999) at a 1:24,000 scale and Saucedo et al. (2016) at a 1:100,000 scale, and the geological time scale of Cohen et al. (2024), the project alignment is underlain by artificial fill (recent) on Holocene (recent to 11,700 years ago) beach sediments (map units af and Qs); Holocene alluvium (map unit Qa); Pleistocene (11,700 years ago to 2.58 million years ago

[mya]) old alluvium, undivided (map unit Qoa), which also includes the Palos Verdes Sand, Pleistocene old shallow marine deposits on wave cut surface (map unit Qom); the Pleistocene San Pedro Sand/San Pedro Formation, undivided (map unit Qsp), the San Pedro Formation Timms Point Silt Member (map unit Qspt); and the Miocene (5.33 mya to 23.04 mya) Monterey Formation, Malaga Mudstone Member (map units Tmg and Tmm), and the Altamira Shale Member (map unit Tma) (see Figure 2 in Attachment A of Confidential Appendix E, Paleontological Resources Memo).

Twenty-one (21) paleontological resource localities were identified within the project alignment, and fifty-six (56) localities were identified within a 1-mile buffer from the same or similar sediments as those that underlie the project alignment (Confidential Appendix E, Paleontological Resources Memo). However, the project alignment is not anticipated to be underlain by unique geologic features. Portions of the project alignment underlain by Holocene-age deposits, including artificial fill, have low paleontological sensitivity that increases with depth as the sediments become older and increase to high sensitivity. Portions of the project alignment underlain by Pleistocene- and Miocene-age deposits have high paleontological sensitivity (see Figure 2 in Attachment A of Confidential Appendix E, Paleontological Resources Memo). If intact paleontological resources are located along the project alignment, then ground-disturbing activities associated with construction of the proposed project, such as grading during alignment preparation and trenching for utilities, have the potential to destroy a unique paleontological resource or site. As such, the project alignment is considered to be potentially sensitive for paleontological resources and, without mitigation, the potential damage to paleontological resources during construction associated with the project is considered a potentially significant impact. Given the proximity of past fossil discoveries in the surrounding area within the same or similar deposits, the project alignment is highly sensitive for supporting paleontological resources below the depth of fill. However, upon implementation of MM-GEO-1, impacts would be reduced to below a level of significance.

MM-GEO-1: Prior to commencement of any grading activity within the project site, the Los Angeles Department of Water and Power (LADWP) shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Mitigation and Monitoring Program (PRMMP) for the project. The PRMMP shall be consistent with the SVP (2010) guidelines and should outline requirements for pre-construction meeting attendance and worker environmental awareness training, where monitoring is required within the proposed project alignment based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The qualified paleontologist shall attend the pre-construction meeting, and a qualified paleontological monitor shall be present during all rough grading and other significant ground-disturbing activities (including augering that is 2 feet or greater in diameter) in Pleistocene and Miocene geological units. A qualified paleontological monitor shall be present to spot-check ground-disturbing activities to determine if undisturbed geological units with high paleontological sensitivity are being impacted. The qualified paleontologist shall determine the frequency and duration of the spot-check monitoring based on subsurface conditions. In geological units with high

paleontological sensitivity with previous disturbance, all excavations below a depth of 3 feet shall be monitored full-time.

In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor shall temporarily halt and/or divert grading activity in coordination with the construction supervisor, to allow recovery of paleontological resources. The area of discovery shall be roped off with a 50-foot-radius buffer. Once documentation and collection of the find is completed, the monitor shall remove the rope and allow grading to recommence in the area of the find. Costs for laboratory processing and curation fees associated with fossils collected during the monitoring program are the responsibility of LADWP.

2.8 Greenhouse Gas Emissions

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

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

Less than Significant Impact. Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period (i.e., decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the Sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2023).

The greenhouse effect is the trapping and buildup of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that

emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g), for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride (see also 14 CCR 15364.5). The three GHGs evaluated herein are CO_2, CH_4, and N_2O, because these gases would be emitted during project construction and operation.

The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e). Consistent with CalEEMod (Version 2022), this GHG emissions analysis assumes the GWP for CH_4 is 25 (i.e., emissions of 1 MT CH_4 are equivalent to emissions of 25 MT CO_2) and the GWP for N_2O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

As discussed in Section 2.3, Air Quality, the project site is located within SCAQMD's jurisdictional boundaries. In October 2008, SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects, as presented in its Draft Guidance Document—Interim CEQA Greenhouse Gas (GHG) Significance Threshold (Interim GHG Significance Threshold) (SCAQMD 2008). This document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the SCAQMD Governing Board. However, in December 2008, SCAQMD adopted an interim 10,000 MT CO_2e per year screening level threshold for stationary source/industrial projects for which SCAQMD is the lead agency (see SCAQMD Resolution No. 08-35, December 5, 2008).

SCAQMD subsequently formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal by SCAQMD, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2 Consider whether or not the project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

Tier 3 Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO_2e per year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e per year), commercial projects (1,400 MT CO_2e per year), and mixed-use projects (3,000 MT CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of Assembly Bill (AB) 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per service population (SP) per year (MT CO_2e/SP/year) for project level analyses and 6.6 MT CO_2e/SP/year for plan level analyses. The 2035 efficiency targets are 3.0 MT CO_2e/SP/year for project level analyses and 4.1 MT CO_2e/SP/year for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Because the project is an energy infrastructure improvement, this analysis applies the SCAQMD Option 2 screening threshold of 3,000 MT CO_2e per year for non-industrial projects for Tier 3 as a conservative approach for determination of significance.

Construction Emissions

Construction of the proposed project would result in GHG emissions that would be primarily associated with the use of off-road construction equipment, on-road haul and vendor trucks, and worker vehicles. The SCAQMD Interim GHG Significance Threshold (SCAQMD 2008) recommends that "construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies." Thus, the total construction GHG emissions were calculated, amortized over 30 years, and added to the total operational emissions for comparison with the GHG significance threshold of 3,000 MT CO_2e per year.

CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 2.3, Air Quality, Construction of the project is anticipated to commence in April 2026 and conclude in December 2030. On-site sources of GHG emissions include off-road equipment and off-site sources include haul trucks, vendor trucks, and worker vehicles. Table 2.8-1 presents construction GHG emissions for the project from on-site and off-site emission sources.

Table 2.8-1. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
2026	1,927.46	0.08	0.10	0.99	1,960.43
2027	2,842.38	0.10	0.12	1.38	2,880.85
2028	3,395.48	0.12	0.14	1.61	3,442.89
2029	3,774.48	0.13	0.16	1.69	3,826.86
2030	2,770.71	0.09	0.13	1.19	2,811.69
				Total	*14,922.72*
				Amortized Emissions (Over 30 Years)	497.42

Source: Appendix A.
Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent; R = Refrigerants.

As shown in Table 2.8-1, the estimated total GHG emissions during construction of the project would be approximately 14,922 MT CO_2e. Estimated project-generated construction emissions amortized over 30 years would be approximately 497 MT CO_2e per year. As with project-generated construction criteria air pollutant emissions, GHG emissions generated during construction of the project would be short term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions.

Operational Emissions

As discussed in Section 2.3, Air Quality project operations would result in mobile, area, energy, operational emissions. It is estimated that this would involve approximately thirty (30) annual trips. SF6 emissions would result from the operation of new circuit breakers associated with the project. Table 2.8-2 shows the estimated maximum daily operational emissions associated with the project.

Table 2.8-2. Estimated Annual Operational Greenhouse Gas Emissions

Source	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
Mobile	<0.005	<0.005	<0.005	0.00	<0.005
Area	0.46	<0.005	<0.005	N/A	0.46
Energy	110.44	0.01	<0.005	N/A	110.88
Water	89.39	1.19	0.03	N/A	127.85
Waste	41.32	4.13	0.00	N/A	144.58
Refrigerants	N/A	N/A	N/A	0.97	0.97
SF6	N/A	N/A	N/A	N/A	22.93
				Total Operational Emissions	407.67
				Amortized Construction Emissions	497.42
				Total (Operational + Construction Emissions)	905.09

As shown in Table 2.8-2, the estimated total GHG emissions during operation of the project would be approximately 905 MT CO_2e per year. The project's annual GHG emissions of 905 MT CO_2e per year as a result of amortized construction emissions and operational emissions would not exceed the SCAQMD recommended threshold of 3,000 MT CO_2e per year. Impacts would be less than significant.

Summary

The project's annual GHG emissions of 905 MT CO_2e per year as a result of amortized construction emissions would not exceed the SCAQMD recommended threshold of 3,000 MT CO_2e per year. Impacts would be less than significant.

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

Less than Significant Impact. The project's potential to conflict with San Pedro Bay Ports Clean Air Action Plan, City of Los Angeles's Sustainable City Plan, state reduction targets, CARB's 2017 and 2022 Scoping Plans, and SCAG's Connect SoCal 2024 is analyzed in this discussion.

Potential to Conflict with the San Pedro Bay Ports Clean Air Action Plan

Originally adopted in 2006, LAHD's Clean Air Action Plan (CAAP) is a comprehensive, far-reaching strategy for reducing port-related air pollution and related health risks, while allowing port development, job creation, and economic activity associated with that development to continue. The plan, most recently updated in 2017, is a collaboration of the Ports of Long Beach and Los Angeles that sets major goals to illustrate a variety of strategies across various sectors of port operations. The two (2) primary goals set in the CAAP are 100% zero-emissions cargo handling equipment (CHE) by 2030 and 100% zero-emission drayage truck fleet by 2035, as well as an overarching goal to reduce GHG emissions from port-related sources to 80% below 1990 levels by 2050.

In pursuit of these goals, LAHD continues to work with local partners to develop, demonstrate, and deploy zero-emissions equipment and vehicles into service at the port. In addition to the CAAP goals, regulatory agencies continue to adopt environmental rules that require increased use of zero-emission technologies in goods movement. For example, CARB has passed several regulations, such as the Commercial Harbor Craft at Berth Regulations, requiring the use of zero-emission equipment and increased use of shore power.

The objective of the project is to reduce port-related air pollution by increasing the capacity of electrical distribution within POLA to accommodate the estimated 200 MVA of additional electrical power the Port will require for electrification of CHE and plugging in ships at berth. CHE includes land-side equipment such as terminal tractors, forklifts, top loaders, empty container handlers, non-road vehicles, rubber-tired gantry cranes, and wharf cranes. To support these goals, the LADWP proposes to expand the capacity of the electric receiving and distribution system within POLA with this project. More specifically, LADWP proposes to increase the capacity of electricity distribution within POLA by installing sixteen (16) new 34.5 kV underground distribution circuits. Electricity is currently supplied to POLA through RS-Q located at the HGS; however, RS-Q and RS-C (located in Wilmington) will need to increase their electrical capacity to provide the additional 200 MVA needed for the established electrification goals. To accommodate the estimated increase in load, LADWP is proposing to expand the capacity of RS-Q and RS-C, install

three (3) new switching stations, and construct a wet cooling tower for the HGS. As such, the project would directly support implementation of the CAAP through increased electrification supporting infrastructure, and therefore, would not conflict with the San Pedro Bay Ports CAAP.

Potential to Conflict with the City of Los Angeles Sustainable City Plan

LADWP has not adopted a qualified climate action plan and the City of Los Angeles's Sustainable City Plan is not a quantified GHG reduction plan according to the CEQA Guidelines Section 15183.5 and thus cannot be used in a cumulative impact analysis to determine significance. However, a discussion of the project's consistency with the City's plan is provided for informational purposes. Table 2.8-3 provides an overview of the measures and goals set forth in the Sustainable City Plan and the project's potential to conflict with these measures and goals.

Table 2.8-3. Project Potential to Conflict with the Sustainable City Plan's GHG Emission Reduction Strategies

Sustainable City Plan Measure	Potential to Conflict
Water	
Reduce LADWP purchases of imported water by 50% by 2025 and source 50% of water locally by 2035.	*No conflict*. The project would not conflict with the City's plan to reduce purchases of imported water.
Reduce average per-capita water use by 22.5% by 2025 and 25% by 2035.	*Not applicable*. The project would not conflict with the City's plan to reduce average per-capita water use.
Solar Power	
Increase cumulative total megawatts (MW) of local solar photovoltaic power to 900–1,500 MW by 2025 and 1,500–1,800 MW by 2035.	*No Conflict*. The objective of the project is to reduce port-related air pollution by increasing the capacity of electrical distribution within POLA to accommodate the estimated 200 MVA of additional electrical power the Port will require for electrification of cargo handling equipment. The project's increased electrification supporting infrastructure would not prevent the City from increasing solar photovoltaic power generation capacity in future years.
Increase cumulative total MW of energy storage capacity to at least 1,654–1,750 MW by 2025.	*Consistent*. With the project, LADWP proposes to increase the capacity of electricity distribution within POLA and would be supportive of increased energy storage through increased distribution capacity.
Energy Efficient Buildings	
Reduce energy use per square foot below 2013 baseline for all building types by at least 14% by 2025 and 30% by 2035.	*Not applicable*. The proposed infrastructure project would not conflict with the City's plan to energy use per square foot below 2013 baseline for all building types by at least 14% by 2025 and 30% by 2035.

Table 2.8-3. Project Potential to Conflict with the Sustainable City Plan's GHG Emission Reduction Strategies

Sustainable City Plan Measure	Potential to Conflict
GHGs	
Reduce GHG emissions below 1990 baseline by at least 45% by 2025, 60% by 2035, and 80% by 2050.	*Not applicable*. The project would not contribute to long-term GHG emission generation. As such, the project would not interfere with efforts to reduce GHG emissions.
Improve GHG efficiency of LA's economy from 2009 levels by 55% by 2025 and 75% by 2035.	*Not applicable*. The project would not contribute to long-term GHG emission generation. As such, the project would not interfere with efforts to improve GHG efficiency.
Influence national and global action through the leadership of LA and other cities on climate change.	*Not applicable*. The project would not interfere with efforts to influence action on climate change.
Have no ownership stake in coal-fired power plants by 2025.	*Not applicable*. The project involves the increase the capacity of electricity distribution within POLA and, therefore, would not affect the ownership stake of coal-fired power plants.
Waste	
Increase landfill diversion rate to at least 90% by 2025 and 95% by 2035.	*No conflict*. The project would produce waste during construction. Construction debris, such as pavement and excavated soils, would be reused on site or recycled to the extent feasible. Wastes would be diverted from landfills to the extent practicable and in accordance with state law. The project would generate minimal waste during operation and maintenance.
Increase proportion of waste production and recyclable commodities productively reused and/or repurposed within LA County to at least 25% by 2025 and 50% by 2035.	*Not applicable*. The project would involve the increase the capacity of electricity distribution within POLA and, therefore, would not interfere with efforts to increase reuse or repurposing of commodities. During construction, pavement and excavated soils would be reused on site or recycled as feasible. The project would not generate waste during operation.

Source: City of Los Angeles 2015.

As shown in Table 2.8-3, the project would not conflict with any of the GHG reduction measures or goals set forth in the Sustainable City Plan.

Project Potential to Conflict with State Reduction Targets and CARB's 2022 Scoping Plan

The California State Legislature passed AB 32, the Global Warming Solutions Act of 2006, to provide initial direction to limit California's GHG emissions to 1990 levels by 2020 and initiate the state's long-range climate objectives. Since the passage of AB 32, the state has adopted GHG

emissions reduction targets for future years beyond the initial 2020 horizon year. For the project, the relevant GHG emissions reduction targets include those established by Senate Bill (SB) 32 and AB 1279, which require GHG emissions be reduced to 40% below 1990 levels by 2030, and 85% below 1990 levels by 2045, respectively. In addition, AB 1279 requires the state to achieve net zero GHG emissions by no later than 2045 and achieve and maintain net negative GHG emissions thereafter.

As defined by AB 32, CARB is required to develop a Scoping Plan that provides the framework for actions to achieve the state's GHG emission targets. The Scoping Plan is required to be updated every 5 years and requires CARB and other state agencies to adopt regulations and initiatives that will reduce GHG emissions statewide. The first Scoping Plan was adopted in 2008 and was updated in 2014, 2017, and most recently in 2022. Although the Scoping Plan is not directly applicable to specific projects, nor is it intended to be used as the sole basis for project-level evaluations, it is the official framework for the measures and regulations that will be implemented to reduce California's GHG emissions in alignment with the adopted targets. Therefore, a project would be found to not conflict with the statutes if it would meet the Scoping Plan policies and would not impede attainment of the goals therein.

