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Chapter 2 Project Description

3 2.1 Introduction

4 This section provides background information related to existing operations at the Shell
5 Marine Oil Terminal, proposed Project elements, and related construction and marine oil
6 terminal operational activities. This section also provides a discussion of the CEQA
7 baseline that forms the basis of the environmental analyses in Chapter 3 Environmental
8 Analysis, a description of the proposed Project and alternatives considered in this Draft
9 EIR, and consistency of the proposed Project and analysis in relation to existing statutes,
10 plans, policies and other requirements. In addition, Section 1.4 in Chapter 1 Introduction
11 discusses the intended uses of this EIR and identifies the permits, approvals, and actions
12 of other agencies that would be required for the proposed Project or alternative.

13 2.2 Background and Project Overview

14 2.2.1 Background

15 There are seven marine oil terminals currently operating at the Port under separate leases.
16 The Shell Marine Oil Terminal at Berths 167-169 has been in operation at Mormon
17 Island since 1923 as a marine liquid bulk terminal (unloading and loading of petroleum
18 products). The existing Harbor Department permit/lease (Permit No. 634) became
19 effective in February 1988, and expires in February 2023.

20 2.2.2 Project Overview

21 The primary goal of the proposed Project is to comply with Chapter 31.F Marine Oil
22 Terminal Engineering & Maintenance Standards (MOTEMS) of the State of California
23 Building Code. MOTEMS is a comprehensive set of codes and standards for the
24 analysis, design, inspection/maintenance, and operation of existing and new marine oil
25 terminals in the State of California. Section 1.2.2 in Chapter 1 Introduction details the
26 MOTEMS requirements.

27 The proposed Project would construct a new MOTEMS compliant wharf and mooring
28 system for the Shell Marine Oil Terminal at Berths 167-169, which would replace the
29 current timber wharf. Other Project elements include piping and related foundation
30 support, and topside equipment replacement. The tenant, Shell Oil Company (hereafter
31 referred to as Shell), has also applied to the Port for a new 30-year lease through the year
32 2048 to allow continued operations of its existing marine oil terminal. The new lease
33 would contain provisions for further minimizing the potential release of petroleum
34 products, beyond existing controls and measures, through the implementation of Shell's

1 Source Control Program Plan (SCP Plan). The proposed Project elements are detailed in
2 Section 2.5 below.

3 **2.3 Project Purpose, Need and Objectives**

4 **2.3.1 Purpose and Need**

5 The proposed Project is needed to comply with Chapter 31F –Marine Oil Terminals of
6 the 2016 California Building Code, Title 24, Part 2, also referred to as MOTEMS.
7 This facility helps maintain the Port’s ability to accommodate fuel imports for the
8 Southern California market over the long-term. Key project elements that would meet
9 MOTEMS requirements include the construction of two new loading platforms to replace
10 the existing timber wharf, new mooring dolphins, and shore side improvements on
11 portions of the terminal. The tenant, Shell, has also applied to the Port for a new, long-
12 term (30-year) lease to allow continued operations of its existing marine oil terminal.

13 **2.3.2 Project Objectives**

14 The proposed Project would address the project objectives, as summarized below.

- 15 • Comply with MOTEMS requirements, which would ensure better resistance to
16 earthquakes, protect the public and the environment, and reduce the potential of
17 an oil spill, and consequently maintain the operation and viability of the marine
18 oil facility (primary objective).
- 19 • Optimize the use of existing land at the terminal and associated waterways in a
20 manner that is consistent with the LAHD’s public trust obligations.
- 21 • Continue operations which contribute to Southern California’s energy needs
22 given evolving market conditions and business cycle variability.
- 23 • Maintain the existing facility’s throughput capabilities and operational
24 parameters.
- 25 • Comply with the LAHD’s Source Control Program (SCP).

26 Together, these five objectives define the need for the proposed Project.

27 **2.4 Project Location and Setting**

28 **2.4.1 Regional Setting**

29 The Port is located in San Pedro Bay and encompasses approximately 7,500 acres of land
30 and water along 43 miles of waterfront, approximately 20 miles south of downtown Los
31 Angeles (Figure 1-1 in Chapter 1 Introduction). It features 24 passenger and cargo
32 terminals, including automobile, breakbulk, container, dry and liquid bulk, and
33 warehouse facilities that handle billions of dollars’ worth of cargo each year. In addition
34 to cargo terminals, the Port includes the World Cruise Center (a passenger terminal),
35 Ports O’ Call Village, Wilmington Waterfront Park, fanfare fountains and water features,
36 Angels Gate Lighthouse, 22nd Street Park, and Fish Harbor.

37 The Port is a key asset that is vital to regional and national security (in the case of the
38 proposed Project – fuel security) and the economy. It is the primary point of entry for

1 goods and fuel coming into the Southern California region, and an important point of
2 entry for the State of California and western portion of the nation. The Port's role in
3 receiving fuel is particularly crucial because Southern California operates as an energy
4 island (USEIA, 2015).

5 **2.4.2 Project Site and Surrounding Uses**

6 The Project site is located within the Port of Los Angeles Community Plan area in the
7 City of Los Angeles, which is adjacent to the City of Los Angeles communities of San
8 Pedro and Wilmington. The Project site occupies the southwestern end of a peninsula on
9 Mormon Island along the east side of Slip 1, and is generally bounded by Rio Tinto
10 Minerals to the north (Berths 165-166), Slip 1 to the west, the Turning Basin to the south,
11 and Berths 170 – 173 to the east (East Basin Channel) (Figure 1-2 in Chapter 1
12 Introduction). Land access to and from the Project site is provided by a network of
13 freeways and arterial routes. The freeway network consists of the Harbor Freeway
14 (Interstate [I]-110), the Long Beach Freeway (I-710), the San Diego Freeway (I-405), and
15 the Terminal Island Freeway (State Route [SR]-103/SR-47).

16 The Project site is located at Berths 167-169 in Planning Area 2, as designated in the Port
17 Master Plan (Port of Los Angeles, 2013a). According to the Port Master Plan, Planning
18 Area 2 designates the Project site for liquid bulk uses.

19 The Project site is identified as Los Angeles County Assessor's Parcel Number (APN)
20 7440019908 and is zoned for heavy industrial uses ([Q] M3-1) by the City of Los
21 Angeles Zoning Ordinance. [Q] M3-1 is designated as "quasi-heavy industrial" uses
22 (City of Los Angeles, 2015).

23 The overall character of the surrounding area is primarily bulk material handling (liquid
24 and dry bulk) (Figure 1-2 in Chapter 1 Introduction). The properties to the north and east
25 of the Project site are also zoned as [Q] M3-1. In addition, the Project site is also situated
26 north of the Yusen Terminals, Inc. (YTI) Container Terminal (across the East Basin
27 Channel) located along Berths 212-224.

28 **2.4.2.1 Existing Terminal Operations**

29 The existing marine terminal occupies a land area of approximately nine acres, an over
30 water area of approximately three acres, and has two operating berths (Berths 168 and
31 169),¹ 11 hydrocarbon storage tanks of various sizes, parking, and several ancillary
32 buildings. Employees at the Project site consist of six full-time and one part-time
33 employees. The existing 1,240-foot timber wharf can accommodate two tankers. The
34 Project site has been leased by Shell and operated as a marine oil terminal since 1923.
35 Both Berth 168 and Berth 169 have a design depth of approximately 40 feet allowing for
36 vessels with a capacity of up to 86,000 deadweight tons (dwt). While the berths allow for
37 ships with maximum cargo sizes of about 425,000 barrels, more typical cargo sizes range
38 from 150,000 to 325,000 barrels. The marine terminal currently only handles refined
39 petroleum liquids (e.g., gasoline, diesel, ethanol, and jet). Maximum vessel flow rates

¹ Historically, the terminal was subdivided into three berths (167, 168, and 169), which would accommodate the ships of the 1920's. The terminal was divided roughly into thirds, arranged with Berth 167 at the north end, and Berth 169 at the south end. The facility currently operates as a two-berth facility (168 and 169). Despite operating as a two berth facility, the wharf structure is typically referred to by its original designations (Berths 167-169). When referring to the berth area as a whole, Berths 167-169 is used. When referring to the specific functional berths as they exist today, Berths 168 and 169 are used.

