Section 3.10
Marine Transportation

3.10.1 Introduction

This section describes existing marine transportation within the Port of Los Angeles (Port) and the West Basin and potential impacts on marine transportation safety associated with implementation of the proposed Project.

3.10.2 Environmental Setting

The Port is located in San Pedro Bay and is protected from Pacific Ocean surge conditions by the San Pedro Middle and Long Beach breakwaters (Figure 3.10-1). The openings between these breakwaters, known as Angels Gate and Queens Gate, provide entry to the Ports of Los Angeles and Long Beach, respectively. Vessel traffic channels have been established in the Harbor, and numerous aids to navigation have been developed.

Numerous types of vessels, including fishing boats, pleasure vessels, passenger-carrying vessels, tankers, auto carriers, container vessels, dry bulk carriers, and barges, call or reside in the Port. When approaching and leaving the Harbor, commercial vessels follow vessel traffic lanes established by the United States Coast Guard (USCG). Designated traffic lanes converge at the "Precautionary Area" (Figure 3.10-1).

3.10.2.1 Vessel Transportation Safety

Several measures are in place to ensure the safety of vessel navigation in the Harbor area. The Harbor utilizes a Vessel Traffic Service (VTS) operated jointly by the USCG Captain of the Port (COTP) and the Marine Exchange of Southern California. Using shore-based radar, the VTS monitors traffic in the approach corridor traffic lanes to the Harbor and the Precautionary Zone to ensure that the total number of vessels transiting the Port does not exceed the design capacity of the federal channel limits. Container vessels are required to report their position and destination to the VTS at certain times and locations and may also request information about traffic that could be encountered in the Precautionary Area.

The Ports of Los Angeles and Long Beach do not require the use of a Port Pilot (a local master with a small vessel who can be retained to help guide large commercial craft) for all vessels that transit in or out of the San Pedro Bay area and adjacent waterways. However, use of a Port Pilot is required for all vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot on board. The number of large commercial vessels transiting without Port Pilot services is negligible. The Los Angeles and Long Beach pilot services and the Marine Exchange all operate radar systems to monitor vessel traffic in the Harbor, and information is available to all vessels upon request. The pilot services also manage the use of anchorages under an agreement with the USCG. A communication system links key operational centers: USCG COTP, VTS, Los Angeles Pilot Station, Long Beach Pilot Station, and Port of Long Beach Security. This system is used to exchange vessel-movement information and safety notices among the various organizations.

The USCG "Rules of the Road" apply to all marine vessels, regardless of size. To minimize the potential for accidents, all marine vessels in the Port of Los Angeles are required to follow vessel safety policies and regulations contained in the International Rules and the Inland Rules.

For the open seas, the International Rules apply and were ratified at the Convention on the International Regulations for Preventing Collisions at Sea, 1972. The International Rules apply to all vessels of nations that ratified the treaty, in addition to the United Nations. The International Rules include 38 numbered rules organized into five parts: A – General, B – Steering and Sailing Rules, C – Lights and Shapes, D – Sound and Light Signals, and E – Exemptions.

Efforts to unify and update various inland navigation rules culminated in 1980 with the enactment of the Inland Navigation Rules Act. The Inland Rules were established under the authorization of International Rule 1(b) to apply to all inland waters of the United States. The Inland Rules numbered 1 through 38 closely match, in some cases exactly, the International Rules. All marine vessels in the Port are required to follow these vessel safety policies and regulations.

The measures enacted to ensure safe vessel navigation are regulated by various agencies and organizations, as described below.

Marine Exchange of Southern California. The Marine Exchange is a voluntary, nonprofit organization affiliated with the Los Angeles Chamber of Commerce that was created to enhance navigation safety in the Precautionary Area and Harbor area of the Ports. The services provided consist of a coordinating office, specific reporting points, and very high frequency-frequency modulation (VHF-FM) radio communications used with participating vessels. Vessel traffic channels and numerous aids to navigation (e.g., operating rules and regulations) have been established in the Port. The Marine Exchange also operates the Physical Oceanographic Real Time System (PORTS) as a service to organizations making operational decisions based on oceanographic and meteorological conditions in the vicinity of the Port. The PORTS collects and disseminates accurate real-time information on tides, visibility, winds, currents, and sea swell to maritime users to assist in the safe and efficient transit of vessels in the Port area.