CARB's 2017 Climate Change Scoping Plan update was the first to address the state's strategy for achieving the 2030 GHG reduction target set forth in SB 32 (CARB 2017), and the most recent CARB 2022 Scoping Plan for Achieving Carbon Neutrality update outlines the state's plan to reduce emissions and achieve carbon neutrality by 2045 in alignment with AB 1279 and assesses the progress the state is making toward the 2030 SB 32 target (CARB 2022b). As such, given that SB 32 and AB 1279 are the relevant GHG emission targets, the 2017 and 2022 Scoping Plan updates that outline the strategy to achieve those targets are the most applicable to the project.

The 2017 Scoping Plan included measures to promote renewable energy and energy efficiency (including the mandates of SB 350), increase the stringency of the Low Carbon Fuel Standard, implement measures identified in the Mobile Source and Freight Strategies and measures identified in the proposed Short-Lived Climate Pollutant Plan, and increase the stringency of SB 375 targets. The 2022 Scoping Plan builds upon and accelerates programs currently in place, including moving to zero-emission transportation; phasing out use of fossil gas for heating homes and buildings; reducing high GWP chemicals and refrigerants; providing communities with sustainable options for walking, biking, and public transit; and displacing fossil-fuel-fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines) (CARB 2022b). With the project, LADWP proposes to increase the capacity of electricity distribution within POLA to provide the additional 200 MVA needed for the established electrification goals. As such, the project is supportive the Scoping Plan measures through adding additional infrastructure allowing for more electrification in the region. Many of the measures and programs included in the Scoping Plan would result in the reduction of project-related GHG emissions with no action required at the project level, including GHG emission reductions through increased energy efficiency and renewable energy production (SB 350), reduction in carbon intensity of transportation fuels (Low Carbon Fuel Standard), and the accelerated efficiency and electrification of the statewide vehicle fleet (Mobile Source Strategy).

Regarding vehicle miles traveled (VMT) reduction efforts, the project would result in an increase in vehicle trips only during the construction period; therefore, it would not be a long-term source of VMT. In addition, maintenance activities would be minimal, occurring at a rate of approximately thirty (30) trips per year. Further, the passenger vehicles and heavy-duty trucks used during project

construction would comply with various California vehicle-related regulations, as applicable, including Advanced Clean Cars, Low Carbon Fuel Standard, Heavy-Duty GHG standards for New Vehicles and Engines, and Medium- and Heavy-Duty GHG standards. As such, the project would not be a long-term source of VMT in the region, and therefore, would not conflict with the 2017 and 2022 Scoping Plan Update's goals.

The 2045 carbon neutrality goal requires CARB to expand proposed actions in the 2022 Scoping Plan to include those that capture and store carbon in addition to those that reduce only anthropogenic sources of GHG emissions. However, the 2022 Scoping Plan emphasizes that reliance on carbon sequestration in the state's natural and working lands will not be sufficient to address residual GHG emissions and that achieving carbon neutrality will require research, development, and deployment of additional methods to capture atmospheric GHG emissions (e.g., mechanical direct air capture). Given that the specific path to carbon neutrality will require development of technologies and programs that are not currently known or available, the project's role in supporting the statewide goal would be speculative and cannot be wholly identified at this time.

Overall, the project would comply will all regulations adopted in furtherance of the Scoping Plan to the extent applicable and required by law. As mentioned above, several Scoping Plan measures would result in reductions of project-related GHG emissions with no action required at the project level, including those related to energy efficiency, vehicles, and construction equipment. In addition, the project increases the capacity of electricity distribution within POLA to provide for the established electrification goals. As demonstrated, the project would not conflict with CARB's 2017 or 2022 Scoping Plan updates or with the state's ability to achieve the 2030 and 2045 GHG reduction and carbon neutrality goals.

Project Potential to Conflict with SCAG's 2020–2045 RTP/SCS

The following policies and strategies are intended to be supportive of implementing the 2024–2050 RTP/SCS and reducing GHGs: Sustainable Development, Air Quality, Clean Transportation, Natural and Agricultural Lands Preservation, and Climate Resilience. The strategies that pertain to sustainable development and clean transportation would not apply to the proposed project. The project's potential to conflict with the applicable strategies is presented below.

- Air Quality. The 2024–2050 RTP/SCS identifies air quality as an environmental strategy because the transportation sector is the predominant source of criteria air pollutant emissions in the region. The 2024–2050 RTP/SCS states that a comprehensive and coordinated regional solution with integrated land use and transportation planning from all levels of governments will be required to achieve the needed emission reductions (SCAG 2024). The project would temporarily increase emissions during construction and would not be a significant source of criteria air pollutant emissions during construction or operation. Therefore, the project would not conflict with this strategy.
- Clean Transportation. The 2024–2050 RTP/SCS identifies provision of EV charging infrastructure, adoption of ZEVs, and promotion of clean transit as ways to reduce GHG emissions from mobile sources. The project would adhere to all regulatory requirements regarding clean transportation during construction and operation. The project would not conflict with this strategy.
- Natural and Agricultural Lands Preservation. The 2024–2050 RTP/SCS promotes the conservation and restoration of natural and agricultural lands through several policies,

such as quantifying the carbon sequestration potential of natural and agricultural lands and prioritization of sensitive habitat and wildlife corridors for permanent protection. The project would not convert natural and working lands or interfere with this strategy.

- Climate Resilience. The 2024–2050 RTP/SCS promotes regional coordination and solutions for effective emergency response for climate-related hazards. Additionally, in the category of climate resilience, SCAG has established the following policies: prioritize the most vulnerable populations and communities subject to climate hazards; support local and regional climate and hazard planning; support nature-based solutions to increase regional resilience; promote sustainable water use planning; and support an integrated planning approach to help jurisdictions meet housing needs in a drier environment. While the project does not directly pertain to these regional coordination efforts for climate resilience, the project would not interfere with this strategy.

Based on the analysis above, the project would not conflict with Connect SoCal 2024.

Summary

As shown in this discussion, the project would not conflict with the San Pedro Bay Ports CAAP, Plan City of Los Angeles's Sustainable City Plan, CARB's 2017 or 2022 Scoping Plan updates, the state's ability to achieve the 2030 and 2045 GHG reduction and carbon neutrality goals, or SCAG's Connect SoCal 2024. Therefore, impacts related to project consistency with an applicable GHG reduction plan would be less than significant.

2.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

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

Less than Significant Impact. During construction of the proposed project, hazardous and potentially hazardous materials typically associated with construction activities would be routinely transported to/from and used on the project site. These hazardous materials could include gasoline, diesel fuel, lubricants, and other products used to operate and maintain construction equipment. During construction of the project, standard operating procedures would be followed to ensure that these hazardous materials do not escape the surrounding area. The transport, use, and handling of these materials would be a temporary activity coinciding with short-term construction activities.

Federal regulations related to the handling, use, transport, or disposal of hazardous materials include, but are not limited to, the Standards Applicable to the Transporters of Hazardous Waste of the Resource Conservation and Recovery Act of 1976 (40 CFR Part 263), Occupational Safety and Health Administration (OSHA) regulations (29 CFR 1910), and the Hazardous Materials Transportation Act of 1975 (49 CFR Parts 105-109). As mandated by the OSHA Hazard Communication Standard (29 CFR 1910.1200[g] and Appendix D of 29 CFR 1920.1200), all

hazardous materials stored on site would be accompanied by a Material Safety Data Sheet, which would inform on-site personnel about the necessary remediation procedures in the case of accidental release.

State regulations include, but are not limited to, California Health and Safety Code Sections 25160-25166.5, Standards Applicable to Transporters of Hazardous Waste (22 CCR Division 4.5, Chapter 13), both of which are administered by the California Department of Toxic Substances Control (DTSC), and Hazardous Material Business Plan (HMBP) requirements, California Health and Safety Code Sections 25500 through 25519. HMBP rules require any site that stores greater than 55 gallons of liquid, 200 cubic feet of compressed gas, or 500 pounds of solid hazardous material to report that storage to the local Certified Unified Program Agency (CUPA), which for the site is the Los Angeles County Fire Department, Health Hazardous Materials Division. The HMBP also includes personnel training and emergency response procedures to reduce the potential for release of hazardous materials.

Local regulations include additional state regulations enforceable through local agencies by CUPA delegated authority (aboveground storage tanks, accident prevention, hazardous waste programs, and underground storage tanks), and the City of Los Angeles Municipal Code Chapter V, Article 4, Liability for Violation of Hazardous Waste and Substance Control Laws.

Any handling, transport, use, or disposal would comply with all applicable federal, state, and local agencies and regulations. As such, impacts associated with handling of hazardous materials would be less than significant.

b) Would the project 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 with Mitigation Incorporated. As discussed in Section 2.9(a), any handling, transport, use, and disposal of hazardous materials would comply with all applicable federal, state, and local requirements. Both short-term construction and long-term operation of the project would adhere to the policies and programs established by all applicable federal, state, and local agencies, including EPA, DTSC, the California Occupational Safety and Health Administration, the Los Angeles County Fire Department (Local CUPA), and the City of Los Angeles. Adherence to the regulations administered by these agencies would ensure that any interaction with hazardous materials would occur in the safest possible manner, reducing the opportunity for the accidental release of hazardous materials into the environment.

Parcels K and Y are known to be contaminated; however, they will soon be remediated under the agreement between LADWP and LAHD. The proposed project would include remediation of these parcels to facilitate construction and operation. In addition, the proposed location of the Outer Harbor Switching Station is located on the former Westway Terminal Tank Farm (Berths 70–71), which has extensive soil and groundwater contamination due to past industrial petrochemical storage and transfer operations (Tetra Tech 2017). Contaminants of concern at the proposed Outer Harbor Switching Station include metals, petroleum hydrocarbons, and volatile organic compounds (Tetra Tech 2017). There are also multiple contaminated sites within a 0.25-mile search radius (see Figure 2.9-1, Hazardous Material Database Map) and contamination from these releases could have resulted in contamination to soils, soil vapor, and/or groundwater within the project site. As excavation is required for all parts of the proposed project, including installation of underground distribution circuits

and installation of footings/foundations at switching stations, contaminated media could be exposed and released during construction, resulting potential upset/accident condition involving the release of hazardous materials (contaminated media), which would be a potentially significant impact. MM-HAZ-1 would require preparation of a soil and groundwater management plan (SWMP) to be implemented during all earthwork and soil disturbance associated with project construction. With implementation of MM-HAZ-1, impacts related to the release of hazardous materials associated with contaminated soil and groundwater would be reduced to less than significant.

The project site overlaps the Wilmington oil field, which is an active oil and gas production area (CDOC 2025c). Numerous oil and gas wells are located throughout the vicinity of the project site, as are petroleum and natural gas pipelines. Construction and excavation activities near active oil and gas production wells and transportation pipelines could result in release of hazardous materials. Additionally, there are regulatory excavation and building restrictions that limit both excavation near pipelines and oil and gas wells, and construction of features that could limit future access to these features, as described below.

Section 51014.6 of the California Government Code:

a) Effective January 1, 1987, no person, other than the pipeline operator, shall do any of the following with respect to any pipeline easement: (1) Build, erect, or create a structure or improvement within the pipeline easement or permit the building, erection, or creation thereof. (2) Build, erect, or create a structure, fence, wall, or obstruction adjacent to any pipeline easement which would prevent complete and unimpaired surface access to the easement, or permit the building, erection, or creation thereof.

b) No shrubbery or shielding shall be installed on the pipeline easement which would impair aerial observation of the pipeline easement. This subdivision does not prevent the revegetation of any landscape disturbed within a pipeline easement as a result of constructing the pipeline and does not prevent the holder of the underlying fee interest or the holder's tenant from planting and harvesting seasonal agricultural crops on a pipeline easement.

c) This section does not prohibit a pipeline operator from performing any necessary activities within a pipeline easement, including, but not limited to, the construction, replacement, relocation, repair, or operation of the pipeline.

As stated in the Office of the State Fire Marshal, Pipeline Safety Division Information Sheet (CAL FIRE 2015), it is the position of the State Fire Marshal that nothing may encroach into or upon the pipeline easement that would impede the pipeline operator from complete and unobstructed surface access along the pipeline ROW, nor may there be any obstructions that would shield the pipeline ROW from observation. In the interest of public safety and the protection of the environment, it is imperative that the pipeline operator visually assesses the conditions along the easement to ensure the integrity of the pipeline.

It is the responsibility of the pipeline operator to ensure that they have unimpeded surface access and to be able to physically observe all portions of their pipeline ROWs. In cases where this is not

possible, the pipeline operator must inform the State Fire Marshal. The State Fire Marshal will, in collaboration with the pipeline operator, resolve the issue.

California Dig Law

Title 1, Division 5, Chapter 3.1, Article 2, Section 4216 requires, prior to any excavation[6], the excavator to delineate the area to be excavated, so that subsurface utilities can be identified and marked. The excavator will contact the regional notification center at least 2 days but not more than 14 days prior to excavation. The regional notification center will in turn identify and notify all appropriate owners and agencies with subsurface utilities in the area. Excavation will not begin until subsurface utilities are marked.

California Dig Alert

CA Government Code 4216

In accordance with CA Government Code 4216.2, an excavator planning to conduct an excavation shall notify the appropriate regional notification center of the intent to excavate between 2 and 14 calendar days prior to excavation activities. When the excavation is proposed within 10 ft of a "high priority subsurface installation," which includes high-pressure natural gas and petroleum pipelines, the operator of the high-priority subsurface installation shall notify the excavator of the existing of the installation and set up an on-site meeting to determine actions required to verify location and prevent damage to the installation. The excavator shall not begin excavating until the on-site meeting is complete.

Adherence to the regulations described herein would ensure that impacts related to the release of hazardous materials associated with oil and gas wells would be less than significant.

Therefore, potential impacts to the public or the environment through the release of hazardous materials would be less than significant with implementation of MM-HAZ-1.

[6] According to Title 1, Division 5, Chapter 3.1, Article 2, Section 4216(g), excavation is defined as "any operation in which earth, rock, or other material in the ground is moved, removed, or otherwise displaced by means of tools, equipment, or explosives in any of the following ways: grading, trenching, digging, ditching, drilling, augering, tunneling, scraping, cable or pipe plowing and driving, or any other way."

SOURCE: Esri 2025; CA State Water Resources Control Board 2025; CA Department of Toxic Substances 2025

DUDEK

0 1,750 3,500 Feet

FIGURE 2.9-1

Hazardous Material Database Map

Port of Los Angeles Electrification Project

c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less than Significant Impact with Mitigation Incorporated. Multiple schools are located within 0.25 miles of the project site. Phineas Banning Senior High School and Avalon High School are both located adjacent to the new underground conduit along North Avalon Boulevard. Harry Bridges Span School, Fries Avenue Elementary School, and George De La Torre Junior Elementary School are located 0.06 miles west, 0.14 miles east, and 0.17 miles east, respectively, of the new underground conduit along North Avalon Boulevard. The Wilmington Skill Center is located 0.01 miles east of the switching station on Parcel K.