1 allow up to 10,000 barrels per hour (bph) per system product line. During the five-year
 2 period from 2011 through 2015, an average of 86 vessel calls occurred annually at the
 3 existing marine terminal.

4 The marine terminal's 11 hydrocarbon storage tanks range in capacity from
 5 approximately 5,000 barrels to approximately 100,000 barrels, and have a total combined
 6 storage capacity of approximately 490,000 barrels. Liquid bulk cargo that is unloaded
 7 from vessels at the marine terminal is pumped to the nearby Shell Carson Distribution
 8 Facility (approximately six miles away in the city of Carson) via a network of existing
 9 underground pipelines. The Shell Carson Distribution Facility is used for tank product
 10 storage and distribution. Product from the Shell Carson Distribution Facility can also be
 11 pumped to the marine terminal for loading onto vessels. Although the Shell Carson
 12 Distribution Facility and associated underground pipelines are connected to the Shell
 13 Marine Oil Terminal, they are not located within the Project site and are not part of the
 14 proposed Project.

15 Table 2-1 shows volumes of commodities handled by the facility from 2011 to 2015.

16 **Table 2-1: Throughput Volume and Vessel Calls by Year**

| Year | Throughput (barrels)* | Annual Vessel Calls |
|-------------------|-----------------------|---------------------|
| 2011 | 12,244,870 | 90 |
| 2012 | 11,539,497 | 77 |
| 2013 | 11,716,522 | 78 |
| 2014 | 10,170,144 | 65 |
| 2015 | 20,584,414 | 121 |
| 2011-2015 Average | 13,251,089 | 86 |

17 *Throughput volumes are for all commodities (which include gasoline, diesel, ethanol
 18 and jet refined petroleum products)

19 Source: Shell Inc., 2016

20 2.5 Proposed Project

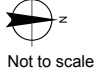
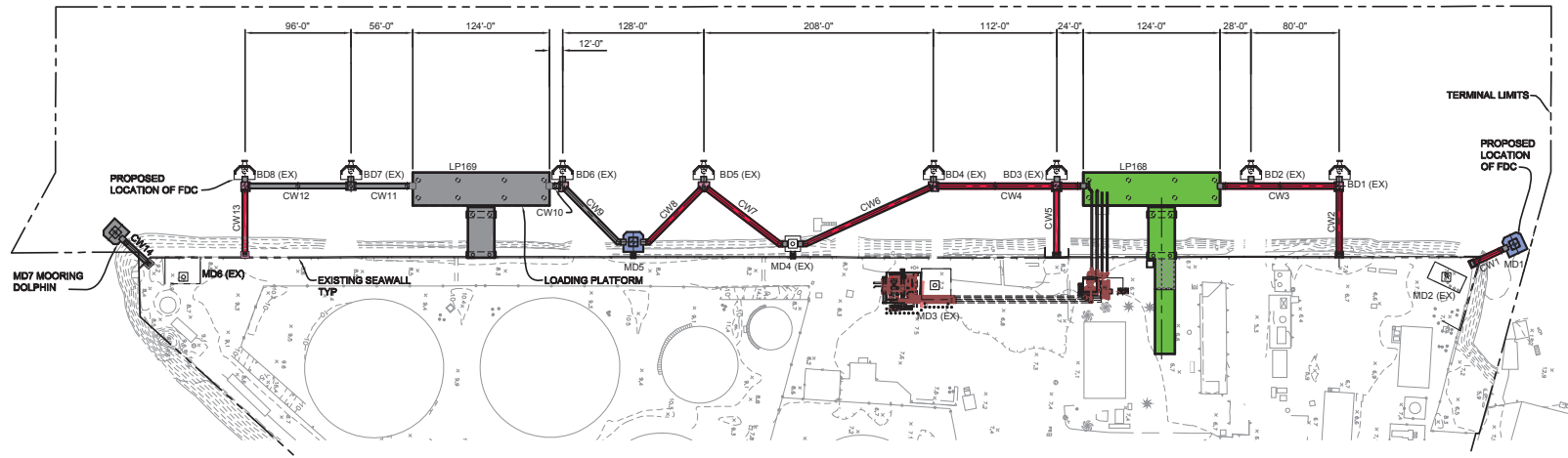
21 The proposed Project consists of various wharf and shoreside improvements to the Shell
 22 Marine Oil Terminal at Berths 167-169 on Mormon Island that are required in order to
 23 comply with MOTEMS, as well as other elements not required by MOTEMS. The
 24 proposed Project would not increase the capacity of the terminal. In general, the
 25 proposed Project would demolish the existing timber wharf (with two berths) and replace
 26 it with two new reinforced concrete loading platforms, access trestles (to the platforms),
 27 mooring dolphins and catwalks, and provide piping and related foundation supports along
 28 the landside portions of the terminal at both operating berths. Additionally, the proposed
 29 Project includes the issuance of a new 30-year lease along with implementation of a SCP
 30 Plan. Figure 2-1 shows the Project site and general wharf improvements.



Legend

- Motems Area
- Project Site

- Legend**
- ATB Articulated tug and barge
 - BD Berthing dolphin
 - CW Catwalk
 - DWT Deadweight ton
 - EX Existing
 - FDC Fire Department Connection
 - LOA Length overall
 - LP168 Loading platform at Berth 168 (124'-0" x 30'-0")
 - LP169 Loading platform at Berth 169 (124'-0" x 30'-0")
 - MD Mooring dolphin
 - New catwalk
 - Exist mooring point
 - New mooring point
 - Berth 168 Loading Platform
 - Berth 169 Loading Platform



Not to scale

**Figure 2-1
Proposed Project**

1 Figure 2-2 shows a plan view of the proposed wharf profile of the new loading platform,
2 and Figure 2-3 shows the topside improvements in relationship to the new loading
3 platform and the terminal at Berth 168.

4 The proposed Project consists of the following components to meet MOTEMS
5 requirements:

- 6 • Replacement piping and related foundation supports to meet seismic
7 requirements at each operating berth.
- 8 • Demolition of the existing timber deck, access trestles, and approximately 900
9 creosote-treated timber piles of existing timber wharfs at Berths 167-169.
10 Existing piles that cannot be extracted would be cut at the mudline.
- 11 • Construction of new loading platforms at Berths 168 and 169 (in phases),
12 installation of new mooring dolphins, new fenders, approach trestles, catwalks,
13 and installation of topside equipment required for loading and unloading
14 operations at and adjacent to the new loading platforms.

15 In addition, the proposed Project would include the following elements that are not
16 related to MOTEMS compliance:

- 17 • Modifications at the Mormon Island marine oil terminal to allow for the loading
18 of refined products onto vessels, while meeting USCG safety regulations and
19 SCAQMD air quality regulations.
- 20 • An SCP Plan would be provided by Shell as part of the new 30-year lease. The
21 SCP Plan would include commitments for certain improvements. This work may
22 include adding double bottoms, or installing leak detection systems to existing
23 storage tanks and pipelines to meet the LAHD's requirements. These
24 improvements would further minimize the potential for accidental release of
25 petroleum products.
- 26 • New 30-year lease would allow operations to continue from 2018 through 2048
27 (the existing lease terminates in 2023).