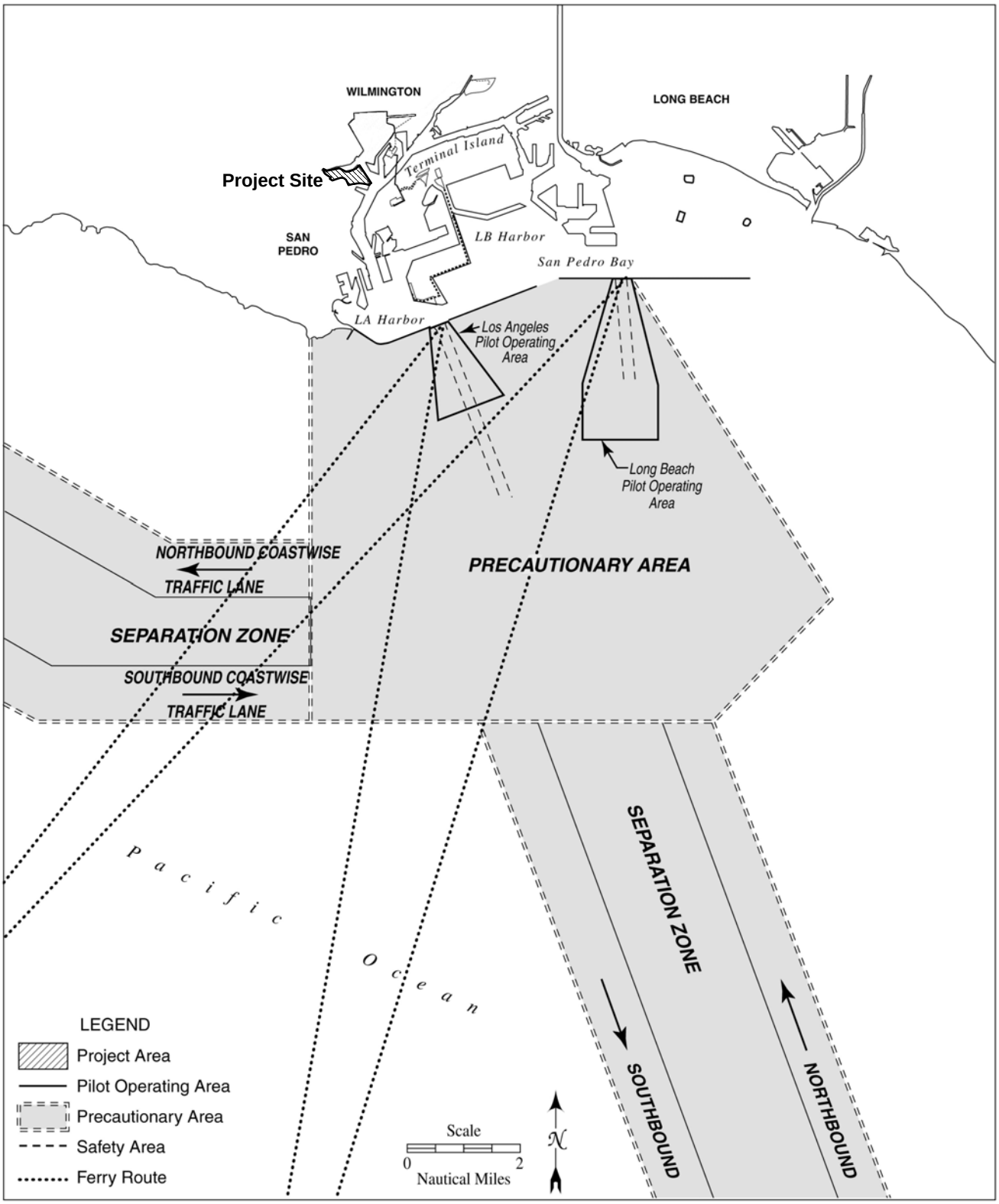

Figure 3.10-1
Vessel Navigation Safety Areas at Port of Los Angeles and Port of Long Beach
Berth 97-109 Container Terminal Project EIS/EIR