While any handling, transport, use, or disposal would comply with all applicable federal, state, and local agencies and regulations, as discussed in Sections 2.9(a) and 2.9(b) above, there is a potential for contaminated media to be encountered during excavation activities due to hazardous material release sites in the area. As discussed in Section 2.9(b), implementation of MM-HAZ-1 would require preparation of a SWMP to be implemented during all earthwork and soil disturbance associated with project construction. Implementation of the SWMP would reduce potential impacts associated with emissions or handling of hazardous materials within 0.25 miles of a school to less than significant.

d) *Would the project be located on a site that 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 with Mitigation Incorporated. The Hazardous Waste and Substance Sites (Cortese) List is a planning document used by the state, local agencies, and developers to comply with the CEQA requirements in providing information about the locations of hazardous materials release sites. California Government Code Section 65962.5 requires the California Environmental Protection Agency to develop, at least annually, an updated Cortese List. While the Cortese List is no longer maintained as a single list, the following databases provide information that meet the Cortese List requirements:

1. List of Hazardous Waste and Substances sites from the DTSC EnviroStor database (Health and Safety Codes 25220, 25242, 25356, and 116395)
2. List of leaking underground storage tank (LUST) Sites by County and Fiscal Year from the SWRCB GeoTracker database (Health and Safety Code 25295)
3. List of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit (Water Code Section 13273[e] and 14 CCR Section 18051)
4. List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from SWRCB (Water Code Sections 13301 and 13304)
5. List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC

As discussed in Section 2.9(b), Parcels K and Y are known to be contaminated, and there are multiple contaminated sites within 0.25 miles of the project site, including LUST sites and Hazardous Waste and Substances Sites, which are on the Cortese List. As such, impacts to the public or the environment due to the project's location on or nearby a Cortese List site are

potentially significant. However, as discussed in Section 2.9(b), implementation of MM-HAZ-1 would require preparation of a SWMP to be implemented during all earthwork and soil disturbance associated with project construction. Implementation of the SWMP would reduce potential impacts associated with Cortese List sites to less than significant.

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

No Impact. The closest airport is Torrance Airport, which is located approximately 3 miles northwest of the project site. The project would not be located in the airport influence area for Torrance Airport (County of Los Angeles 2024) and thus would not expose people to excessive noise levels. Therefore, no impacts associated with excessive airport noise or safety hazards would occur.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. Primary evacuation routes in the City and Los Angeles County consist of major interstates, highways, and primary arterials (City of Los Angeles 2020). The project involves the installation of multiple underground distribution lines in and around the POLA. Ten (10) new circuits would be located within San Pedro and the outer POLA. Four circuits would be located within Terminal Island in the POLA. Two new circuits would be installed from RS-C in Wilmington to the RS-Q Area.

LADWP would prepare a Traffic Control Plan as specified in BMP-TRA-1 prior to the start of construction to minimize impacts. Likewise, prior notification and coordination with emergency services providers and other road users (e.g., agencies), as specified in BMP-TRA-2 (see Section 1.8, Best Management Practices), would minimize temporary impacts during construction.

During the construction phase, construction crew would trench approximately 300 ft per week. Up to three crews would perform trenching operations so that concurrent trenching would occur along various points of the transmission line alignment; a length of approximately 60 ft of trenching per day is anticipated. Areas that are trenched or excavated would be covered with steel plates every evening until the road surface is restored; this would allow for full usage of the affected roadway outside of work hours. When segments of the trench are restored, more trenching would occur farther down the street until the conduit system is installed for the entire alignment. Provisions for emergency vehicle and local access would be provided. All construction activities would be temporary, and when project construction is complete, all closed areas would be reopened. With implementation of BMP-TRA-2 as part of LADWP's standard practice, during operations, the project would be contained within existing parcels or facilities and would not impede roadways or other emergency access.

Therefore, the project would not impair an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

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

Less than Significant Impact. According to the California Department of Forestry and Fire Protection, the project site is not located within a very high, high, or moderate Fire Hazard Severity Zone (FHSZ) (CAL FIRE 2025). Additionally, the project site is in an urban, built-up, flat area that is not in the vicinity of wildlands. Further, the project site is within existing roadways and POLA or LADWP property, which contains only limited amounts of ruderal vegetation and does not contain extensive amounts of vegetation or wildland fuel. In addition, the project would be in compliance with applicable fire code and building code requirements. Project construction and maintenance/operations would comply with existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Therefore, it is not anticipated that the proposed project would expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Impacts would be less than significant.

Mitigation Measures

MM-HAZ-1 Prior to the issuance of a grading permit and before earthwork activity or soil disturbance occurs, LADWP, LAHD, or their designated contractor shall prepare or retain a qualified environmental consultant to prepare a soil and groundwater management plan (SWMP) that outlines the proper screening, handling, characterization, transportation, and disposal procedures for contaminated or potentially contaminated soils and groundwater on site. The SWMP shall include:

- Identification of areas of known or potential soil, soil vapor, and/or groundwater contamination within the project footprint.
- If contaminated media is suspected due to historical site uses, but hazardous characteristics are unknown (e.g., contaminants of concern in soil have not been characterized), then preliminary sampling may be required. Preliminary sampling requirements will be outlined in the SWMP based on the type of construction to occur, depth of excavations or grading, and potential exposure risks (soil, groundwater, soil vapor).
- Procedures for field screening, stockpiling, sampling, and characterizing contaminated or potentially contaminated soils.
- Procedures and requirements for on-site soil reuse, off-site soil reuse, and off-site soil disposal (landfilling).
- Procedures for dewatering contaminated groundwater, including applicable permitting agencies.
- Procedures for air quality monitoring during excavation work in contaminated areas, including areas with volatile contamination (such as fuel release sites) and methane-impacted areas (within oil and gas fields). Procedures will include stop work authority, engineering controls, and health and safety measures to ensure releases of airborne hazardous materials (dusts, methane, volatile compounds) do not impact on-site workers or nearby public, including sensitive receptors).
- Health and safety and training procedures for workers who may come in contact with contaminated soils.

- On-site soil management requirements to avoid fugitive dust and stormwater runoff, including stockpile management.
- Response and reporting procedures in the event a release of contaminated soils or groundwater or violation of air quality or water quality rules occurs.
- Requirements if contaminated soil and/or groundwater is identified during project construction activities. These include, but are not limited to:
    - Stop-work requirements for further evaluation of identified contamination
    - Notification requirements
    - Documentation requirements for sampling, analysis, and required actions in conformance with regulatory standards
    - Protocols for resuming earthwork activities
- Procedures to meet all applicable federal, state, and local regulations associated with handling, excavating, stockpiling, and disposing of contaminated soils; handling and dewatering contaminated groundwater; and air monitoring.
- The proposed disposal facility that will accept the contaminated soils and procedures for authorization and transportation.

The SWMP will be implemented by LADWP, LAHD, or their designated contractor for all earthwork activities and activities that have the potential to encounter previously unidentified hazardous materials or wastes on the project site and within off-site disturbance areas.

2.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	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:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction

Less than Significant Impact. The proposed project would involve trenching, tunneling, excavation, and grading activities in order to complete the construction of all project components (i.e., RS-Q Rack D, RS-C Rack C, distribution circuits, switching stations, and the wet cooling tower). Both receiving stations (RS-Q and RS-C) would require trenching and excavation for conduits, piers, grounding connections, foundations, and a maintenance vault. The underground distribution lines would be installed using open-cut trenching techniques within the ROW that would require an approximately 10- to 15-foot-wide temporary construction corridor. As described in Section 1.7.3, the underground distribution conduits would require tunneling in 11 locations to cross under active railways, PCH, and the East Basin Channel. The excavation would

follow the removal of the overlying concrete/asphalt. The typical trench for the duct bank (trench in which the conduits are laid within) installation would be approximately 3 ft wide and 6 ft deep with trench depths varying depending on encountered conditions. Grading and earthwork activities would also be required for the switching stations and cooling tower.

In the event that stormwater runoff was to be generated during construction activities, sediment runoff or runoff containing pollutants from construction equipment present at any of the construction areas would have the potential to be transported off site. However, water quality standards and waste discharge requirements related to construction and stormwater runoff would apply to the proposed project.

Prior to the start of construction, LADWP and LAHD would be required to obtain a General Storm Water Permit Associated with Construction Activity, issued by SWRCB. One of the conditions of the General Permit is the development and the implementation of a SWPPP by a Qualified SWPPP Developer, which would identify structural and nonstructural BMPs to be implemented by the Qualified SWPPP Practitioner during the construction phase (see BMP-WQ-1 and BMP-WQ-2 in Section 1.8). These required BMPs would minimize direct impacts to surface water quality and would also minimize the potential for indirect impacts to occur such as increases in sediment loads in surface waters. With implementation of BMPs as outlined in the SWPPP and erosion control plan, the proposed project would not violate any water quality standards or waste discharge requirements. After construction is complete, each work area would be restored to its original condition to the extent feasible.

Therefore, potential construction impacts to any water quality standards or waste discharge requirements would be less than significant.

Operations

Less than Significant Impact. After construction of the proposed project elements are complete, all disturbed areas would be restored to their original condition to the extent feasible. Many of the proposed improvements (e.g., underground distribution lines, maintenance substructures, and duct banks) would have no net effect on drainage patterns or water quality conditions once construction is completed. Other proposed improvements (e.g., receiving station racks, switching stations, and cooling tower) would be constructed aboveground, but located in areas that are largely already covered in impervious surfaces and likely not represent any substantial change to stormwater runoff conditions. Regardless, all proposed aboveground improvements would be subject to applicable stormwater regulations under the Los Angeles Water Board's NPDES Municipal Separate Storm Sewer System (MS4) Permit (Order No. R4-2021-0105), which would ensure that post-construction runoff does not exceed pre-development conditions. Therefore, operational conditions and activities would not be substantively altered by the proposed project such that water quality standards or waste discharge requirements would be violated and, as such, operational impacts associated with the proposed project would be less than significant.

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

Construction

Less than Significant Impact. Water demands associated with construction of the proposed project would primarily consist of water used for dust control during earthwork activities. This water would likely be transported to the work sites in a water truck and could be sourced from various water providers that could be accessing groundwater or imported surface water. Regardless, considering the general scope of activities involved, the volumes of water required would be temporary, relatively small volumes, dispersed over intermittent time frames and likely would not increase water use in the project area to the extent that groundwater supplies in any one of the groundwater basins where it would become substantially depleted.

Groundwater can potentially be encountered during construction activities when deep excavations are involved and/or when groundwater levels are high. However, any dewatering activities that become necessary would also be temporary and conducted in accordance with all applicable regulatory requirements. As such, it is not anticipated that substantive groundwater volumes would be required to be pumped from excavations prior to completion of underground improvements. Considering the above, construction impacts would be less than significant.

Operations

Less than Significant Impact. After construction of the proposed project is complete, the primary water supply need would be for the wet cooling tower, with a relatively minor amount of water required for the maintenance building. As discussed further in Section 2.19, Utilities and Service Systems, the wet cooling tower would require an estimated water usage rate (averaged across 1 year) of 100,000 GPD or approximately 112 acre-feet per year (AFY). Water would be supplied by LADWP). According to LADWP's 2020 Urban Water Management Plan, water is sourced from the Los Angeles Aqueduct, local groundwater, State Water Project (imported surface water), and Colorado River Aqueduct water (also imported surface water). The local groundwater is sourced from the San Fernando Groundwater Basin, which is considered by the California Department of Water Resources to be a very low priority basin because of the adjudication of the groundwater use and existing management (DWR 2025). According to the Urban Water Management Plan, MWD alone has the capability to provide 100% of the water supply for LADWP service area during normal, single dry year, and multiple dry year scenarios out to 2045 due to a projected surplus of at least 532,800 AFY (projection for the multi-dry year scenario) (LADWP 2021a).

Most proposed project elements would be completed underground or within areas that are already covered in impervious surfaces. The triangular lot on Terminal Island selected for the proposed Terminal Island Switching Station is the only project site primarily not covered in impervious surfaces. However, the triangular lot has existing stormwater catch basins and piping to convey water off site. Additionally, Terminal Island is entirely manmade and does not have natural hydrology. Therefore, operational activities of the electrification distribution system would have negligible changes related to groundwater recharge. As a result, because of the existing management of the San Fernando Basin, surplus water supplies available, and negligible changes to groundwater recharge, operational impacts related to groundwater supplies or groundwater recharge would be less than significant.

c) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

i) *Result in substantial erosion or siltation on- or off-site?*

Construction

Less than Significant Impact. No proposed construction activities are anticipated to result in temporary or permanent fill of any stream or river. However, as noted above, construction activities would include substantive earthwork activities including excavation and trenching to complete construction of foundations, underground distribution conduits, a maintenance vault, and piers. All construction activities would be planned and completed in accordance with the NPDES General Storm Water Permit Associated with Construction Activity, issued by SWRCB. One of the conditions of the General Permit is the development and the implementation of a SWPPP by a Qualified SWPPP Developer, which would identify structural and nonstructural erosion control BMPs (e.g., use of straw bales, silt fences, and inlet protections, and appropriate management of soil stockpiles) to be implemented by the Qualified SWPPP Practitioner during the construction phase. LADWP would also develop and implement an erosion control plan for the proposed project. These required BMPs would minimize the exposure of disturbed soils to the effects of wind and water erosion. With implementation of these required erosion control BMPs as outlined in the SWPPP and erosion control plan, the construction activities associated with the proposed project would not result in substantial erosion or siltation on or off site. Storm events occurring during the construction phase would have the potential to carry disturbed sediments off site. However, compliance with the stormwater runoff regulations described under Section 2.10(a) would ensure that impacts related to erosion and siltation during construction activities would be less than significant.

Operations

Less than Significant Impact. After construction of the proposed project is complete, work areas would be restored to their original condition to the extent feasible, with the majority of the disturbed soils covered by asphalt, concrete, building pad, or structure. Operational activities of the proposed project would not substantively change drainage patterns such that it would result in erosion or siltation. It is anticipated that during operation, areas within the project site that were affected by construction activities and areas that introduce new impervious surfaces would include drainage control features (i.e., post-construction BMPs) that minimize the potential for erosion or siltation to occur. Operational conditions and activities would not be altered by the proposed project and, as such, operational impacts would be less than significant.

ii) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?*

Construction

Less than Significant Impact. As described above in Section 2.10(c)(i), construction of the proposed project would not alter the course of a stream or river. Construction could require temporary dewatering of trenches or excavations, however any dewatering and discharge of that water would be conducted in accordance with existing regulatory requirements and would not

result in flooding on or off site as a result. Therefore, construction impacts related to flooding on or off site would be less than significant.

Operations

Less than Significant Impact. After construction of the proposed project is complete, work areas would be restored to their original condition to the extent feasible, and covered by asphalt, concrete, building pad, or structure. Drainage patterns would be relatively similar to existing conditions since the vast majority of the proposed improvements are already covered in impervious surfaces. One exception would be the location of the proposed receiving station RS-Q Rack D, which is currently almost entirely pervious with the only existing improvements consisting of a railroad spur. The second exception is the triangular lot on Terminal Island selected for the Terminal Island Switching Station, which is primarily covered in non-native vegetation and contains existing stormwater catch basins to convey stormwater off site. However, as noted above in Section 2.10(a), construction of all proposed project elements would be subject to all applicable NPDES MS4 Permit (Order No. R4-2021-0105) requirements that would include appropriate management of stormwater volumes that could increase with construction of the project such that there would be no net increase in stormwater runoff. Therefore, because the proposed project would not alter the course of a stream or river, substantially increase the amount of impervious surfaces in the project area, or result in increases to the rate or amount of surface runoff with implementation of any required stormwater drainage control features, the proposed project would have a less-than-significant impact related to flooding on or off site.

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?

Construction

Less than Significant Impact. As described above under Section 2.10(c)(ii), the proposed project would not increase the amount of runoff from the project area during construction and would not affect the capacity of stormwater drainage systems. Compliance with the water quality regulations for construction described above under Section 2.10(a) would ensure that impacts related to polluted runoff during construction activities would be controlled. Therefore, construction impacts would be less than significant.

Operations

Less than Significant Impact. After construction of the proposed project is complete, most work areas would be restored to their original condition to the extent feasible, and there would be negligible changes to impervious surfaces. As noted above, the proposed location for the receiving station RS-Q Rack D would result in an increase in impervious surfaces for those two parcels (L and P). However, all proposed improvements would be subject to applicable stormwater drainage control requirements pursuant to the NPDES MS4 permit. These requirements include ensuring that post-construction runoff does not exceed pre-development conditions. As a result, there would not be any substantive increases in stormwater runoff that would exceed the capacities of existing or planned stormwater drainage systems.

Many of the proposed improvements associated with the project would be belowground or on existing developed areas such that there would be no substantive new sources of polluted runoff. The proposed cooling tower would operate on a closed loop system, where the cooling water is recirculated and there would be no discharges associated with it. As a result, there would be no other sources of polluted runoff that are not already discussed above in Section 2.10(a). Therefore, operation of the project would not create or contribute runoff water that would exceed the capacities of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff and the impacts would be less than significant.

iv) Impede or redirect flood flows?