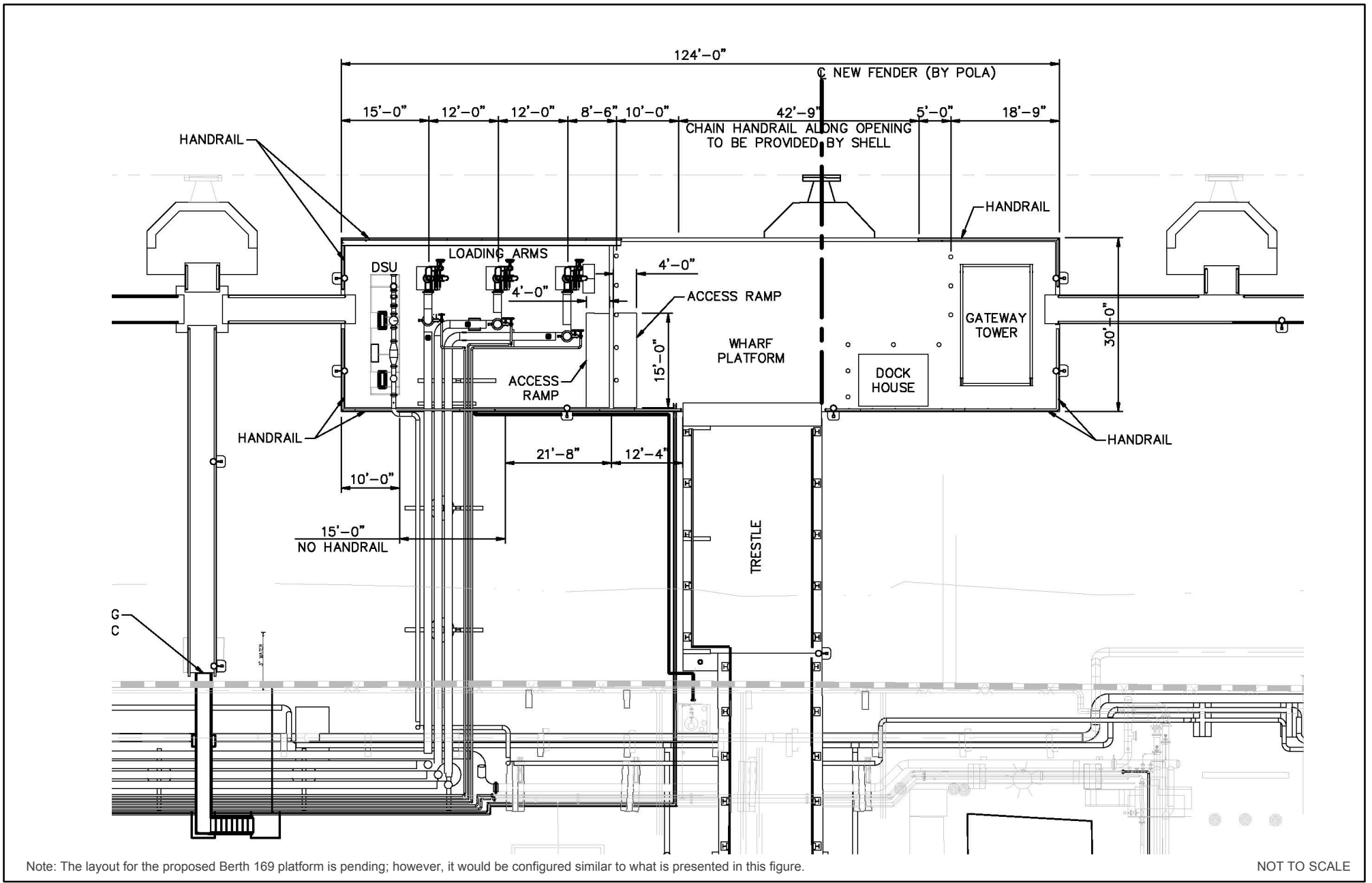
28 The MOTEMS and non-MOTEMS elements of the proposed Project are described below.

29 **2.5.1 Project Elements for MOTEMS Compliance**

30 **2.5.1.1 Shore Side Improvements: Piping Replacement and** 31 **Related Support Structures**

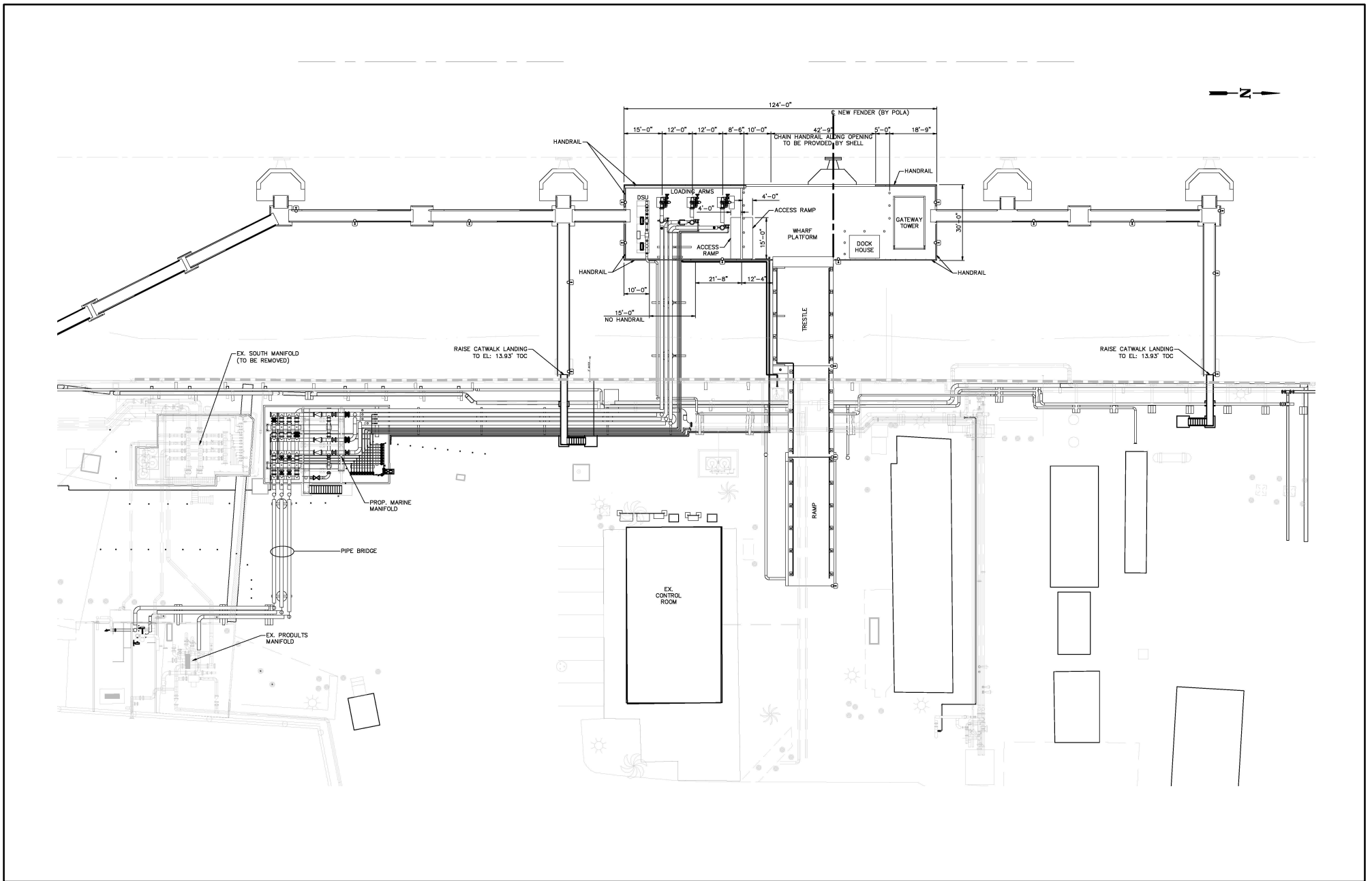
32 The existing piping from Berth 168 and 169 would be replaced with new piping and
33 related support structures. Potential upgrades include, but are not limited to: piping and
34 piping supports between the marine loading arms and the landside manifold to convey the
35 various petroleum products to or from vessels.