Less than Significant Impact. No project elements are within a 100-year flood hazard areas (DWR 2025). While some of the project elements (e.g., receiving station racks, switching stations, and cooling tower) would be located aboveground, other elements (e.g., distribution lines, maintenance substructures, and duct banks) would be belowground once constructed. Because the proposed aboveground improvements would be outside of the 100-year flood hazard area and would not substantively increase the aboveground profiles, there would be no significant impedance or redirection of flood flows. Therefore, impacts related to impeding or redirecting flood flows would be less than significant.

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

Less than Significant Impact. As noted above, none of the proposed project elements are located within an identified 100-year flood hazard area (FEMA 2025). However, with the exception of receiving station RS-C Rack C, all the other proposed project elements would be located within the tsunami hazard area as mapped by the California Geological Survey (CGS 2025). However, the project would not involve the storage or handling of bulk quantities of hazardous materials. Any small quantities of hazardous materials used during construction would be handled in a manner consistent with existing regulatory requirements.

Seiches are oscillations generated in enclosed or semi-enclosed bodies of water, usually as a result of earthquake-related ground shaking. A seiche wave has the potential to overflow the sides of a containing basin to inundate adjacent or downstream areas. The Inner Harbor of the Port, including the East and West Basins, would be considered semi-enclosed bodies of water. These basins are relatively close to the project area including the HGS. However, as stated above, the proposed project would not include the bulk storage or handling of hazardous materials during construction and would be required to manage any hazardous materials in a manner consistent with existing regulatory requirements and MM HAZ-1.

Scientific evidence indicates that the rapidly accelerating and irreversible ice loss due to global warming could result in increased sea level rise (SLR) of up to 66 inches sometime into the future (POLA 2018). A Sea Level Rise Adaptation Study was conducted by POLA in 2018 to assess the potential impacts of rising sea levels on the Port's infrastructure and operations (POLA 2018). The study assessed the Port's vulnerability to SLR, examined potential impacts of several SLR scenarios on critical Port infrastructure, and identified adaptation strategies to manage the risks. These scenarios included an SLR of 12 inches by the year 2030, 24 inches by the year 2050, and 37 inches by the year 2100. Additionally, each SLR scenario was assessed under two tide conditions—daily tidal levels and the 100-year storm tide—representing permanent inundation

and temporary flooding, respectively. The existing electrical delivery system is considered a critical facility in the vulnerability report, with some existing facilities (e.g., transformers) becoming inundated at 37 inches of SLR when adding storm tide surges (POLA 2018). At 66 inches, more existing electrical infrastructure becomes inundated. For the proposed project, this would affect primarily the distribution system located along the Los Angeles Main Channel and all project elements on Terminal Island. As noted above, however, there would be no bulk storage of any hazardous materials associated with the proposed project such that there would be no substantive release of hazardous materials in the event of future flooding due to SLR.

Therefore, considering the location and characteristics of the proposed project, the potential for adverse effects occurring as a result of release of pollutants due to inundation would be considered less than significant.

e) *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Less than Significant Impact. As described in Section 2.10(a) and Section 2.10(c)(i), all construction activities associated with the proposed project would be required to comply with the NPDES General Storm Water Permit Associated with Construction Activity, requiring preparation and implementation of a SWPPP to control runoff from construction work sites. The SWPPP would include BMPs to address transport of sediment and protect properties from erosion, flooding, or the deposition of mud, debris, or construction-related pollutants. Implementation of BMP-WQ-1 through BMP-WQ-2, including physical barriers to prevent erosion and sedimentation, construction of sedimentation basins, limitations on work periods during storm events, use of infiltration swales, protection of stockpiled materials, and a variety of other measures, would substantially reduce the potential for impacts to surface water quality occurring during construction, which is consistent with the applicable Basin Plan policies and objectives for the Los Angeles Region Coastal Watershed. During operation, all proposed project improvements would be required to include, as applicable, stormwater source control features to protect water quality of receiving waters, which are also consistent with the Basin Plan policies and objectives.

The proposed project site is located within the Coastal Plain of Los Angeles – West Coast and would be supplied with water from LADWP, which includes groundwater sourced from the West Coast and San Fernando Groundwater Basin. According to the California Department of Water Resources, both of these groundwater basins are considered a very low priority due to existing management as adjudicated groundwater basins. Several retail water purveyors that supply water to the region have pumping rights established as part of these adjudications to obtain groundwater but because groundwater withdrawals from the groundwater basins are limited based on the adjudication, compliance with the judgments that set pumping rights would eliminate the potential for the water supplied to the project area to substantially impact the existing management of these basins. Therefore, implementation of the project would not conflict with a water quality control plan or sustainable groundwater management plan and impacts would be less than significant.

2.11 Land Use and Planning

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

a) Would the project physically divide an established community?

No Impact. With the exception of RS-C Rack C, the proposed project would be located within industrial areas that do not contain any established communities. Additionally, after construction, all aboveground project elements would be within LADWP properties or existing parcels and would not create any barriers to movement within existing established communities. Therefore, the project would have no impact related to physically dividing an established community.

b) Would the project 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?

California Coastal Act (PRC Division 20, Sections 30000–30900)

The California Coastal Act recognizes that the "California coastal zone is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem" and sets regulations for development within the Coastal Zone. Under the Coastal Act, development activities within the Coastal Zone generally require a permit to ensure that the activity is consistent with the policies of the Coastal Act.

Port Master Plan

A certified port master plan transfers coastal permit jurisdiction relative to port development from the Coastal Commission to the port authority, with limited appeal jurisdiction remaining with the Coastal Commission. The Port of Los Angeles Port Master Plan (LAHD 2018) is a certified port master plan, which allows the Port to issue Coastal Development Permits for development within the Coastal Zone.

Community Plans

The City of Los Angeles is organized into 36 Community Plan Areas. Taken together, the community plans make up the Land Use Element of the City of Los Angeles's General Plan. The proposed project would be located within the POLA and Wilmington-Harbor City Community Plan Areas and, if Option 2 is ultimately constructed for the underground distribution line alignment (see Figure 1-1, Project Scope), a portion of the alignment would also be within the San Pedro Community Plan Area. The Port Master Plan acts as the Community Plan for POLA, where the majority of the project footprint is located.

No Impact. The underground distribution line alignment would be located entirely within the existing road ROW. The properties adjacent to the underground alignment include the following land use designations: Public Facilities, Low Residential, Medium Residential, Commercial, Industrial, and Open Space within the City of Los Angeles. RS-Q, RS-C, and HGS are located on LADWP-owned land designated for Public Facilities.

The three (3) switching stations are located within or adjacent to the POLA and are designated for M3- Heavy Industrial (Outer Harbor and Terminal Island), or M2- Light Manufacturing (Harry Bridges).

The project elements do not conflict with these zoning and land use designations. For project elements within the Coastal Zone, LADWP will obtain a Coastal Development Permit, exemption, or waiver from the California Coastal Commission or POLA, consistent with the requirements of the California Coastal Act. Therefore, the proposed project would have no impact related to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

2.12 Mineral Resources

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

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

No Impact. The project site is located in the San Gabriel Production-Consumption Region (CGS 2010). The California Geological Survey has mapped portions of the City within Mineral Resource Zone 2 (MRZ-2) for aggregate resources. MRZ-2 is defined as follows (Department of Conservation Natural Resources Agency 2014):

> areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. This zone shall be applied to known mineral deposits or where well-developed lines of reasoning, based upon economic-geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high.

In the San Gabriel Production-Consumption Region, only Portland cement concrete-grade construction aggregate resources were classified (Department of Conservation Natural Resources Agency 2014). The project site is not located in any of the MRZ-2 areas within the San Gabriel Production-Consumption Region. The project site is located in an urbanized area and is surrounded by residential, commercial, and utilities uses, which would preclude mineral extraction. No impact would occur.

b) Would the project 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. As discussed in Section 2.12(a), the project site is not located within any MRZ-2 area within the San Gabriel Production-Consumption Region (CGS 2010). The project site is located in an urbanized area and is surrounded by residential, commercial, and utilities uses, which would preclude mineral extraction activities in the area. Therefore, the project would not result in a loss of availability of a known locally important mineral resource recovery site, and no impact would occur.

2.13 Noise

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a) Would the project result in 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?

Short-Term Construction

Construction noise and vibration are temporary phenomena, with emission levels varying from hour to hour and day to day, depending on the equipment in use, the operations performed, and the distance between the source and receptor. Equipment that would be in use during construction would include, in part, graders, backhoes, rubber-tired dozers, loaders, cranes, forklifts, pavers, rollers, and air compressors. The typical maximum noise levels at a distance of 50 feet from various pieces of construction equipment and activities anticipated for use on the proposed project site are presented in Table 2.13-1. Note that the equipment noise levels presented in Table 2.13-1 are maximum noise levels. Usually, construction equipment operates in alternating cycles of full power and low power, producing average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Table 2.13-1. Typical Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment (L_{max}, dBA at 50 Feet)
Backhoe	78
Compressor (air)	78
Concrete Saw	90
Crane	81
Dozer	82
Excavator	81

Table 2.13-1. Typical Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment (L_{max}, dBA at 50 Feet)
Flat Bed Truck	74
Front End Loader	79
Generator	72
Grader	85
Man Lift	75
Paver	77
Roller	80
Scraper	84
Welder / Torch	73
All Other Equipment > 5 HP	85

Source: DOT 2006.
Note: L_{max} = maximum sound level; dBA = A-weighted decibels.

For purposes of this study, and in a manner resembling the "general assessment" methodology per Federal Transit Administration (FTA) guidance, this analysis assumes that the two (2) loudest types of equipment per construction phase would be located at the nearest possible distance to a noise-sensitive receptor. This would be considered a conservative analysis as construction equipment would not realistically "stack" at the nearest possible distance as opposed to operating at various locations (and therefore various distances from the nearest noise-sensitive receptor) throughout a given work area.

Noise-sensitive receptors adjacent to the project alignment include residences, schools, churches, and parks. The closest noise-sensitive receptors along the alignment are located approximately 20 feet from the proposed areas of construction.

The City of Los Angeles Rush Hour Ordinance limits in-street construction on weekdays to the hours of 9:00 a.m. through 3:30 p.m. In-street construction hours would be Monday through Friday from 9:00 a.m. to 3:30 p.m., and Saturday from 8:00 a.m. to 6:00 p.m. Construction of all other facilities located outside of public streets would occur Monday through Friday, between the hours of 7:00 a.m. and 9:00 p.m., and Saturday from 8:00 a.m. to 6:00 p.m.

This analysis is focused on determining whether project construction could exceed the LAMC construction noise level limit of 75 dBA L_{eq} at a distance of 50 feet within or in 500 feet of residential zones.

A Microsoft Excel–based noise prediction model emulating and using reference data from the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) (FHWA 2008) was used to estimate construction noise levels at the nearest occupied noise-sensitive land uses. Although the RCNM was funded and promulgated by the FHWA, it is often used for non-roadway projects, because the same types of construction equipment used for roadway projects are often used for other types of construction. Input variables for the predictive modeling consist of the equipment type and number of each (e.g., a dozer, a backhoe, a tractor, and an excavator), the duty cycle for each piece of equipment (e.g., percentage of time within a specific time period, such as an hour, when the equipment is expected to operate at full power or capacity and thus make noise at a level comparable to what is presented in Table 2.13-1, and the distance

from the noise-sensitive receptor. The predictive model also considers how many hours that equipment may be on-site and operating (or idling) within an established work shift. Conservatively, no topographical or structural shielding was assumed in the modeling. The RCNM has default duty-cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty-cycle values were used for this noise analysis.

Appendix A of Appendix F, Noise Technical Report, contains the RCNM worksheets used to predict the construction noise levels per activity phase. Table 2.13-2 presents the predicted construction noise levels per activity phase using the methodologies described above.

Table 2.13-2. Predicted Construction Noise Levels per Activity Phase

Construction Phase (and distance to nearest receptor)	8-Hour L_{eq} at Nearest Receptor Boundary to Site Boundary (dBA)	Significant Impact?
Underground Distribution/Alignment (20 feet)	86	Yes
RS-C Rack C Improvement (295 feet)	61	No
HGS Phase 1: Site Prep, Earthwork, and Demolition (1,025 feet)	49	No
HGS Phase 2: Foundations and Piles (1,025 feet)	48	No
HGS Phase 3: Cooling Tower and Auxiliary Equipment (1,025 feet)	45	No
HGS Phase 4: Makeup Water Storage, Wastewater, and Stormwater Holding Tank Assembly (1,025 feet)	49	No
HGS Phase 5: Water Infrastructure (1,025 feet)	45	No
HGS Phase 6: Outage, Tie-Ins, and Commissioning (1,025 feet)	46	No
RS-Q Rack D Construction (275 feet)	61	No
Cerritos Channel (3,240 feet)	36	No
Terminal Island Switching Station (6,115 feet)	28	No
Harry Bridges Switching Station (355 feet)	59	No
Outer Harbor Switching Station (1,650 feet)	44	No
Railroad Crossing Pit Preparation 1/9 (2,480 feet)	45	No
Railroad Crossing Pipe 1/9 (2,480 feet)	39	No
Railroad Crossing Pit Preparation 2/9 (195 feet)	70	No
Railroad Crossing Pipe 2/9 (195 feet)	64	No
Railroad Crossing Pit Preparation 3/9 (515 feet)	60	No
Railroad Crossing Pipe 3/9 (515 feet)	54	No
Railroad Crossing Pit Preparation 4/9 (5,405 feet)	35	No
Railroad Crossing Pipe 4/9 (5,405 feet)	29	No

Table 2.13-2. Predicted Construction Noise Levels per Activity Phase

Construction Phase (and distance to nearest receptor)	8-Hour L_{eq} at Nearest Receptor Boundary to Site Boundary (dBA)	Significant Impact?
Railroad Crossing Pit Preparation 5/9 (5,595 feet)	34	No
Railroad Crossing Pipe 5/9 (5,595 feet)	28	No
Railroad Crossing Pit Preparation 6/9 (4,965 feet)	36	No
Railroad Crossing Pipe 6/9 (4,965 feet)	30	No
Railroad Crossing Pit Preparation 7/9 (5,330 feet)	35	No
Railroad Crossing Pipe 7/9 (5,330 feet)	29	No
Railroad Crossing Pit Preparation 8/9 (2,515 feet)	44	No
Railroad Crossing Pipe 8/9 (2,515 feet)	38	No
Railroad Crossing Pit Preparation 9/9 (8,455 feet)	28	No
Railroad Crossing Pipe 9/9 (8,455 feet)	22	No
Channel Pit (2,800 feet)	43	No
Channel Pipe (2,800 feet)	37	No
Parcel K and Y (190 feet)	64	No

Source: Appendix A of Appendix F, Noise Technical Report.
Notes: Leq = equivalent noise level; dBA = A-weighted decibels.

As presented in Table 2.13-2, the Underground Distribution/Alignment phase would be expected to exceed the LAMC limit of 75 dBA L_{eq} at a distance of 50 feet. Mitigation is therefore required to reduce construction noise. As such, MM-NOI-1 requires the use of noise-reducing measures. MM-NOI-1 would be applicable anywhere that the Underground Distribution/Alignment phase would occur within 500 feet of noise-sensitive land uses, such as residences, parks, and churches.

Mitigation Measures

MM-NOI-1 Temporary Trenching Noise Reduction. The Los Angeles Department of Water and Power shall ensure that the following measures are implemented and monitored for compliance throughout construction within 500 feet of noise-sensitive land uses:

- All construction equipment must have supplier-approved sound muffling devices (e.g., engine air intake or exhaust treatment) installed and used in compliance with relevant industry standards and California Occupational Safety and Health Administration regulations pertaining to construction noise, which shall be properly maintained and used at all times such equipment is in operation.