36



Source: AECOM, 2018





Source: AECOM, 2018

NOT TO SCALE



2.5.1.2 Wharf Demolition and Replacement

Under the proposed Project, the existing timber wharf and access trestles would be demolished and replaced with new loading platforms to meet MOTEMS requirements. Demolition would include removal and disposal of the timber deck (cap beam, joists, decking, etc.) and approximately 900 creosote-treated timber support piles, which would be extracted or cut at the mudline (see Figure 2-4).

Existing topside equipment along Berth 168 would be decommissioned, followed by the demolition of the northern half of the terminal's existing wharf (Berth 168). The southern half of the existing wharf (Berth 169) would be demolished after the Berth 168 improvements become operational.

Once the northern portion of the existing wharf is removed, a new loading platform would be constructed at Berth 168 (Figure 2-1). The loading platform would be comprised of a concrete deck supported steel pipe piles. An access trestle would be constructed to provide pedestrian and vehicular access to the loading platform.

Upon completion of the platform and topside equipment at Berth 168 and its commissioning, the southern half of the existing wharf (Berth 169) would be demolished. Piles and catwalks would be installed to maintain access to the existing berthing dolphins. The second new loading platform, access trestle, catwalks, and topside equipment at Berth 169 would be similar to the loading platform at Berth 168. The improvements along Berth 169 would be constructed at a future yet-to-be-determined date based on throughput demands (assumed to occur beginning in 2021, after completion of the first platform).

2.5.1.3 Mooring Dolphins

As shown on Figure 2-1, two new mooring dolphins (MD1 and MD5) would be constructed at the north end of Berth 168 (MD1) and at the north end of Berth 169 (MD5), following demolition of the existing wharf. The new mooring dolphins would provide a foundation for triple quick release mooring hooks. The existing mooring dolphin (MD4) located just south of the new loading platform at Berth 168 would be modified to provide access from the shore.

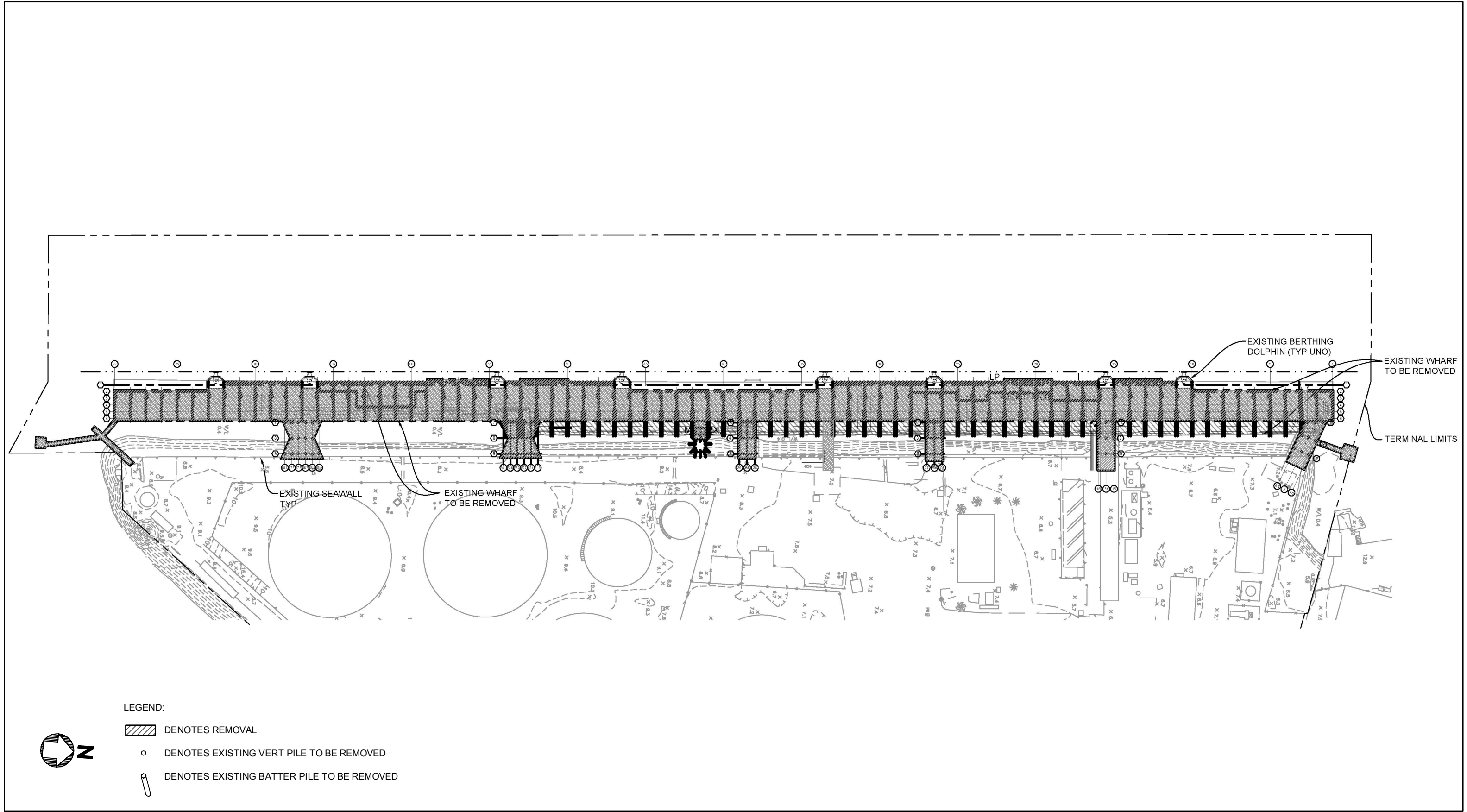
2.5.1.4 Steel Catwalks

Steel catwalks would be constructed to provide pedestrian access from the new loading platforms and the shore to the eight existing berthing dolphins and the two new mooring dolphins. Installation of the new catwalks would occur in stages.

2.5.1.5 New Topside Equipment

The existing topside equipment at Berth 168 and 169 would be replaced with new equipment on and adjacent to the new loading platforms (see Figure 2-3). Upgrades include, but are not limited to:

- A gangway tower;
- Three marine loading arms;



Source: AECOM, 2017

- 1 • A skid-mounted vapor control system;
- 2 • A foam and water fire protection system (fire monitors for topside equipment
- 3 protection located on-shore)
- 4 • A potable water line;
- 5 • Dry utility lines (electrical lines, communication lines, and compressed air lines);
- 6 and
- 7 • An approximate 120 square foot dock house.

8 **2.5.1.6 Dredging**

9 During wharf demolition and pile installation, there is a potential for sediment along the
10 existing slope to slough off and settle along the harbor bottom. If necessary, up to 4,000
11 cubic yards of such sediment would be dredged from the berths (approximately 2,000
12 cubic yards from each operating berth area) after construction of the two loading
13 platforms and associated structures to return the berths to their original designed water
14 depths. Dredged spoils would be transported by barge to the existing and authorized
15 confined disposal facility (CDF) at Berths 243-245.

16 **2.5.2 Other Project Elements**

17 **2.5.2.1 Vapor Control System**

18 The terminal would be modified to allow for the loading of refined products onto vessels
19 at one berth. Equipment proposed is required to meet United States Coast Guard safety
20 requirements as well as SCAQMD regulations.

21 The proposed Project components include piping modifications, two new 1,000-gallon
22 above ground propane tanks (one for enriching product, and one to supply pilot burners),
23 a Dockside Safety Unit, and a Vapor Destruction Unit (VDU). (See Figure 2-3).

24 **2.5.2.2 New Lease**

25 The proposed Project would include a new 30-year lease that is expected to begin in 2018
26 and extend to 2048. The new lease would allow Shell to continue operations of its existing
27 marine oil terminal and to maximize the Port's ability to ensure continued reliability and
28 availability of fuel supplies to meet Southern California's energy needs.

29 **2.5.2.3 Source Control Program Plan**

30 LAHD's requirements of the SCP Plan are consistent with various standards required by
31 the American Petroleum Institute (API). The new lease would contain provisions for
32 Shell to comply with the LAHD's SCP through the development and implementation of a
33 written Plan, which would outline measures to further reduce the potential for accidental
34 release of petroleum products at the terminal. Key elements of the SCP Plan include
35 inspections of and certain improvements to above ground tanks that are used to store
36 petroleum products. This work may include; adding a double bottom, installation of leak
37 detection systems, and maintenance and/or upgrades to cathodic protection systems. One
38 of the terminal's tanks has been upgraded with a double bottom and a continuous leak
39 detection system, and two additional tanks have been inspected and are scheduled to be

1 upgraded in the near future. Inspections and added controls to the remaining eight tanks
2 would occur after the tanks are temporarily removed from service for routine
3 maintenance. Facility piping upgrades would occur on a case-by-case basis, and could
4 include their relocation aboveground where feasible and/or new leak detection systems.
5 Added controls and leak protection improvements would commence within five years of
6 the start of the new lease, in accordance with the SCP Plan.

7 **2.5.3 Construction Schedule**

8 Construction of the proposed Project is expected to begin in 2018. Construction
9 associated with the first platform (Berth 168) would occur first and take approximately
10 two-years to complete, followed by a similar period for construction of a platform at
11 Berth 169. The construction schedule may be subject to variations. Up to 24 workers
12 would be required at the site at any given time, depending on the construction phase.
13 Construction staging and lay down area is expected to occur on the Project site; however,
14 it could include use of an adjacent vacant lot to the east of the Project site, adjacent to
15 Berths 171 to 173, if necessary.

16 The following nine phases would allow the terminal to continue to operate while
17 improvements are being made:

- 18 • Phase I: Install the Vapor Control System at Berth 169
- 19 • Phase II: Prepare Berth 169 for Stand-Alone Operation
- 20 • Phase III: Berth 168 Demolition and Wharf Structure Improvements
- 21 • Phase IV: Shore Side Improvements: Piping Replacement and Related
22 Support Structures
- 23 • Phase V: New Topside Equipment at Berth 168 and Commissioning
- 24 • Phase VI: Berth 169 Demolition and Improvements
- 25 • Phase VII: Berth 169 Wharf Structure Improvements
- 26 • Phase VIII: New Topside Equipment at Berth 169 and Commissioning
- 27 • Phase IX: Source Control Program Plan

28 This construction schedule and phasing was analyzed as part of the air quality
29 assessment. Construction assumptions and details are contained in Chapter 3.1 – Air
30 Quality and Meteorology and Appendix B1.

31 **2.5.4 Project Operations**

32 The proposed Project is required in order to bring the existing terminal into compliance
33 with MOTEMS and would be comprised of replacing the existing two-berth timber wharf
34 with two loading platforms (one at each berth) and ancillary improvements. The
35 improvements under the proposed Project would not facilitate an increase in capacity or
36 throughput (i.e., barrels and vessel calls) during the new 30-year lease period. However,
37 the proposed Project would allow the terminal to remain in operation through 2048 and
38 the annual throughput could be affected over the lease period due to market fluctuations.

1 Although future total throughput cannot be forecasted with any level of certainty, for the
2 purposes of the analysis, it is projected that the peak annual throughput associated with
3 the proposed lease extension would be up to approximately 25.5 million barrels over the
4 new lease term (the approximate annual throughput based on Shell’s two percent
5 compound annual growth rate projection). At an annual throughput of approximately
6 25.5 million barrels, the terminal is projected to accommodate up to 166 annual vessel
7 calls (comprised of both tankers and barges; 50 percent for each vessel type). The largest
8 vessels that could be accommodated at the terminal would remain the same as existing
9 conditions, approximately 86,000 dwt tankers. The forecasted increased throughput
10 would not require additional employees.

11 The proposed Project would not increase the existing terminal’s capacity to handle
12 petroleum products or affect the types of products handled. Accordingly, the proposed
13 Project would not require installation of any other pipeline, storage, or refining projects.
14 The proposed Project therefore would not affect the operations of any other facilities,
15 including those that are connected via pipelines (e.g., the Carson Distribution Facility).
16 Thus, the proposed Project is deemed to have independent utility, and represents a
17 rational end-point for a marine oil terminal project and for the review of the
18 environmental impacts.

19 2.6 CEQA Baseline

20 CEQA provides for an EIR to assess the significance of a project’s impacts in comparison
21 to a baseline that consists of the existing physical environmental conditions at and near
22 the Project site. Baseline conditions are normally measured at the time of
23 commencement of environmental review of the proposed Project. State CEQA
24 Guidelines, Section 15125, subdivision (a), provides:

25 *An EIR must include a description of the physical environmental*
26 *conditions in the vicinity of the project, as they exist at the time the notice*
27 *of preparation is published, or if no notice of preparation is published, at*
28 *the time environmental analysis is commenced, from both a local and*
29 *regional perspective. This environmental setting will normally constitute*
30 *the baseline physical conditions by which a lead agency determines*
31 *whether an impact is significant.*

32 Courts have recognized that there may be instances in which conditions existing at the
33 time of a Notice of Preparation (NOP) do not accurately represent existing conditions.
34 The courts have reasoned that by using the qualifying term, “normally,” the Guidelines
35 recognize that in appropriate situations a lead agency has discretion in representing the
36 baseline.

37 As described in Chapter 1 Introduction, supply and demand for petroleum and other
38 energy products are subject to wide fluctuations based on variations in global/local
39 economic activity, business cycles (e.g., recessions and recovery), and planned and
40 unplanned or unforeseen supply disruptions. Due to these various factors, the Shell
41 Marine Oil Terminal has experienced wide fluctuations in throughput during the past
42 several years, ranging from 10.2 million barrels in 2014 to 20.6 million barrels in 2015.
43 An NOP was released on June 30, 2015 (2015 NOP) for the proposed Project. Although
44 the throughput described in the 2015 NOP accurately represented the existing conditions
45 for the baseline year of 2014, the revised baseline captures the year-to-year volatility of
46 throughput at the terminal. Therefore, the “existing” conditions are based on average

1 conditions over a wider timeframe than the set of conditions at the time the 2015 NOP
2 was circulated (hereafter referred to as the ‘Revised NOP’). The CEQA baseline takes
3 into account the operational activity and throughput over a five-year period in order to
4 provide an accurate and representative characterization of baseline activity level that
5 occurs due to variations in global/local economic activity and/or production and
6 distribution infrastructure, which in this case does not correlate with a more common
7 definition of baseline conditions under CEQA.

8 Therefore, for purposes of this Draft EIR, conditions that occurred from calendar year
9 2011 through calendar year 2015 (January 2011 through December 2015) are considered
10 to be the baseline throughput for evaluations herein. Using a five-year average for the
11 baseline allows a more accurate comparison between baseline and future year conditions.
12 The CEQA baseline for the proposed Project consists of a throughput of approximately
13 13.25 million barrels and 86 annual vessel calls, and the Project site includes the Shell
14 Marine Oil Terminal at Berths 167-169 on Mormon Island. This facility encompasses a
15 land area of approximately nine acres, an over water area of approximately three acres,
16 and has two operating berths (Berths 168 and 169), a 1,240-foot timber wharf that
17 accommodates two tankers, 11 storage tanks of various sizes, parking, and several
18 ancillary buildings. Employees at the Project site consist of six full-time and one part-
19 time employees.