- Stationary construction equipment shall be placed so that emitted noise is directed away from noise-sensitive receptors.
- Equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.
- Maximizing the distance between construction equipment staging areas and adjacent residences, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.
- The project contractor shall, to the extent feasible, schedule construction activities to avoid concurrent operation of several pieces of construction equipment proximate to an off-site noise-sensitive receptor.
- In-street construction activity, including warming up or servicing equipment, shall be limited to Monday through Friday from 9:00 a.m. to 3:30 p.m., and Saturday from 8:00 a.m. to 6:00 p.m. Construction of all other facilities located outside of public streets shall be limited to Monday through Friday, between the hours of 7:00 a.m. and 9:00 p.m., and Saturday from 8:00 a.m. to 6:00 p.m.
- A public liaison shall be appointed for project construction will be responsible for addressing public concerns about construction activities, including excessive noise. As needed, the liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and implement measures to address the concern.
- The public shall be notified in advance of the location and dates of construction hours and activities.
- Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.

Level of Significance After Mitigation

Table 2.13-3 shows the estimated maximum daily construction emissions associated with the construction phases of the project after application on MM-NOI-1.The following refined construction noise analysis for the Underground Distribution/Alignment phase represents a predictive implementation of MM-NOI-1 “c”, “d”, and “e” above.

By a process of input variable iteration, the FHWA RCNM emulator worksheet was used to estimate the minimum perpendicular horizontal distances between the proposed work areas and the nearest noise-sensitive receptor position; approximately 25 feet from Underground/ Distribution Alignment phase activities. Assumptions used include the following:

- As shown in Exhibit I of Appendix F, Noise Technical Report, construction progress along the project alignment is a finite length (approximately 1,000 feet), which means construction equipment involved in the Underground/Distribution Alignment phase will not be located at the closest perpendicular distance to an off-site receptor for an entire 8-hour work day; instead, this analysis approximates detail of project daily progress as follows:
  - 40% of the total usage hours at the start and end positions of the 1,000 foot-long segment, where they are most distant from the off-site receptor position;
  - 40% of the total usage hours at the first-quarter and third-quarter progress positions of the 1,000 foot-long segment, where they are closer to the off-site receptor position; and

- 20% of the total usage hours at the halfway point (also known as the closest or perpendicular distance between the activity and the receptor position).

For the Underground Distribution/Alignment phase, a perpendicular distance of 25 feet was assumed for the nearest noise-sensitive land uses adjacent to the proposed construction activities

Second, acoustical usage factors within RCNM for construction equipment used in the Underground Distribution/Alignment phase were reduced from their default values to those consistent with up to five minutes of activity within an hour during which equipment would be expected to work under "full load" or otherwise at a power setting or capacity associated with the RCNM-based reference maximum (L_{max}) noise level. At other times within the sample hour, the equipment may only have its engine or motor idling or be deactivated. See Appendix A for the construction noise modeling worksheets.

As demonstrated in Table 2.13-3, implementation of MM-NOI-1 "c", "d", and "e" in a manner consistent with the above would reduce project construction noise associated with the Underground Distribution/Alignment phase to less than significant levels. Given that the noise levels shown in Table 2.13-2 are modeled at 25 feet from sensitive receptor locations, and all levels are at or below 75 dBA L_{eq}, the LAMC construction noise limit of 75 dBA L_{eq} at a distance of 50 feet would also be met.

For informational purposes, Table 2.13-4 compares the predicted construction noise levels per phase to estimated ambient noise levels. It is noted that residents in the area would have the option to remain indoors during construction hours to avoid potential annoyance or disruption of outdoor speech or other activities. Indoors, and after being attenuated by the process of exterior-to-interior noise intrusion through the envelope of a receiving enclosed structure, the resulting construction noise exposure levels would not be anticipated to exceed 60 dBA L_{eq}, which would not interfere with conversations or other daytime indoor activities (FHWA 2011).

Construction noise impacts are thus considered less than significant with mitigation incorporated.

Table 2.13-3. Predicted Construction Noise Levels per Activity Phase (Mitigated)

Construction Phase	8-Hour L_{eq} at Nearest Receptor from Construction Boundary with Mitigation (dBA)*	Significant Impact with Mitigation?
Underground Distribution/Alignment	75	No

Source: Appendix A of Appendix F, Noise Technical Report
Notes: L_{eq} = equivalent noise level; dBA = A-weighted decibels.
* Distance from construction activities to the nearest sensitive receptor is assumed to be approximately 20 feet

Table 2.13-4. Highest Predicted Construction Noise Level Compared to Ambient Noise Levels

Estimated Noise Level L_{eq} (dBA)	Highest Predicted Unmitigated Construction Noise Level L_{eq} (dBA)	Amount of Largest Increase – Unmitigated Construction Noise Levels Over Existing (dBA)	Highest Predicted Mitigated Construction Noise Level L_{eq} (dBA)	Amount of Largest Increase – Mitigated Construction Noise Levels Over Existing (dBA)
55	87	32	75	20
60	87	27	75	15
65	87	22	75	10
70	87	17	75	5
75	87	12	75	0

Source: Appendix A of Appendix F, Noise Technical Report
Notes: L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels.

Construction Traffic Noise

The project would result in local, short-term increases in roadway noise as a result of construction traffic. Based on information developed as part of the project's transportation assessment, project-related traffic would include workers commuting to and from the project site as well as vendor and haul trucks bringing or removing materials. As shown in the transportation assessment, after adjustment of trip generation estimates using PCE factors, the peak period of construction for the project would generate approximately 520 daily vehicle trips, including 178 vehicle trips during the AM peak hour and 178 vehicle trips during the PM peak hour. For all other phases of construction, the amount of vehicular traffic is estimated to be less than the peak period. All construction-related traffic would be temporary and short term and would end upon completion of the project's 5-year construction period.

Based upon available data from the City of Los Angeles (City of Los Angeles Department of Public Works 2025), Table 2.13-5 compares existing average daily traffic (ADT) to the total construction ADT expected for project construction and calculates the percentage increase in noise level for segments adjacent to noise sensitive receptors. Based upon the fundamentals of acoustics, a doubling (i.e., a 100% increase) of traffic would be needed to result in a 3 dB increase in noise levels, which is the level corresponding to an audible change to the typical human listener. As shown in Table 2.13-5, none of the analyzed roadway segments is predicted to experience a 100% increase in traffic due to the addition of project construction trips. Therefore, traffic related to construction activities would not result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project. Impacts from project-related construction traffic noise would be less than significant. No mitigation measures are required.

Table 2.13-5. Calculated Increase in Existing Traffic Noise Levels Due to Project Construction Traffic

Segment	Existing Average Daily Traffic (ADT)	Project Construction Passenger Car Equivalent (PCE) Average Daily Traffic (ADT)	Existing Average Daily Traffic ADT Plus Project Construction PCE ADT	Calculated Percentage Increase (%)	Calculated Increase in Decibels (dB)
East R Street – From RS-C Boundary to North Avalon Boulevard	587	520	1,107	89%	2.8
North Avalon Boulevard – From East R Street to West Harry Bridges Boulevard	3,203	520	3,723	16%	0.7
West Harry Bridges Boulevard – From North Avalon Boulevard to South Figueroa Street	16,920	520	17,440	3%	0.1
North Fries Avenue – From West Harry Bridges Boulevard to Hermosa Street	8,382	520	8,902	6%	0.3
John S. Gibson Boulevard – From West Harry Bridges Boulevard to West Channel Street	19,885	520	20,405	3%	0.1
North Gaffey Street – From West Channel Street to West Summerland Avenue	24,767	520	25,287	2%	0.1
West Summerland Avenue – North Gaffey Street to North Cabrillo Avenue	10,257	520	10,777	5%	0.2
North Cabrillo Street – From West Summerland Avenue to West Sepulveda Street	938	520	1,458	55%	1.9
West Sepulveda Street – From North Cabrillo Street to North Gaffey Street	1,799	520	2,319	29%	1.1

Table 2.13-5. Calculated Increase in Existing Traffic Noise Levels Due to Project Construction Traffic

Segment	Existing Average Daily Traffic (ADT)	Project Construction Passenger Car Equivalent (PCE) Average Daily Traffic (ADT)	Existing Average Daily Traffic ADT Plus Project Construction PCE ADT	Calculated Percentage Increase (%)	Calculated Increase in Decibels (dB)
West Ofarrell Street – From North Gaffey Street to Harbor Boulevard	938	520	1,458	55%	1.9
North Front Street – From North Pacific Avenue to North Harbor Boulevard	5,685	520	6,205	9%	0.4
North Harbor Boulevard – From North Front Street to North Beacon Street	16,461	520	16,981	3%	0.1
South Harbor Boulevard – From North Beacon Street to Miner Street	14,973	520	15,493	3%	0.1
Miner Street – From Harbor Boulevard to South Crescent Avenue	10,537	520	11,057	5%	0.2

Source: City of Los Angeles Department of Public Works 2025.

Long-Term Operational

Project Sound Sources

Outdoor Mechanical Equipment

The completion of the project will add a variety of noise-producing mechanical equipment that include those presented and discussed in the following paragraphs. These noise-producing equipment or sound sources would be considered stationary or limited in mobility to a defined area.

Cooling Tower

The proposed project includes the construction of a cooling tower at the HGS. Primary noise sources from a cooling tower include fans, fan motors, airflow, and water as it falls from the tower. Multiple unknown manufacturers provided single-level, distance-based noise level data. Table 2.13-6 presents the far-field noise data from these manufacturers.

Table 2.13-6. Cooling Tower Noise Data

Tower Manufacturer	Distance from Tower (feet)	Overall Sound Pressure Level (dBA)
1	400	64.6
2	500	56.3
3	400	62.4

Source: LADWP 2021b.

Due to the limited information available regarding these manufacturers and following the inverse-square law, Table 2.13-7 shows the estimated noise level at the nearest noise sensitive receptors (approximately 1,020 feet from the cooling tower location).

Table 2.13-7. Estimated Cooling Tower Noise at Nearest Noise-Sensitive Receptor

Tower Manufacturer	Distance from Tower (feet)	Overall Sound Pressure Level (dBA)	Distance to Nearest Noise-Sensitive Receptor (feet)	Estimated Tower Noise at Nearest Noise-Sensitive Receptor (dBA)
1	400	64.6	1,020	56.5
2	500	56.3	1,020	50.1
3	400	62.4	1,020	54.3

Source: LADWP 2021b.

Assuming a reference level of approximately 56 to 65 dBA at 400 to 500 feet, the calculated sound pressure level (SPL) in dBA at 1,020 feet (the distance from the cooling tower to the nearest noise sensitive receptor) ranges from 50 dBA to 57 dBA. As shown in Table 2.13-7, the highest estimated cooling tower noise level at the nearest noise-sensitive receptor (approximately 1,020

feet to the north) is approximately 57 dBA. The nearest noise-sensitive land use, a park, is estimated to have an ambient noise level of approximately 70 dBA, as described in Section 3 of Appendix F, Noise Technical Report. Using logarithmic addition of multiple noise sources, the estimated ambient noise level with the cooling tower operational would be 70 dBA. Therefore, a noise impact related to the proposed converted cooling tower would be less than significant.

Switching Stations

The proposed project includes the construction of three (3) new switching stations scattered across the project area. Two (2) of the switching stations are very distant from the noise-sensitive receptors. The switching station closest to a potentially noise-sensitive receptor is the Harry Bridges Switching Station at a rating of 74 MVA. The nearest noise-sensitive receptor to the Harry Bridges Switching Station is a park (Wilmington Park) located approximately 360 feet east of the proposed switching station. Assuming a reference level of approximately 96 dBA sound power level (PWL) at 1 meter, the calculated SPL in dBA 360 feet from the edge of the switching station to the park would be approximately 55 dBA $L_{eq,}$ or 61 dBA L_{dn}/Community Noise Equivalent Level (CNEL). Therefore, the calculated noise level of the switching station closest to a noise sensitive receptor would be below the estimated ambient noise levels for the project area (as described in Section 3 of Appendix F) by up to 9 dBA and would be considered less than significant.

Prediction Methodology and Parameters for RS-C Rack C

RS-C provides power to the Wilmington community and has the capacity to support the installation of a new rack, Rack C, increasing the total capacity of RS-C by 160 MVA. The additional 160 MVA transformer was modeled with sound prediction software to capture potential impacts to the surrounding community.

The aggregate noise emission from this outdoor-exposed sound source has been predicted with the Datakustik CadnaA sound propagation program. CadnaA is a commercially available software program for the calculation, presentation, assessment, and prediction of environmental noise based on algorithms and reference data per International Organization of Standardization (ISO) Standard 9613-2, “Attenuation of Sound During Propagation Outdoors, Part 2: General Method of Calculation” (ISO 1996). The CadnaA computer software allows one to position sources of sound emission in a simulated three-dimensional space having heights and footprints consistent with project architectural plans and elevations. In addition to the above-mentioned sound source inputs and building-block structures that define the three-dimensional sound propagation model space, the following assumptions and parameters are included in this CadnaA-supported stationary noise source assessment:

- Ground effect acoustical absorption coefficient equal to 0.5, which intends to represent an average or blending of ground covers that are characterized by a mix of soft, natural materials and hard, reflective pavements along with existing building surfaces across the project site and the surroundings
- Reflection order of 1, which allows for a single reflection of sound paths on encountered structural surfaces
- Off-site residential structures and buildings have not been rendered in the model
- Calm meteorological conditions (i.e., no wind) with 68 degrees Fahrenheit and 50% relative humidity

- All of the modeled noise sources are operating concurrently and continuously for a minimum period of 1 hour

For purposes of this analysis, the overall A-weighted levels appearing in Table 2.13-8 were used to define the transformer noise source.

Table 2.13-8. Sound Power Levels for the Modeled Individual Sources of Outdoor Noise Emission

Source	A-Weighted Sound Level per Octave Band Center Frequency (OBCF)									Overall Sound Level (dBA)
	31.5	63	125	250	500	1,000	2,000	4,000	8,000	
160 MVA Transformer[a]	59	78	90	92	98	95	91	86	77	101

Notes: OBCF = Octave Band Center Frequency in cycles per second (Hertz [Hz]); dBA = A-weighted decibels.
[a] Estimated with Electric Power Plant Environmental Noise Guide (Edison Electric Institute 1984).

Prediction Results

An operational scenario of the proposed project was modeled that assumes all that the 160 MVA transformer is operating for a minimum period of one hour. Figure 1 in Appendix F, Noise Technical Report, displays the predicted noise contours associated with sound propagation from the transformer.

Figure 1 in Appendix F illustrates predicted aggregate SPL propagation solely from operation of the proposed RS-C Rack C implementation as described above. The color-coded annular bands of SPL are calculated across a field parallel with, and 5 feet above, local grade.

Based on the noise level contours appearing in Figure 1 in Appendix F, the proposed project is predicted to be up to 50 dBA L_{eq}, or 56 dBA L_{dn}/CNEL at the nearest single-family homes to the northwest and west of the project (approximately 310 feet away, directly adjacent to East Lomita Boulevard). Additionally, as noted above, the predicted noise levels shown in Figure 1 in Appendix F do not take intervening buildings and barriers into consideration, and would be considered conservative. Ambient noise levels are estimated to be equal to 55 dBA L_{dn}/CNEL at receptors 400 feet away from East Lomita Boulevard. As shown in Figure 1 in Appendix F, the predicted stationary operations noise level is also expected to decrease with distance, and would be approximately 45 dBA L_{eq} or 51 dBA L_{dn}/CNEL at receivers up to 400 feet away from the project site, which is lower than the lowest estimated ambient noise level of 55 dBA L_{dn}/CNEL (as described in Section 3 of Appendix F).

Therefore, impacts associated with the operation of a new 160 MVA transformer at RS-C would be less than significant.

RS-Q Rack D Construction

RS-Q Rack D is approximately 320 feet from the nearest sensitive receptor, the southeastern corner of Wilmington Park. As indicated in the RS-C Rack C analysis, the predicted level approximately 310 feet from new rack equipment would be up to 50 dBA L_{eq}, or 56 dBA L_{dn}/CNEL.

As described in Section 3 of Appendix F, ambient noise levels are estimated to be approximately 70 dBA L_{dn}/CNEL at receptors up to 50 feet away from a major city street such as Harry Bridges Boulevard.

Therefore, the predicted stationary operation noise level due to the installation of Rack D would be lower than the estimated ambient noise level by up to 14 dBA, and impacts associated with the operation of a new 160 MVA transformer at RS-Q would be less than significant.