20 **2.7 Alternatives**

21 According to the State CEQA Guidelines, Section 15126.6, an EIR need only examine in
22 detail those alternatives that could feasibly meet most of the basic objectives of the
23 proposed Project. The primary objective of the proposed Project is to meet MOTEMS
24 safety requirements for an existing marine oil terminal as established by the California
25 State Lands Commission. Most of the physical improvements are associated with
26 MOTEMS requirements, which are legal requirements that must be met to continue
27 operation of the marine oil terminal at the Project site. Therefore, the reduced project
28 alternative fully meets MOTEMS requirements but includes only one platform. In
29 addition to the MOTEMS compliance objective, the other project objectives described in
30 Section 2.1 above apply. Alternatives being considered in this Draft EIR are described
31 below.

32 **2.7.1 Alternatives Evaluated in this Draft EIR**

33 This document evaluates a reasonable range of alternatives to the proposed Project. The
34 identification by LAHD of a reasonable range of feasible alternatives is informed by legal
35 mandates of LAHD. The Port is one of only five locations in the state identified in the
36 Coastal Act (Public Resources Code [PRC] Sections 30700 and 30701) for the purposes
37 of international maritime commerce. These mandates identify the Port and its facilities as
38 a primary economic/coastal resource of the state and an essential element of the national
39 maritime industry for promotion of commerce, navigation, fisheries, and operations of a
40 harbor. LAHD is required to give highest priority to safe navigation, shipping and
41 necessary support, and access facilities to accommodate the demands of foreign and
42 domestic waterborne commerce. Based on existing demand and capacity limitations on
43 industrial Port uses and Public Trust purposes, all or most of the industrial facilities
44 adjacent to deep water are needed to accommodate maritime commerce, specifically
45 containerized cargo over the long term.

1 Two alternatives were considered during the preparation of this Draft EIR; 1) The No
2 Project Alternative, which is required under CEQA and 2) a Reduced Project alternative
3 that includes compliance with MOTEMS.

4 This section presents a description of the two alternatives that are carried forward in the
5 detailed impact analysis. A more detailed description of each alternative, is provided in
6 Chapter 6 Analysis of Alternatives.

7 **2.7.1.1 Alternative 1 – No Project**

8 The No Project Alternative required by CEQA represents what would reasonably be
9 expected to occur in the foreseeable future if the proposed Project were not approved.
10 Under this alternative, the existing marine oil terminal would not be compliant with all
11 MOTEMS requirements. Because the facility would not be MOTEMS compliant, the
12 tenant (Shell Oil Company) would cease operation at the Project site at some time in the
13 future. For purposes of the EIR, terminal operations are assumed to grow at an annual
14 rate of two percent and reach approximately 15.5 million barrels and 101 vessel calls
15 annually when the existing terminal lease expires in 2023, at which time operations
16 would cease. Any subsequent use of the site, once identified, would be subject to
17 additional environmental review.

18 **2.7.1.2 Alternative 2 – Reduced Project – One Platform**

19 Under Alternative 2, only Berth 168 would be improved. A vapor control system would
20 be added to allow for the loading of vessels. Berth 169 would become non-operational
21 once construction of Berth 168 is complete. As with the proposed Project, construction
22 would be expected to begin in 2018 and occur over a two-year period. A new 30-year
23 lease would be issued and the terminal would continue to operate as a fully functional
24 marine oil terminal using one berth (Berth 168) through 2048. Similar to the proposed
25 Project, this reduced platform alternative would generally be capable of accommodating
26 the anticipated future throughput (i.e., approximately 25.5 million barrels and 166 vessel
27 calls annually). However, in certain circumstances throughput would be limited, as two
28 berths would be required to accommodate temporary peaks in throughput. This
29 alternative would not be able to accommodate situations where a second berth would add
30 redundancy to allow for undisrupted terminal operation if one berth becomes temporarily
31 inoperable (e.g., during routine maintenance activities that shutdown a berth or a
32 platform). However, to provide a conservative analysis and disclose maximum potential
33 impacts, it is assumed that Alternative 2 will handle the same throughput as the proposed
34 project over the course of the lease term.

35 **2.8 Relationship to Existing Statutes, Plans, 36 Policies, and Other Regulatory Requirements**

37 One of the primary purposes of the LAHD approval processes is to ensure that the
38 proposed Project or alternative is consistent with applicable statutes, plans, policies, and
39 other regulatory requirements. Table 2-2 lists the statutes, plans, policies, and other
40 regulatory requirements, including environmental review and consultation requirements
41 required by federal, state, or local laws, regulations or policies, applicable to the proposed
42 Project and alternatives. Additional analysis of plan consistency is contained in
43 individual resource sections of Chapter 3 Environmental Analysis of this Draft EIR.
44

Table 2-2: Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

| Act/Plan/Policy | Description |
|------------------------------------|---|
| California Coastal Act of 1976 | <p>The California Coastal Act (20 PRC 30700 et seq.) identifies the Port and its facilities as “one of the state’s primary economic and coastal resources and...an essential element of the national maritime industry” (PRC Section 30701). LAHD is responsible for the modernizing and construction of necessary facilities to accommodate deep-draft vessels and to accommodate the demands of foreign and domestic waterborne commerce and other traditional and water-dependent and related facilities in order to preclude the necessity for developing new ports elsewhere in the state (Sections 30007.5 and 30701(b)). The act also establishes that the highest priority for any water or land area use within LAHD’s jurisdiction will be for developments that are completely dependent on such harbor water areas and/or harbor land areas for their operations (Sections 30001.5(d), 30255, and 31260). The act further provides that LAHD should “[g]ive highest priority to the use of existing land space within harbors for port purposes, including, but not limited to, navigational facilities, shipping industries, and necessary support and access facilities” (Section 30708 (c)).</p> <p>Under the California Coastal Act, water areas may be diked, filled, or dredged when consistent with a certified PMP only for specific purposes, including: (1) construction, deepening, widening, lengthening, or maintenance of ship channel approaches, ship channels, turning basins, berthing areas, and facilities that are required for the safety and the accommodation of commerce and vessels to be served by port facilities; and (2) new or expanded facilities or waterfront land for port-related facilities.</p> <p>In accordance with provisions of the California Coastal Act, LAHD has a certified master plan that provides LAHD with coastal development permit authority for actions/developments consistent with that master plan. Inconsistent items, such as new fills in water, would require a master plan amendment through the California Coastal Commission (CCC). The proposed Project would be consistent with the master plan’s provisions.</p> |
| Coastal Zone Management Act (CZMA) | <p>Section 307 of the federal CZMA requires that all federal agencies with activities directly affecting the coastal zone, or with development projects within that zone, comply with the state coastal acts (in this case, the California Coastal Act of 1976) to ensure that those activities or projects are consistent to the maximum extent practicable. The CCC will use this EIR when considering whether to find the proposed Project consistent with the California Coastal Act, and USACE will use that approval as a demonstration that the proposed Project would be in compliance with the CZMA.</p> |
| Port Master Plan (PMP) | <p>In August 2013, the LAHD Board of Harbor Commissioners approved an update to the PMP, which it intends to serve as a long-range plan to establish policies and guidelines for future use of Port lands within the coastal zone, as required under the California Coastal Act. The Project site is in Planning Area 2 of the updated PMP: West Basin and Wilmington. According to the PMP, Planning Area 2 designates the Project site for liquid bulk uses. The proposed Project would be consistent with the updated PMP.</p> |
| California Coastal Plan | <p>Under provisions of the California Coastal Act, the PMP is incorporated into the City’s Local Coastal Program. LAHD has coastal development permit authority for activities throughout the Port. Therefore, if the proposed Project would be consistent with the PMP, the proposed Project would also be considered consistent with the Local Coastal Program.</p> |

Table 2-2: Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

| Act/Plan/Policy | Description |
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| California Tidelands Trust Act, 1911 | Submerged lands and tidelands within the Port, which are under the Common Law Public Trust, were legislatively granted to the City pursuant to Chapter 656, Statutes of 1911, as amended. Those properties are held in trust by the City and administered by LAHD to promote and develop commerce, navigation, fisheries, and other uses of statewide interest and benefit, including commercial, industrial, and transportation uses; public buildings and public recreational facilities; wildlife habitat; and open space. LAHD would fund the proposed Project with trust revenues. All property and improvements included in the proposed Project would be dedicated to maritime-related uses; therefore, the proposed Project would be consistent with the trust. |
| San Pedro Bay Ports Clean Air Action Plan (CAAP) | LAHD, in conjunction with the Port of Long Beach and with guidance from South Coast Air Quality Management District (SCAQMD), CARB, and U.S. Environmental Protection Agency, has developed the CAAP, which was approved by the Los Angeles and Long Beach Boards of Harbor Commissioners on November 20, 2006. The CAAP focuses on reducing diesel PM, NOX, and SOX, with two main goals: (1) to reduce Port-related air emissions in the interest of public health; and (2) to disconnect cargo growth from emissions increases. The 2010 CAAP Update (adopted by the Board of Harbor Commissioners on November 22, 2010). includes near-term measures implemented largely through the CEQA/NEPA process and new leases at both ports, and includes new, far-reaching goals for curbing port-related air pollution over the next decade. The proposed Project includes air quality control measures outlined in the 2010 CAAP Update, both as mitigation that would be imposed via a lease amendment and as standard measures that would be implemented through agreements with other agencies and business entities, and LAHD contracting policies. |
| Port Strategic Plan Update | <p>The updated Port of Los Angeles Strategic Plan 2012–2017, 2014 Update (LAHD, 2014) serves to align the broad spectrum of activities of the Port with a focused vision - embracing a new economic era and remaining the leading container port in the nation. The Plan provides the high-level areas of focus, with which divisions and staff align their activities, and serves as the roadmap to ensure that the Port remains competitive over the coming years, aptly and proactively meeting the needs of a new era of international trade. The updated Strategic Plan for the Port includes an objective to facilitate an efficient, secure, and environmentally sustainable supply chain. To this effect, the Strategic Plan update includes Initiative 2 to strengthen Port security. Under Initiative 2, the Port would implement security and public safety strategies that support goods movement and mitigate risk. Metrics for this Initiative include:</p> <ul style="list-style-type: none"> a. Number of vessel and terminal safety inspections b. Number and effectiveness of joint preparedness exercises <p>The modern goods movement environment requires that ports be prepared for a variety of incidents, from natural disasters to potential acts of terror. The Harbor Department has committed to the following:</p> |

Table 2-2: Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

| Act/Plan/Policy | Description |
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| | <ul style="list-style-type: none"> • Reduce risks of interruptions to goods movement through regular inspections of facilities. • Prevent incidents and improve responses to incidents by holding joint preparedness exercises with supply chain partners for a variety of potential incidents (e.g., active shooter, hazmat release, seismic events, etc.). • Track the effectiveness of these joint exercises in order to measure the success of the strategies – to be better prepared for an actual incident. |
| Port Risk Management Plan (RMP) | The Port RMP, an amendment to the PMP, was adopted in 1983, in accordance with requirements of CCC. The purpose of the Port RMP is to provide siting criteria relative to vulnerable resources and the handling and storage of potentially hazardous cargo such as crude oil, petroleum products, and chemicals. The plan provides guidance for future development of the Port to minimize or eliminate the hazards to vulnerable resources from accidental releases (LAHD, 1983). As part of the PMP Update in 2013, the Port updated and incorporated the RMP as Chapter 8 of the PMP. |
| Port of Los Angeles and Long Beach, Water Resources Action Plan (WRAP) | The WRAP is a plan to protect and improve water and sediment quality in the San Pedro Bay. The WRAP establishes programs and water quality improvement measures necessary to achieve the goals and targets established by the Regional Water Quality Control Board (RWQCB). The plan targets four basic types of potential sources of pollutants to harbor waters: Land Use Discharges, On-Water Discharges, Sediments, and Watershed Discharges. The proposed Project would include clean-up dredging and, if the material were contaminated, would help improve sediment quality in the bay by removing and properly treating or disposing of such material. |
| City of Los Angeles: Port of Los Angeles Plan | The Port of Los Angeles Plan is one of 35 community plans that make up the General Plan of the City of Los Angeles (City of Los Angeles, 1982). This plan provides a 20-year official guide to the continued development and operation of the Port. It is designed to be consistent with the PMP discussed above. The proposed Project would be consistent with allowable land uses and the goals and policies of the General Plan—Port of Los Angeles Plan. |
| City of Los Angeles: San Pedro Community Plan | The San Pedro Community Plan (City of Los Angeles, 1999) serves as a basis for future development of the community. It is also the land use plan portion of the City's Local Coastal Program for San Pedro. The Port is not part of the San Pedro Community Plan area. However, the San Pedro Community Plan does make recommendations regarding the Port, particularly for areas adjacent to commercial and residential areas of San Pedro. The proposed Project would be consistent with these recommendations, as LAHD has taken into consideration the residential and commercial communities of San Pedro during proposed Project development through the scoping process. |
| City of Los Angeles: Wilmington – Harbor City Community Plan | The Wilmington – Harbor City Community Plan (City of Los Angeles, 1999) serves as a basis for future development of the community. It is also the land use plan portion of the City's Local Coastal Program for Wilmington. Although the Port is not part of the Wilmington – Harbor City Community Plan area, the Wilmington – Harbor City Community Plan does make recommendations regarding the Port, particularly for areas adjacent to the Wilmington community. The proposed Project would be consistent with the Community Plan, as LAHD has taken into consideration the Wilmington community during proposed Project development, including through the scoping process. |

Table 2-2: Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

| Act/Plan/Policy | Description |
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| City of Los Angeles General Plan: Air Quality Element | The City of Los Angeles General Plan has an Air Quality Element (City of Los Angeles, 1992) that contains general goals, objectives, and policies related to improving air quality in the region. Policy 5.1.1 relates directly to the Port and requires improvements in harbor operations and facilities to reduce emissions. LAHD is actively planning for and implementing such improvements. The proposed Project and alternatives would be consistent with the Air Quality Element in that they would incorporate CAAP measures to reduce air quality impacts. |
| Water Quality Control Plan: Los Angeles River Basin | The Water Quality Control Plan for the Los Angeles River Basin (Region 4) (Basin Plan) was adopted by the Los Angeles RWQCB in 1978 and updated in 1994 (RWQCB, 1994), with amendments through October 2014. The proposed Project and alternatives would not affect waste discharges or changes to beneficial uses, and would be consistent with the Basin Plan. |
| Water Quality Control Policy: Enclosed Bays and Estuaries of California | In 1974, the State Water Resources Control Board (SWRCB) adopted a water quality control policy that provides principles and guidelines to prevent degradation and to protect the beneficial uses of waters of enclosed bays and estuaries (SWRCB, 1974). Los Angeles Harbor is considered to be an enclosed bay under this policy. The policy addresses activities such as the discharge of effluent, thermal wastes, radiological waste, dredge materials, and other materials that adversely affect beneficial uses of the bay and estuarine waters. Among other requirements, waste discharge requirements developed by the RWQCB must be consistent with this policy. The proposed Project would be constructed and operated in conformance with objectives of the water quality control policy through controls on construction activities (e.g., dredging) and on operations (stormwater and other discharges). |
| Air Quality Management Plan | <p>The federal Clean Air Act (CAA) and its subsequent amendments establish the National Ambient Air Quality Standards (NAAQS) and delegate the enforcement of these standards to the states. In areas that exceed the NAAQS, the CAA requires states to prepare a State Implementation Plan that details how the NAAQS would be met within mandated timeframes. The CAA identifies emission reduction goals and compliance dates based on the severity of the ambient air quality standard violation within an area. The California Clean Air Act (CCAA) outlines a program to attain the California Ambient Air Quality Standards (CAAQS) for ozone, nitrogen dioxide, sulfur dioxide, and carbon monoxide by the earliest practical date. The Lewis Air Quality Act of 1976 established the SCAQMD, created SCAQMD's jurisdiction over the four-county South Coast Air Basin, and mandated a planning process requiring preparation of an air quality management plan (AQMP). The Final 2012 AQMP was adopted by the AQMD Governing Board on December 7, 2012 (SCAQMD, 2013).</p> <p>In addition, the AQMD Governing Board adopted a Clean Air Plan Amendment to include control measure IND-01 in the Final 2012 AQMP at the February 1, 2013 Governing Board meeting. The AQMD asserts that Control Measure IND-01 would ensure that the Ports of Los Angeles and Long Beach meet their voluntary commitments to reducing air pollution from port-related sources. The AQMD states that this represents a backstop measure to enforce emission reduction goals that the Ports voluntarily adopted in the Clean Air Action Plan by 2015. The AQMD asserts that, under control measure IND-01, any additional port emission reductions must be technically feasible, cost-effective, and within the legal authority of the Ports.</p> |