Other Stationary Noise Sources

The proposed project buildings may feature other noise emitters, but their contributions would tend to be sporadic or otherwise occur infrequently and thus be expected to have no greater acoustic contribution to an hourly L_{eq} than the continuous-type noise studied herein.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Construction activities may expose persons to excessive ground-borne vibration or ground-borne noise, causing a potentially significant impact. Information from Caltrans (Caltrans 2020) indicates that continuous vibrations with a peak particle velocity (PPV) of approximately 0.3 inches per second (ips) can potentially damage older residential structures. For context, heavier pieces of construction equipment, such as a roller that may be expected on the project site, have peak particle velocities of approximately 0.210 ips or less at a reference distance of 25 feet (DOT 2006).

Caltrans' guidance for building damage shows more stringent vibration thresholds for fragile buildings and historic buildings. The FTA provides guidance for damage due to construction vibration based on the structural engineering of a building. For non-residential, reinforced concrete buildings such as the historic buildings at the HGS, a vibration threshold of 0.5 ips PPV is considered appropriate.

A vibration threshold of 0.3 ips PPV is considered appropriate for the residential buildings within project area, given that many of the residential structures along the project alignment were generally constructed in the 1950s and are thus considered "older residential structures" for the purposes of the Caltrans' vibration guidance.

Ground-borne vibration attenuates rapidly, even over short distances. The attenuation of ground-borne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in FTA (FTA 2018) and Caltrans (Caltrans 2020) guidance. By way of example, for a roller operating on site and at 20 feet from the nearest residential structure, the estimated vibration velocity would be 0.293 ips per the equation as follows (FTA 2018):

$$PPV_{rcvr} = PPV_{ref} * (25/D)^{1.5} = 0.293 = 0.210 * (25/20)^{1.5}$$

In the above equation, PPV_{rcvr} is the predicted vibration velocity at the receptor position, PPV_{ref} is the reference value at 25 feet from the vibration source (the roller), and D is the actual horizontal distance to the receptor.

Anticipated construction vibration associated with the proposed project would yield a maximum amplitude of 0.293 ips, which does not surpass the Caltrans vibration threshold of 0.3 ips PPV for preventing damage to older residential structures or the FTA vibration threshold of 0.5 ips PPV for preventing damage to reinforced concrete buildings, such as the historic structures at HGS. Because the predicted vibration level at 20 feet is less than these guidance limits, the risk of vibration damage to nearby structures is considered less than significant.

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

No Impact. The closest airport is Torrance Airport, which is located approximately 3 miles northwest of the project site. The project would not be located in the airport influence area for Torrance Airport (County of Los Angeles 2024) and thus would not expose people to excessive noise levels. Therefore, no impacts associated with airport noise would occur.

2.14 Population and Housing

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

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

No Impact. The proposed project would not include construction of new homes or businesses or the extension of roads or other infrastructure that would induce population growth. It would increase the capacity of electricity distribution within the Port to support electrification of Port operations that currently utilize fossil fuels. The increased electrical capacity would not induce growth of Port operations but rather would support a shift in existing and planned growth to cleaner electrical energy.

Due to the relatively low number of personnel required for project construction, workers would likely be drawn from local communities, and no population growth in the area would occur. The operation of the proposed project would not require a substantial number of personnel and thus would not induce population growth or the need for new housing in the area. No impact would occur related to population growth.

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

No Impact. The proposed project would be located within existing road ROW, existing container terminals, and LADWP property and facilities. As such, it would not displace any existing people or housing and no impact would occur.

2.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES – Would the project:				
a) 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, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

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, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

Less than Significant Impact. Fire protection for the project site would be provided by the Los Angeles Fire Department, South Bureau Battalions 6, 13, and 18 (LAFD 2015), and the monitoring of operations would be provided by LADWP. The need for new or altered fire facilities is typically associated with an increase in population. As described in Section 2.14, Population and Housing, the proposed project would not increase population in the project area. The new switching stations and Parcel K and Y development would be operated remotely and would be adequately

served by existing fire resources. As such, the proposed project would not generate a requirement for additional fire protection services and the impact would be less than significant.

Police protection?

Less than Significant Impact. Police protection for the project site would be provided primarily by the Los Angeles Port Police, with the exception of the project area that is within the City of Wilmington, which would be provided by the Los Angeles Police Department (POLA 2025). As described in Section 2.14, the proposed project would not increase population in the project area. After construction, the portions of the project on public roadways would be underground and would therefore have no impact on policing. All other improvements would be within LADWP or LAHD property, would not be publicly accessible, and would have security lighting. All aboveground improvements outside of HGS would be operated remotely and would not require additional workers outside of those already employed at HGS. As such, the proposed project would not generate a requirement for additional police protection and the impact would be less than significant.

Schools?

No Impact. The proposed project would not lead directly or indirectly to substantial population growth such that new or physically altered school facilities would be required. No impact would occur.

Parks?

No Impact. No feature of the proposed project would directly generate a demand for parks, nor would the proposed project lead directly or indirectly to substantial population growth such that new or physically altered park facilities would be required. No impact would occur.

Other public facilities?

No Impact. The project proposes to expand the capacity of the electric receiving and distribution system within POLA. No new housing or businesses would be constructed as part of the proposed project, nor would the proposed project directly or indirectly induce population growth in the area such that new or physically altered governmental facilities would be required to adequately provide services. No impact would occur.

2.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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. As discussed in Section 2.14, Population and Housing, the proposed project would not include housing or any elements that would indirectly induce population growth. As such, the project would not increase the use of existing neighborhood or regional parks or other recreational facilities. As such, no impact would occur.

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. The proposed project would involve the expansion of the capacity of the electric receiving and distribution system within POLA. It would not include recreational facilities or require construction or expansion of recreational facilities that might have an adverse physical effect on the environment. No feature of the proposed project would directly generate a demand for parks, nor would the proposed project lead directly or indirectly to substantial population growth such that the construction or expansion of recreational facilities would be required. No impact would occur.

2.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the project:				

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

This section evaluates the potential transportation-related impacts of the project, including the potential for the project to conflict with a program, plan, ordinance, or policy addressing the circulation system, substantially increase hazards, or result in inadequate emergency access. The section also analyzes the potential impacts of the project based on CEQA Guidelines Section 15064.3(b), which focuses on vehicle miles traveled (VMT) for determining the significance of transportation impacts. Pursuant to SB 743, the focus of transportation analysis in CEQA documents has changed from level of service or vehicle delay to VMT.

Existing Setting

The proposed project is located within POLA, HGS, and the neighborhoods of San Pedro and Wilmington. The POLA is bounded to the north by Harry Bridges Avenue, to the east by the Schuyler F. Heim Bridge and Navy Way, to the south by the San Pedro Breakwater, and to the west by Harbor Boulevard. Regional access to the site is provided via Interstate (I) 110, I-710, PCH, and SR-47. Interchanges are provided at I-110 and PCH, I-110 and Harry Bridges Boulevard, I-110 and Gaffey Street, SR-47 and Gaffey Street, and SR-47 and Harbor Boulevard. I-710 also provides direct access to Terminal Island from the east.

The proposed project would occur within the public roadway ROW of East R Street, North Avalon Boulevard, Harry Bridges Boulevard, Fries Avenue, Ferry Street, New Dock Street, Henry Ford Avenue, Navy Way, Terminal Way, Earle Street, John Gibson Boulevard, Pacific Avenue, Channel Street, Gaffey Street, Summerland Avenue, Marshall Court, Sepulveda Street, O'Farrell Street, Front Street, Harbor Boulevard, 22nd Street, and Miner Street. Periodic intrusions into the sidewalks and/or parkways along these roadways would also occur for valve installations.

The Union Pacific Railroad tracks are located throughout the study area, and the underground alignment would cross the existing railroad tracks in nine (9) places:

- Berths 121–131 Terminal from John S Gibson Boulevard
- Berths 136–147 Terminal from Harry Bridges Boulevard
- Fries Avenue south of HGS
- Twice on Navy Way
- Seaside Avenue toward the Terminal Island Switching Station
- Berths 302–306 Terminal from Earl Street
- Berths 212–224 Terminal
- New Dock Street

Public transportation in the City is provided by Los Angeles Metropolitan Transportation Authority (LA Metro) and Los Angeles Department of Transportation (LADOT) Transit. Near the project site, LA Metro operates Route 246 on North Avalon Boulevard, Pacific Avenue, and Gaffey Street (LA Metro 2025). LADOT Transit operates Commuter Express Route 142 along Miner Street, 7th Street, and Gaffey Street near the project site (LADOT 2025). Several bus stops are located along Avalon Boulevard along the length of the proposed distribution line. Additional stops near the site are provided on Miner Street south of Harbor Boulevard and near 6th Street, on Pacific Avenue near Front Street and near Channel Street, and on Gaffey Street near Summerland Avenue.

The City's existing bicycle facilities are located along the majority of John S Gibson Boulevard, and along Avalon Boulevard, Harbor Boulevard, Pacific Avenue, Miner Street, and Gaffey Street where the project would be installed. The City has a comprehensive sidewalk network; sidewalks are provided on all major roads near the project site, and crosswalks are provided at all signalized intersections near the site.

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

Less than Significant Impact. The project would not conflict with applicable programs, plans, ordinances, or policies addressing the circulation system, as further discussed below. This includes the City's Mobility Plan 2035 (City of Los Angeles 2016), the Complete Streets Design Guide (City of Los Angeles 2025), the Citywide Design Guidelines (City of Los Angeles 2019), and the existing and proposed roadway, pedestrian, bicycle, and transit facilities and services in the study area.

City of Los Angeles General Plan Mobility Element

The Mobility Plan 2035, one of the Elements of the City's General Plan, lays out the policy foundation for achieving a transportation system that balances the needs of all road users. The priorities of the Mobility Plan 2035 include:

- Safety First: Focusing on safety, education, and enforcement
- Access for all Angelenos: Increasing access through greater community connections
- World Class Infrastructure: Investing in the construction of Complete Streets Networks
- Collaboration, Communications, and Informed Choices: Using open data and information to inform future policy considerations

- Clean Environment & Healthy Communities: Tackling issues related to the overall health and sustainability of Los Angeles' neighborhoods

The Mobility Element is a comprehensive revision of the adopted 1999 City of Los Angeles Transportation Element of the General Plan that guides mobility decisions in the City through year 2035. The Mobility Plan 2035 includes: (1) policies that support the goals and objectives described above; (2) an Enhanced Complete Street System that prioritizes selected roadways for pedestrian, bicycle, transit, or vehicle enhancements; (3) an Action Plan that prioritizes actions necessary for implementing the policies and programs; (4) a Complete Streets Manual that describes and identifies implementation procedures for the City's expanded Street Standards and Guidelines; and (5) a Bicycle Plan incorporated into this plan since the previous 2010 Bicycle Plan was adopted in 2011.

The Complete Streets Design Guide

The Complete Streets Design Guide accompanies the Mobility Plan 2035, outlining the vision for designing safe, accessible, and vibrant streets in Los Angeles. The Mobility Plan's emphasis on safety, traffic calming, and access are key principles that mirror the goals of the Complete Streets Design Guide. The Complete Streets Design Guide provides a compilation of design concepts and best practices that promote the major tenets of Complete Streets—safety and accessibility. The Complete Streets Design Guide is meant to supplement existing engineering practices and requirements in order to meet the goals of Complete Streets. Due to specific site and operational characteristics associated with any given street, any proposed street improvement project must still undergo a detailed technical analysis by the appropriate City departments.

Factors that should be considered during design include the physical characteristics of the street, urban versus suburban context, surrounding land uses, collision history, and expected pedestrian and roadway demand. Specific guidelines related to the project include the following:

> *4.12 Utilities and other infrastructure*
>
> Effective management of utility placement on, above, and below the sidewalk area ensures a safer and more enjoyable street environment. The placement of other sidewalk amenities can potentially reduce maintenance access to utilities, highlighting the need for interdepartmental coordination. Utilities that affect sidewalk functionality include surface-mounted facilities (SMFs) such as utility vault and signal boxes; above-ground infrastructure (AGI) such as power and telecommunications wiring; and underground infrastructure serving electricity, storm drainage, sewer and water, gas, telecommunications, street lighting, and traffic signalization.

Citywide Design Guidelines

The City of Los Angeles' General Plan Framework Element, together with each of the 35 Community Plans, promote architectural and design excellence in buildings, landscape, open space, and public space. These plans also promote the preservation of the City's character and scale. To this end, the Citywide Design Guidelines establishes ten (10) guidelines to carry out the common design objectives that maintain neighborhood form and character while promoting

quality design and creative infill development solutions. Transportation-related guidelines include the following:

- Guideline 1: Promote a safe, comfortable and accessible pedestrian experience for all.
- Guideline 2: Carefully incorporate vehicular access such that it does not degrade the pedestrian experience.
- Guideline 3: Design projects to actively engage with streets and public space and maintain human scale.

Impact Analysis

Construction

The project would result in a temporary, short-term increase in traffic during construction. This includes construction workers driving to and from the project site and the delivery of large construction equipment and hauling trips to the site as needed.

Construction of the project components would occur in a phased approach, and would occur over a total duration of 6.75 years. Construction hours for project components that would occur in existing public streets would be Monday through Friday from 9:00 a.m. to 3:30 p.m., and Saturday from 8:00 a.m. to 6:00 p.m., in compliance with the City of Los Angeles Rush Hour Ordinance that limits in-street construction on weekdays to these hours.

The trip generation estimates during the peak construction period, assumed to occur during the pipe-jacking construction phase, are summarized Table 2.17-1. To account for the larger sizes of construction-related trucks relative to construction worker passenger vehicles, passenger car equivalence (PCE) factors were applied to the trip generation estimates. A 1.0 PCE factor was applied to passenger vehicles, a 2.0 PCE factor was applied to vendor trucks, and a 3.0 PCE factor was applied to haul trucks.

Table 2.17-1. Peak Period Construction Trip Generation Estimates

Vehicle Type	Daily Quantity		Daily Trips	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Non-PCE Adjusted Trip Generation									
Construction Workers[1]	283	workers	566	283	0	283	0	283	283
Vendor Trucks[2]	89	trucks	178	9	9	18	9	9	18
Haul Trucks[2]	14	trucks	28	1	2	3	1	2	3
Peak Trip Total (Non-PCE)			772	293	11	304	10	294	304
PCE Adjusted Trip Generation									
Construction Workers	283	workers	566	283	0	283	0	283	283
Vendor Trucks[3]	89	trucks	356	18	18	36	18	18	36
Haul Trucks[3]	14	trucks	84	3	6	9	3	6	9

Table 2.17-1. Peak Period Construction Trip Generation Estimates

Vehicle Type	Daily Quantity	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Peak Trip Total (PCE)		1,006	304	24	328	21	307	328

Notes: PCE = passenger car equivalence.

[1] Conservatively assumes all construction workers arrive in the morning commute period, which typically occurs between 7:00 a.m. and 9:00 a.m., and depart during the evening commute period, which typically occurs between 4:00 p.m. and 6:00 p.m.

[2] Vendor and haul trucks are assumed to arrive and depart the site evenly throughout the workday. Water trucks are accounted for in the vendor trip estimates.

[3] Vendor trucks were estimated to have an approximately 2.0 PCE adjusted value, while haul trucks were estimated to have an approximately 3.0 PCE adjusted value.

As shown in Table 2.17-1, the peak period of construction would generate approximately 772 daily vehicle trips, including 304 vehicle trips during the AM peak hour and 304 vehicle trips during the PM peak hour. After adjustment of trip generation estimates using PCE factors, the peak period of construction for the project would generate approximately 1,006 daily vehicle trips, including 328 vehicle trips during the AM peak hour and 328 vehicle trips during the PM peak hour. For all other phases of construction, the amount of vehicular traffic is estimated to be less than the peak period. All construction-related traffic would be temporary and short term and would end upon completion of the project's 6.5-year construction period.

Regional access to the project area is provided via I-110, PCH, SR-47, and I-710 with interchanges at PCH, Harry Bridges Boulevard, Gaffey Street, and Harbor Boulevard. Exact truck routes will be determined in consultation with LADWP, LAHD, the City, and the construction contractor; however, it is anticipated that truck travel would primarily occur on these major regional routes. Due to the nominal and temporary increase in construction traffic during the peak hour, any effect on the operations of roadways or the overall circulation system along these roads would be minimal.

Full road closures are not anticipated during construction. It is anticipated that up to two traffic lanes would be closed for the installation of the transmission or distribution conduit bank and up to three traffic lanes would be closed for maintenance vaults. However, at least one lane of vehicular traffic would be maintained at all times to minimize traffic impacts. Additionally, BMP-TRA-1 would require notification of construction to residences and businesses near the pipeline alignment (see Section 1.8, Best Management Practices). A description of the project components is provided below.

RS-Q Rack D and RS-C Rack C

Underground transmission lines would be trenched from RS-Q to the new RS-Q Rack D within the public ROW on Harry Bridges Avenue. RS-C would require additional electrical equipment to be installed, similar to RS-Q Rack D.

Underground Distribution Lines

The underground distribution lines would be installed using open-cut trenching techniques that would require an approximately 10- to 15-foot-wide temporary construction corridor. Up to three (3) crews would perform trenching operations so that concurrent trenching would occur along

various points of the transmission line alignment; a length of approximately 60 ft of trenching per day is anticipated. Areas that are trenched or excavated would be covered with steel plates every evening until the road surface is restored; this would allow for full usage of the affected roadway outside of work hours. When segments of the trench are restored, more trenching would occur farther down the street until the conduit system is installed for the entire alignment. Provisions for emergency vehicle and local access would be provided. Once the conduit is in place, cable segments between two (2) maintenance vaults would be pulled into the ducts. Generally, three (3) cable spans between two (2) maintenance vaults would be installed per day and would require the closure of up to two (2) lanes. No full road closures are anticipated. Additionally, BMP-TRA-1 would require notification of construction to residences and businesses near the pipeline alignment (see Section 1.8, Best Management Practices).

As previously noted, the underground alignment crosses existing railroad tracks in nine (9) places. Either horizontal directional drilling or jack and boring will be necessary to micro-tunnel underneath the tracks to prevent disruptions to railroad operations. The project would require extensive coordination with Union Pacific Railroad, including obtaining necessary encroachment permits for construction within the railroad ROW. In addition, either the horizontal directional drilling or jack and bore method may be necessary to cross PCH where it intersects Avalon Boulevard. The method used to cross PCH would be determined by Caltrans.

Maintenance Substructures

Each substructure would take approximately 72 hours total to install, which includes excavation, shoring, base work, installation of prefabricated vaults, backfilling, and plating. Installation of each vault would require a workspace the width of a road lane; utilization of flag personnel would help maintain one lane with two-way traffic flow. This would allow residents to access their homes. In some cases, street parking may be temporarily inaccessible, or sidewalk removal may be necessary on smaller residential roads in order to maintain one lane open for traffic. Vault excavations would be covered with steel plates every evening until complete to allow for full usage of the affected roadway outside of work hours.

Switching Stations

Three (3) new switching stations would be constructed: one (1) on northeast Terminal Island, one (1) on the southwest corner of John S Gibson Boulevard and Harry Bridges Boulevard, and one (1) south of Signal Street and 22nd Street. All construction would occur within the confines of the existing property.

Parcel K Demolition and Remediation

Parcel K is located across Harry Bridges Avenue from HGS. The two (2) existing warehouses and associated hardscape would be demolished. After demolition, Parcel K would undergo soil remediation to industrial usage standards. All construction would occur within the confines of the existing property.

HGS Wet Cooling Tower

All construction related to the cooling tower upgrades would occur within the confines of the existing facility.

Summary

Full road closures are not anticipated during construction of any of the project components. Construction workers with flags would be stationed near work areas to avoid vehicle conflicts. Bicycle lanes within the vicinity of construction work areas would be temporarily closed. Full sidewalk closures are not anticipated, although periodic intrusions into sidewalks and/or parkways would occur for valve installations. The nearest bus stops to the site are provided along Avalon Boulevard, on Miner Street south of Harbor Boulevard and near 6th Street, on Pacific Avenue near Front Street and near Channel Street, and on Gaffey Street near Summerland Avenue. These stops could potentially be impacted by the proposed construction activities. All construction staging would occur on site within the work areas, adjacent to the areas of excavation and within the public ROW.

The construction activities within the public ROW would result in a temporary impact to the local roads, sidewalks, bicycle facilities, and transit routes and bus stops along the project alignment. Closures to sidewalks and bicycle lanes could potentially affect the flow and/or safety of pedestrian and bicycle traffic and lane and bus stop closures could result in transit delays. The project would implement BMP-TRA-1 and BMP-TRA-2 (see Section 1.8, Best Management Practices) to minimize temporary impacts, which will include procedures for advance notification to business and residents, as well as coordination with all affected local agencies regarding construction schedules and worksite traffic control and detour plans. Metro requires that the Metro Bus Operations Control Special Events Coordinator be contacted regarding construction activities that may impact Metro bus lines at least 30 days in advance of initiating construction activities. Upon proper notification of Metro for any potential interruptions in bus service, impacts to public transit along the project alignment would be minimized. Worksite traffic control plans would be prepared in coordination with LADOT to delineate traffic lanes around work areas and to address any turn-lane pockets affected by the proposed project at major intersections. The worksite traffic control plans will be prepared in accordance with standard construction practices, such as the Standard Specifications for Public Works Construction (Greenbook). Any portion of the roadway damaged as a result of construction activities would be repaved and restored in accordance with all applicable City of Los Angeles Department of Public Works standards. Once the pavement has been restored, traffic delineation (striping) would also be restored.

The Mobility Plan 2035 details the existing roadway, pedestrian, bicycle, and transit facilities as well as plans and policies to implement enhanced facilities throughout the City. Although temporary inconveniences and conflicts may occur for vehicular traffic, pedestrians, bicyclists, and transit riders during the construction period, no changes would be made to the plans and policies detailed in the Mobility Plan 2035. The project would not permanently alter the existing circulation system and would not substantially conflict with the City's goals of enhancing pedestrian and bicycle transportation and safety or achieving a transportation system that balances the needs of all road users. The project also would not interfere with the Citywide Design Guidelines for safety and access, including the ability to promote a safe, comfortable, and accessible pedestrian experience. The project would also be designed consistently with the City's Complete Streets Design Guide as it relates to utilities and other infrastructure. Once constructed, the project would not affect the sidewalk safety or functionality. Therefore, the implementation of the proposed project would not conflict with a program, plan, ordinance, or policy related to the circulation system, including roadways, transit, bicycle, and pedestrian facilities. The project would result in less-than-significant impacts to the existing circulation system.

Operations

Operational activities would be limited to scheduled maintenance and as-needed repair to aboveground project components including switching stations, new racks, and HGS improvements. Maintenance activities would be minimal and would be similar to those that occur under existing conditions. No permanent workers would be required to operate or maintain the proposed project. Activities associated with long-term operations and maintenance would, therefore, be minimal. With no new employees and a nominal increase in maintenance trips, the project would result in less-than-significant impacts to the existing circulation system.

Once constructed, the project does not include site improvements that would extend into the public ROW or interfere with the existing roadway network, public transit, bicycle, or pedestrian facilities, or impede the construction of new or the expansion of existing facilities in the future. Bicyclist and pedestrian safety would be maintained at existing levels in the area. The project would also not severely delay, impact, or reduce the service level of transit in the area. Therefore, the proposed project would not conflict with the circulation policies within the City's General Plan Mobility Element. Impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Less than Significant Impact. CEQA Guidelines Section 15064.3(b) focuses on VMT for determining the significance of transportation impacts. Consistent with the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018), the City developed Transportation Assessment Guidelines, which establish VMT screening criteria and thresholds for evaluating a project's potential impact on VMT (LADOT 2022). As described below, the project is screened from conducting a project-specific VMT analysis, and impacts to VMT are presumed to be less than significant.

Per the City's guidelines, a project may be screened from conducting a project-level VMT analysis if the project would generate less than 250 "permanent" vehicle trips per day. Furthermore, per guidance from the Governor's Office of Planning and Research, vehicle miles traveled refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty truck VMT is not required to be included in the analysis of VMT.

Construction

As shown in Table 2.17-1, the project is estimated to generate approximately 566 daily on-road passenger trips during the peak construction period, associated with the construction workers commuting to and from any of the eight project component construction sites. However, the construction workers would be pulled from the existing regional road network and would not result in a net increase in new trips. Construction workers already commute to jobs in the region and would be temporarily redistributed to the site for the duration of the project construction. Therefore, the project construction meets the small project screening criteria (generating less than 250 daily net new trips) and impacts related to construction VMT would be less than significant.

Operations

The project would result in nominal net new project trips as maintenance activities would be performed by existing operational staff, on an as-needed basis. Therefore, impacts related to operations VMT would be less than significant.

c) Would the project 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. The project site is located in an established, developed area with direct access to designated local and regional truck routes. Transportation and haul permits would be required from Caltrans and the City for construction truck traffic. The project would not introduce uses (types of vehicles) that are incompatible with existing uses already served by the area's road system during either construction or operations. There would be no changes to the existing off-site circulation on City roads. Therefore, impacts associated with hazardous design features or incompatible land uses would be less than significant.

d) Would the project result in inadequate emergency access?

Less than Significant Impact. The project site is located in an established, developed area with sufficient access for emergency service providers.

LADWP would prepare a worksite traffic control and detour plans as specified in BMP-TRA-2 (see Section 1.8, Best Management Practices) prior to the start of construction to minimize potential impacts to emergency access due to partial road closures. Likewise, prior notification and coordination with emergency services providers and other road users (e.g., agencies), as specified in BMP-TRA-2, would minimize temporary impacts during construction.

Emergency access to the work areas would be maintained throughout construction. For those public roads impacted by the construction activities, temporary lane closures could be required during construction; however, as necessary, LADWP would coordinate with the local jurisdictions and/or affected agencies/entities regarding any temporary lane closures. No full road closures would occur and the project area would remain accessible to emergency responders during construction.

With implementation of BMP-TRA-2 as part of LADWP's standard practices, the project would not result in inadequate emergency access, and impacts would be less than significant.

There would be no changes to the existing off-site circulation on City roads during project operations. As such, the project would have a less-than-significant impact related to emergency access.

2.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) 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	☐	☐	☒	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

The evaluation of potential impacts on tribal cultural resources (TCRs) is based on findings of Section 2.5, Cultural Resources, in this IS/MND. Background research conducted to inform this analysis includes a California Historical Resources Information System records search conducted at the SCCIC, a search of the NAHC SLF, archival research, and a reconnaissance-level archaeological resources pedestrian survey of the project area.

Native American Heritage Commission Sacred Lands File Search

LADWP contacted the NAHC and requested a review of their SLF for the project area and a 1-mile radius. The SLF consists of a database of known Native American cultural resources that may not be included in the SCCIC database. The NAHC replied via email on May 16, 2024, stating that the SLF search was completed with negative results. The NAHC additionally provided a list of fourteen (14) Native American individuals and/or tribal organizations that should be contacted for more information on potential tribal sensitivities regarding the currently proposed project.

Assembly Bill 52 Consultation

The project is subject to compliance with AB 52 (PRC Section 21074), which requires consideration of impacts to TCRs as part of the CEQA process and that the lead agency notify California Native American tribal representatives (that have requested notification) who are traditionally or culturally affiliated with the geographic area of the project. As lead agency, LADWP sent notification letters pursuant to AB 52 via U.S. Postal Service certified mailing on July 25, 2024, to all California Native American tribal representatives identified on the NAHC contact list. The notification letters contained a project description, a project location map, outline of AB 52 timing, an invitation to consult, and contact information for the appropriate lead agency representative. Table 2.18-1 summarizes the results of the AB 52 consultation efforts for the project thus far.

Table 2.18-1. Assembly Bill 52 Native American Tribal Outreach Results

Native American Tribe	Consultation Record
Andrew Salas, Chairperson Gabrieleno Band of Mission Indians–Kizh Nation	August 7, 2024 Email from Gabrieleno Band of Mission Indians–Kizh Nation to LADWP acknowledging receipt of AB 52 notification letter for the project and expressed interest in consulting on the ZEPEO project. August 21, 2024 LADWP emailed Gabrieleno Band of Mission Indians–Kizh Nation to set up a meeting to discuss the ZEPEO project. October 1, 2024 Email from Gabrieleno Band of Mission Indians–Kizh Nation to LADWP stating: “After further review our concerns are at a level that does not require consultation. Please inform us of any findings regarding this project”.
Anthony Morales, Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians	No response has been received to date.
Robert Dorame, Chairperson Gabrielino Tongva Indians of California Tribal Council	No response has been received to date.
Sandonne Goad, Chairperson Gabrieleno/Tongva Nation	No response has been received to date.
Charles Alvarez, Chairperson Gabrieleno–Tongva Tribe	No response has been received to date.
Heidi Lucero, Chairperson, Tribal Historic Preservation Officer Juaneño Band of Mission Indians Acjachemen Nation 84A	No response has been received to date.
Steven Estrada, Tribal Chairman	No response has been received to date.

Table 2.18-1. Assembly Bill 52 Native American Tribal Outreach Results

Native American Tribe	Consultation Record
Santa Rosa Band of Cahuilla Indians	
Joseph Ontiveros, Tribal Historic Preservation Officer Soboba Band of Luiseño Indians	No response has been received to date.
Jessica Valdez, Cultural Resource Specialist Soboba Band of Luiseño Indians	No response has been received to date.

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

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

Less than Significant Impact. The SCCIC records search identified six (6) archaeological resources that intersect with the project area, four (4) of which are considered prehistoric archaeological resources. These include P-19-000145 (traces of a campsite), P-19-000146 (shell midden), P-19-000149 (shell midden), and P-19-000150 (shell midden). P-19-000145, P-19-000146, P-19-000149, and P-19-000150 have not been evaluated for eligibility for listing in the CRHR or local register, nor have they been assessed for their significance under CEQA. Overall, there is evidence to indicate that these resources have been destroyed by the development of POLA over the first half of the twentieth century. An NAHC SLF search was also requested for the project, and results were negative for Native American cultural resources within 1 mile of the project area.

During the pedestrian survey, the previously recorded locations of P-19-000145, P-19-000146, P-19-000149, and P-19-000150 were all revisited and inspected for the presence of exposed subsurface cultural materials. No archaeological resources were observed or successfully relocated during the pedestrian survey, though the vast majority (98%) of the ground surface was obscured by structures, hardscape, gravel, and landscaping. Additionally, Dudek's archival review indicates that the project area has been subject to extensive ground disturbance associated with the construction and expansion of POLA, including large-scale grading, dredging and fill placement, roadway construction, and the development of residential, commercial, and industrial facilities.

LADWP sent notification letters pursuant to AB 52 via U.S. Postal Service certified mailing to all California Native American tribal representatives identified on the NAHC contact list. No California Native American tribes requested consultation under AB 52 in response to LADWP's project notification.

Although four (4) cultural resources of Native American origin have been documented as intersecting the project area, none of these resources are listed on the CRHR or a local register.

Because all previously mapped resource locations are paved and completely covered in hardscape, it was not possible to conduct subsurface testing to evaluate the presence of buried archaeological deposits within the project's area of direct impacts. Additionally, there is evidence to indicate these resources were likely destroyed or materially altered during the development of POLA and its associated roadways and facilities. Furthermore, no cultural resources of Native American origin were identified within the project area through AB 52 consultation conducted by LADWP. Therefore, the project would not adversely affect TCRs that are listed or eligible for listing in the state or local register. Impacts would be less than significant.

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

Less Than Significant Impact with Mitigation Incorporated. An appropriate approach to potential impacts to TCRs is developed in response to the identified presence of a TCR by California Native American tribes through the process of consultation. The AB 52 process requires consideration of impacts to TCRs as part of the CEQA process and requires lead agencies notify and, if requested, consult with California Native American tribal representatives who are traditionally or culturally affiliated with the geographic area of the project. LADWP sent notification letters pursuant to AB 52 via U.S. Postal Service certified mailing to all California Native American tribal representatives identified on the NAHC contact list. No California Native American tribes requested consultation under AB 52 in response to LADWP's project notification.