Table 2-2: Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

| Act/Plan/Policy | Description |
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| | <p>LAHD provided cargo forecasts that were used by the Southern California Association of Governments (SCAG) to simulate future growth and emission scenarios in the 2012 AQMP. These cargo forecasts include the operational activities associated with the handling of liquid bulk cargo. As a result, activities associated with the proposed Project would not exceed the future emission growth projections in the 2012 AQMP.</p> <p>The most recent 2016 AQMP was adopted and submitted to the EPA in March 2017. The 2016 AQMP focuses on a comprehensive and integrated plan primarily focused on addressing the ozone standards. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Regional Transportation Plan/Sustainable Communities Strategy, and updated emission inventory methodologies for various source categories.</p> <p>Construction and operational activities associated with the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan.</p> |
| California Air Resources Board: Emission Reduction Plan for Ports and Goods Movement | CARB approved the Emission Reduction Plan for Ports and Goods Movement (CARB, 2006) on April 20, 2006, and a Goods Movement Action Plan in January 2007. Many of the proposed air quality mitigation measures in this Draft EIR were developed as part of the CAAP (Port of Los Angeles and Port of Long Beach, 2006). Therefore, LAHD's air quality plan complies with CARB's goals and meets and/or exceeds all reduction strategies. |
| AB 32 | On September 27, 2006, the Governor of California signed AB 32, the Global Warming Solutions Act. AB 32 caps California's greenhouse gas (GHG) emissions at 1990 levels by 2020. This legislation represents the first enforceable statewide program in the United States to cap all GHG emissions from major industries that includes penalties for noncompliance. It requires CARB to establish a program for statewide GHG emissions reporting and to monitor and enforce compliance with this program. The proposed Project or an alternative would be required to comply with Port requirements, such as the CAAP, to reduce air emissions. The proposed Project would thereby implement energy and emission reduction requirements in compliance with GHG emission reduction strategies and would thus be in compliance with AB 32. |
| Southern California Association of Governments (SCAG) Regional Plans | SCAG is responsible for developing regional plans for transportation management, growth, and land use, as well as developing the growth factors used in forecasting air emissions within the South Coast Air Basin. SCAG has developed a Growth Management Plan, a Regional Housing Needs Assessment, a Regional Mobility Plan, and, in cooperation with the SCAQMD, the AQMPs. The proposed Project would not generate a measurable change in population distribution, nor would it result in a change to housing demand on a regional or local scale. It would fit within population and housing projections for the local area and region as a whole and thus would be consistent with these plans. |

Table 2-2: Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

| Act/Plan/Policy | Description |
|-------------------------------------|--|
| Congestion Management Program (CMP) | The CMP is a state-mandated program intended as the analytical basis for transportation decisions made through the State Transportation Improvement Program process (Los Angeles County Metropolitan Transportation Authority, 2010). The CMP was developed to: (1) link land use, transportation, and air quality decisions; (2) develop a partnership among transportation decision makers on devising appropriate transportation solutions that include all modes of travel; and (3) propose transportation projects that are eligible to compete for state gas tax funds. The CMP includes a Land Use Analysis Program, which requires local jurisdictions to analyze the impacts of land use decisions on the regional transportation system. For development projects, an EIR is required based on local determination and must incorporate a transportation impact analysis into the EIR. The Revised NOP determined that potential traffic impacts for the proposed Project would not significantly affect CMP highways, and thus the proposed Project is consistent with the CMP. |
| Water Resource Regulations | The Rivers and Harbors Act of 1899, Section 10 (33 United States Code [USC] 403); federal Water Pollution Control Act (as amended by the Clean Water Act of 1977), Section 401 and 402 (33 USC 1341 and 1342); ² Marine Protection, Research, and Sanctuaries Act of 1972, Section 103 (33 USC 1413); California Hazardous Waste Control Act; State Water Resources Control Board, Enclosed Bays and Estuaries Plan; and Water Quality Control Plan for the Los Angeles River Basin (Region 4B), adopted by the Regional Water Quality Control Board, Los Angeles Region. The Revised NOP evaluated potential impacts to water quality, including the federal water resources regulations associated with the proposed Project; therefore, the proposed Project or an alternative would be consistent with water resource laws, regulations, and plans. |
| Air Quality Regulations | CAA, Title 40 CFR Parts 50 and 51 as amended; Titles 40 CFR Part 51.24 and 40 CFR Part 52.21; CCAA; AQMP of the City of Los Angeles General Plan, Air Quality Element; and SCAQMD Regulations X111 and XV, New Source Review and Rules 212, 401, 403, and 431.2. Refer to Section 3.1, Air Quality and Meteorology, of this Draft EIR for discussion of applicable air quality laws, regulations, and plans. |
| Biological Resources Protection | Endangered Species Act of 1973, as amended; Marine Mammal Protection Act; Migratory Bird Conservation Act; Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972; California Endangered Species Act; Section 302 of the Marine Protection, Research, and Sanctuaries Act of 1972; U.S. Fish and Wildlife Act of 1956 (16 USC 742a <i>et seq.</i>); Fish and Wildlife Coordination Act (16 USC 661 <i>et seq.</i>); Magnuson-Stevens Fishery Conservation and Management Act, as amended; Executive Order 13112, Invasive Species; Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (P.L 01-646), as amended by the National Invasive Species Act of 1996; Ballast Water Management for Control of Nonindigenous Species Act of 1999 (PRC Sections 71200–71271); and federal Water Pollution Control Act (as amended by the Clean Water Act of 1977). The proposed Project, as mitigated, is expected to comply with the applicable laws and regulations protecting biological and marine resources. |

² The proposed Project does not involve a discharge of dredged or fill material as defined under USACE's Clean Water Act, section 404 implementing regulations (33 CFR 323).

Table 2-2: Applicable Statutes, Plans, Policies, and Other Regulatory Requirements

| Act/Plan/Policy | Description |
|-------------------------------|--|
| Cultural Resources Protection | Section 106 of the National Historic Preservation Act of 1966, as amended, and Corps implementing regulations (36 CFR 800; 33 CFR 325, Appendix C); the Archaeological and Historical Preservation Act and Executive Order 11593 "Protection and Enhancement of the Cultural Environment." The Revised NOP/IS (Appendix A of this Draft EIR) determined that the proposed Project would not affect cultural resources listed or eligible for listing on the National Register of Historic Places. In addition, a Letter of Permission was issued by the USACE in April 2014 for the portion of the proposed Project within the USACE Permit Area. Therefore, compliance with federal laws, regulations, and other guidelines has occurred. |

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