Through consultation efforts conducted by LADWP to date, no additional information has been provided to support the presence of specific, geographically defined TCRs that could be affected by project-related construction or operation. While LADWP acknowledges that the landscape surrounding the project was traditionally used by indigenous peoples, no substantial evidence was presented demonstrating that the project has the potential for affecting known TCRs, as defined by PRC Section 21074(a).

However, in acknowledgment of information identified through inventory efforts and in an effort to protect unknown TCRs, LADWP has developed mitigation measures (MM-CUL-1 through MM-CUL-3), as outlined in Section 3.5, Cultural Resources, and MM-TCR-1 to ensure proper treatment of unknown cultural and TCRs in the event of an inadvertent discovery. With implementation of MM-CUL-1 through MM-CUL-3 and MM-TCR-1, potentially significant impacts to unknown TCRs would be reduced to less than significant with mitigation incorporated.

MM-TCR-1 MM-Inadvertent Discovery Notification and Tribal Monitoring. In the event that a tribal cultural resource is inadvertently discovered during project construction, affiliated Native American tribe(s) provided by the NAHC shall be notified and be provided with information about the find to allow for early input from the tribal representatives with regards to the potential significance and treatment of the resource.

If, as a result of the resource evaluation and tribal consultation process, the resource is considered to be a tribal cultural resource in accordance with California Public Resources Code Section 21074, determined to be eligible for inclusion in the California Register of Historic

Resources or a local register of historical resources, or determined to be significant by LADWP (the CEQA lead agency), a tribal monitor from a consulting Native American tribe shall be procured to monitor all remaining ground-disturbing activities in the area of the resource as specified by the Environmental Project Manager. The tribal monitor shall be ancestrally affiliated with the project area and qualified by their tribe to monitor tribal cultural resources. The input of all consulting tribes shall be considered in the preparation of any required treatment plan for the resources prepared by the qualified archaeologist. Work in the area of the discovery may not resume until evaluation and treatment of the resource is completed and/or the resource is recovered and removed from the site. Construction activities may continue on other parts of the construction site while evaluation and treatment of the resource takes place.

2.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, waste water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the waste water 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

a) Would the project require or result in the relocation or construction of new or expanded water, waste water 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. The proposed project would increase the capacity of electricity distribution within the LAHD through installation of new underground distribution circuits and expansion of receiving station capacities. The proposed project involves expansion to two (2) existing receiving stations (RS-Q Rack D and RS-C Rack C), sixteen (16) new underground circuits, three (3) new switching stations, and a new wet cooling tower. With the exception of the new wet cooling tower, these activities would not substantially increase the amount of water used or wastewater generated at the project sites. The proposed project would use water for dust control during construction and the maintenance building would have relatively minor water supply needs for two small restrooms.

Despite the design of the wet cooling tower to operate on a closed loop recirculation of cooling water, replenishment water would be necessary to replace the water losses that would occur from evaporation. The wet cooling tower would operate on recycled water, potable water, or a combination of both depending on the availability of recycled water in the future. Currently, 0.5 MGD of recycled water would be available for use from the TIWRP. However, as the source is currently not known, all potable water is assumed in this analysis to be conservative.

The installation of new water lines of various types or the modification of existing water lines would be necessary to provide makeup water to the cooling tower via a makeup water supply tank, as well as collect and dispose of blowdown water. Depending on the need, conditions, and type of material, these lines may be installed partially aboveground or underground, but all would be located within the confines of HGS.

The pipelines providing water to the makeup water supply tank would include a recycled water line carrying supply delivered to HGS from the Harbor Recycled Water Loop, and a connection to the potable water system within HGS. While the precise locations of these various lines are currently unknown, the recycled water line would be routed from the existing recycled water pipeline running along the HGS southern property. A new line would be installed from the tank to the cooling tower to provide the makeup water to the tower. However, construction of the project's infrastructure, including water pipeline improvements, has been considered as part of the project and already accounted for in the other technical sections of this document. There are no unique impacts associated with the installation of water infrastructure to serve the project that

have not been discussed and accounted for in this document. Therefore, impacts associated with water facilities would be less than significant.

The disposal of the blowdown water would occur through connection with existing sewer lines that may require upsizing. As with the water infrastructure, any upgrades that could be required to accommodate the proposed project improvements are considered part of the project and included in the analysis of the applicable technical sections of this document. There are no unique impacts associated with the upsizing of wastewater infrastructure to serve the project that have not been discussed and accounted for in this document. Therefore, impacts associated with wastewater facilities would be less than significant.

The majority of the proposed improvements (e.g., underground distribution lines, maintenance substructures, and duct banks) would have no net effect on drainage patterns once construction is completed. Other proposed improvements (e.g., receiving station racks, switching stations, cooling tower) would be constructed aboveground, but located in areas that are already largely covered in impervious surfaces and likely not represent any substantial change to stormwater runoff conditions such that there would be no substantive changes required to existing stormwater infrastructure. Therefore, the proposed project would not require the construction of substantive new stormwater drainage facilities or expansion of existing facilities and the potential impact related to stormwater infrastructure would be less than significant.

The purpose of the proposed project is to increase capacity of electrical distribution within POLA to accommodate the estimated 200 MVA of additional electrical power the Port will require for electrification of CHE. Outside of the activities already described and analyzed throughout this document as part of the proposed project activities, no other new or expanded electrical power facilities are required that have not been addressed herein. Potential impacts related to new electrical infrastructure would be less than significant with the application of the mitigation measures outlined in this IS/MND.

Project construction and operation would have no need for natural gas or telecommunication infrastructure. To the extent that any existing telecommunication lines are currently coexisting with the transmission lines, there would not be alterations or changes to any existing telecommunication facilities.

For these reasons, there would be no construction or operational impacts related to new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, and impacts would be less than significant.

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

Construction

Less than Significant Impact. High construction water demand is typically associated with large-scale residential developments, hotels, and large office complexes that involve extensive earthwork activities. The proposed project would involve only minor grading and trenching for subsurface improvements (e.g., underground distribution lines, maintenance substructures, and duct banks). The water needs of the proposed project would be limited to water required for dust control during construction activities, which would be delivered to the project area by water trucks. New or expanded water entitlements would not be required, as water to supply the water

trucks would be minor relative to the total water service provided by regional purveyors. Construction impacts on water supplies would be less than significant.

Operations

Less than Significant Impact. After construction of the proposed project is complete, the primary water supply required would be for the wet cooling tower, with a relatively minor amount of water required for the maintenance building. As described in Section 1.6, Project Components, the wet cooling tower would require an instantaneous water flowrate of 1,388 GPM with a peak flowrate of approximately 2 MGD. However, it is unlikely that the HGS units would run for the full duration of a day and consume this quantity of water. A more realistic water usage rate averaged across 1 year would be 100,000 GPD or approximately 112 AFY. Water would be supplied by LADWP, which relies on imported water from the Los Angeles Aqueduct and MWD. According to the 2020 Urban Water Management Plan for LADWP, MWD alone has the capability to provide 100% of the water supply for the LADWP service area during normal, single dry year, and multiple dry year scenarios out to 2045 with a projected surplus of at least 532,800 AFY (LADWP 2021). Therefore, the proposed increase in water supply demand of approximately 112 AFY is well within the projected capabilities of LADWP and MWD to serve the proposed project during normal, dry, and multiple dry years. The operational impact on water supplies would be less than significant.

c) *Would the project result in a determination by the waste water 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?*

Less than Significant Impact. The proposed project would expand electrical distribution and capacity within the LAHD and would include expansion to two (2) existing receiving stations (RS-Q Rack D and RS-C Rack C), sixteen (16) new underground circuits, three (3) new switching stations, and a new wet cooling tower. The proposed electrical distribution facilities (i.e., receiving stations, underground circuits, switching stations, and wet cooling tower), would not have any discharges of wastewater associated with them. The maintenance building would include two small restrooms but the primary source of increased wastewater requiring treatment would come from the discharge of blowdown water associated with the cooling tower. An estimated 344 GPM, or 495,360 GPD, of wastewater from the proposed project would be discharged through existing sewer lines that deliver wastewater to the TIWRP. The TIWRP services the Harbor Area in the City of Los Angeles. TIWRP has the capability to provide high-quality tertiary treatment for up to 30 MGD of municipal and industrial flows, but typically treats from between 15 and 16 MGD (Bolin, pers. comm., 2025). Sixty percent of the incoming flow to the plant comes from nearby industries while the remaining 40% is from residential areas. In addition, TIWRP has a 12 MGD advanced water treatment capacity to generate high-quality recycled water to help offset potable water use. From January 2020 to December 2021, TIWRP discharged an average of 8.7 MGD of effluent into the Los Angeles Outer Harbor through the TIWRP Outfall (LASAN 2023). Therefore, there would be sufficient capacity for the TIWRP to handle the proposed increases in wastewater flows from the proposed project and the impacts would be less than significant.

d) Would the project 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?

Construction

Less than Significant Impact. The proposed project would involve grading, trenching, excavation, and construction of various electrical distribution lines and equipment. The project's grading and soil remediation activities would involve removal of soil that would be primary hauled off site for disposal or reuse. Construction waste would be recycled, or disposed of at a landfill approved to accept such materials and would be recycled when feasible (e.g., asphalt and concrete debris) in accordance with solid waste disposal regulations. The proposed project would also involve the demolition of three (3) ancillary buildings at the HGS and rail spurs, which would produce demolition debris waste. However, all demolition debris waste would be recycled to the extent feasible in accordance with current regulatory requirements and would not represent a substantive waste stream. Therefore, due to the relatively minimal amount of waste that would be produced during construction, area landfills would be able to accommodate any solid waste disposal and recycling needs associated with the proposed project. Construction impacts would be less than significant.

Operations

Less than Significant Impact. After construction of the proposed project is complete, operational activities of the electricity distribution system would involve relatively minimal solid waste disposal associated with maintenance activities, which would likely be sporadic over time. All solid waste disposal would occur in accordance with state and local standards and, as a result, less-than-significant impacts would occur.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Construction

Less than Significant Impact. The proposed project would comply with federal, state, and local statutes and regulations related to solid waste. As discussed above in Section 2.19(f), construction debris generated by the proposed project would be relatively minimal. Any construction or demolition debris that are produced would be recycled or disposed of according to local and regional standards. All materials would be handled and disposed of in accordance with existing local, state, and federal regulations. Compliance with existing regulations would ensure less-than-significant construction impacts.

Operations

Less than Significant Impact. After construction of the proposed project is complete, other than relatively minor amounts of solid waste that would be produced as part of operations and maintenance activities, operational activities of the proposed project would not produce substantive quantities of solid waste related to the expansion of electrical transmission. Regardless, any disposal of solid waste related to the proposed project would adhere to all applicable solid waste statutes and regulations and impacts would be less than significant.

2.20 Wildfire

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

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. As mentioned in Section 2.9(g), the project site is not located within a very high, high, or moderate FHSZ (CAL FIRE 2025). Primary evacuation routes in the City and Los Angeles County consist of major interstates, highways, and primary arterials (City of Los Angeles 2020). The project would involve the installation of multiple underground distribution lines in and around the POLA. Sixteen (16) new circuits would be located within Wilmington, San Pedro, and the POLA. Ten (10) new circuits would be located within San Pedro and the outer POLA. Four (4) circuits would be located within Terminal Island in the POLA. Two (2) new circuits would be installed from RS-C in Wilmington to the RS-Q Area.

LADWP would prepare a Traffic Control Plan, as specified in BMP-TRA-1, prior to the start of construction to minimize impacts. Likewise, prior notification and coordination with emergency services providers and other road users (e.g., agencies), as specified in BMP-TRA-2, would minimize temporary impacts during construction.

During the construction phase, construction crew would trench approximately 300 ft per week. Up to three (3) crews would perform trenching operations so that concurrent trenching would occur along various points of the transmission line alignment; a length of approximately 60 ft of trenching per day is anticipated. Areas that are trenched or excavated would be covered with steel plates every evening until the road surface is restored; this would allow for full usage of the affected roadway outside of work hours. When segments of the trench are restored, more trenching would occur farther down the street until the conduit system is installed for the entire alignment. Provisions for emergency vehicle and local access would be provided. All construction activities would be temporary, and when the project has been constructed, all closed areas would be reopened. With implementation of BMP-TRA-2 as part of LADWP's standard practice, impacts would be less than significant.

As such, the construction phase of the project would not impair an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

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

Less than Significant Impact. As mentioned in Section 2.9(g), the project site is not located within a very high, high, or moderate FHSZ (CAL FIRE 2025). Additionally, the project site is located in an urban, built-up, flat area that is not in the vicinity of wildlands. Further, the project site is within existing roadways and LADWP or LAHD property, which contains only limited amounts of ruderal vegetation and does not contain extensive amounts of vegetation or wildland fuel. In addition, the project would be in compliance with applicable California Fire Code and California Building Code requirements. Project construction and maintenance/operations would comply with existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Therefore, it is not anticipated that the proposed project, due to slope, prevailing winds, and other factors, would exacerbate wildfire risks or expose future occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Thus, the proposed project would not expose people or structures to significant risk involving wildland fires, exacerbate wildfire risks, or otherwise result in wildfire-related impacts. Therefore, impacts would be less than significant.

c) Would the project 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?

Less than Significant Impact. As mentioned in Section 2.9(g), the project site is not located within a very high, high, or moderate FHSZ (CAL FIRE 2025). The proposed project would increase the capacity of electricity distribution within the LAHD through installation of new underground distribution circuits and expansion of receiving station capacities. The proposed project involves expansion to two (2) existing receiving stations (RS-Q Rack D and RS-C Rack C), sixteen (16) new underground circuits, three (3) new switching stations, and a new wet cooling tower. As

discussed above in Section 2.20(b), the project would adhere to applicable California Fire Code and California Building Code requirements. Additionally, project construction and maintenance/operations would comply with existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Therefore, impacts would be less than significant.

d) Would the project 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?

Less than Significant Impact. As mentioned in Section 2.9(g), the project site is not located within a very high, high, or moderate FHSZ (CAL FIRE 2025). As discussed in Section 2.7(i)(iv), the proposed project is not located in landslide or hillside areas (CGS 2024). Additionally, the project site is in an urban, built-up, flat area of the City that is not in the vicinity of wildlands. Thus, the project would not expose people or structures to significant risk as a result of runoff, post-fire slope instability, or drainage changes. Therefore, impacts would be less than significant.

2.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
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?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No 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.)	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

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 with Mitigation Incorporated. Potential impacts related to sensitive and special-status habitat, wildlife species, and plant species are discussed in Section 2.4, Biological Resources. As discussed in Section 2.4, with the implementation of standard construction measures BMPs BIO-1 through BIO-4 (Section 1.8 of this IS/MND), all potentially significant impacts to biological resources would be less than significant. The proposed project would not substantially degrade the quality of the environment or impact fish or wildlife species or plant communities. As discussed in Section 2.5, Cultural Resources, potential impacts to cultural resources would be reduced to a level below significance with incorporation of mitigation measures. In addition, as discussed in Section 2.18, Tribal Cultural Resources, the proposed project would not result in significant impacts to TCRs with the implementation of MM-CUL-1 through MM-CUL-3 and MM-TCR-1. The proposed project would not eliminate important examples of the major periods of California history or prehistory. Overall, impacts would be less than significant with incorporation of mitigation measures.

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

Less Than Significant Impact with Mitigation Incorporated. As indicated in the analysis presented throughout this IS/MND, the proposed project would not result in significant and unavoidable impacts in any issue area. With the incorporation of mitigation identified herein, the project's impacts would be reduced to less-than-significant levels and would not considerably contribute to cumulative impacts in the greater project region. In addition, other related projects would presumably be bound by their applicable lead agency to (1) comply with all applicable federal, state, and local regulatory requirements and (2) incorporate all feasible mitigation measures, consistent with CEQA, to further ensure that their potentially cumulative impacts would be reduced to less-than-significant levels.

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

Less Than Significant Impact with Mitigation Incorporated. The potential for adverse direct or indirect impacts to human beings was considered throughout this IS/MND. Based on this evaluation, there is no substantial evidence that construction or operation of the project with the proposed mitigation measures incorporated would result in a substantial adverse effect on human beings. Impacts would be less than significant with mitigation incorporation.

SECTION 3
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