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Vessel Traffic Service. Vessel Traffic Service (VTS) is jointly operated by the Marine Exchange and the USCG. VTS monitors traffic with shore-based radar in both the main approach and departure lanes, including the Precautionary Area, as well as internal movement inside the Harbor. VTS uses radar, radio, and visual inputs to collect real-time vessel traffic information and broadcasts traffic advisories to assist mariners. In addition, container vessels are required to report their positions and destinations to VTS at certain times and locations. They may also request information about traffic they could encounter in the Precautionary Area. Further, VTS implements the COTP's uniform procedures, including advance notification to vessel operators, vessel traffic managers, and Port Pilots identifying the locations of dredges, derrick barges, and any associated operational procedures or restrictions (e.g., one-way traffic), to ensure safe transit of vessels in and to and from the proposed Project area. In addition, a communication system links USCG COTP, VTS, Los Angeles Pilot Station, Long Beach Pilot Station, and Port of Long Beach Security. This system is used to exchange vessel movement information and safety notices among the various organizations.

Traffic Separation Schemes. A Traffic Separation Scheme (TSS) is an internationally recognized vessel routing designation, which separates opposing flows of vessel traffic into lanes, including a zone between lanes where transit is to be avoided. TSSs have been designated to help direct offshore vessel traffic along portions of the California coastline, such as the Santa Barbara Channel. Vessels are not required to use a TSS, but failure to do so, if one is available, would be a major factor for determining liability in the event of a collision. TSS designations are proposed by the USCG, but they must be approved by the International Maritime Organization (IMO), which is part of the United Nations.

Safety Fairways. Offshore waters in high traffic areas are designated as safety fairways, which means that placement of surface structures, such as oil platforms, is prohibited to ensure safer navigation. USACE is prohibited from issuing permits for surface structures (e.g., oil platforms) in safety fairways, which are frequently located between a port and the entry into a TSS.

Precautionary and Regulated Navigation Areas. A Precautionary Area is designated in congested areas near the Harbor entrances. The Precautionary Area enables Harbor officials to set speed limits or to establish other safety precautions for ships entering or departing the Harbor. A regulated navigation area (RNA) is a water area within a defined boundary for which federal regulations have been established under 33CFR165.1109 for vessels navigating in this area. In the Harbor, RNA boundaries match the designated Precautionary Area. For example, 33CFR 165.1152 identifies portions of the Precautionary Area as RNA.

The Precautionary Area for the Port is defined by a line that extends south from Point Fermin approximately 7 nautical miles (nm), then due east approximately 7 nm, then northeast for approximately 3 nm, and then back northwest (see Figure 3.10-1). Ships are required to cruise at speeds of 12 knots or less upon entering the Precautionary Area. A minimum vessel separation of 0.25 nm is also required in the Precautionary Area. The Marine Exchange of Southern California monitors vessel traffic within the Precautionary Area.

Pilotage. Use of a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways is required for all vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot on board (some U.S.-flag vessels have a trained and licensed pilot onboard and, thus, are not required to use a Port Pilot while navigating through the Port). Los Angeles Harbor Pilots provide pilotage to the Ports and receive special training that is regulated by the Harbor Safety Committee. Pilots typically board the vessels at the Angel's Gate entrance, then direct the vessels to their destinations. Pilots normally leave the vessels after docking and reboard the vessels to pilot them back to sea or to other destinations within the Port. In addition, radar systems are also operated by Los Angeles Harbor Pilots to monitor vessel traffic in the Harbor area. This information is available to all vessels upon request. The pilot service also manages the use of anchorages under an agreement with the USCG.

The Port also enforces numerous federal navigation regulations (e.g., Port Tariffs) in the Harbor. Specifically, larger commercial vessels (i.e., greater than 300 gross tons) are required to use a federally licensed pilot when navigating inside the breakwater. In most circumstances, vessels employ the services of a federally licensed local pilot from the Los Angeles Harbor Pilots. When a local pilot is not used, masters must have a local federal pilot license and receive approval from the USCG COTP prior to entering or departing the Port. Port Tariffs also require vessels to notify the affected pilot station(s) in situations when a pilot is not needed before entering, leaving, shifting, or moving between the Ports.

Tug Escort/Assist for Tank Vessels. "Tug Escort" refers to the stationing of tugs in proximity to a vessel as it transits into port to provide immediate assistance should a steering or propulsion failure develop. "Tug Assist" refers to the positioning of tugs alongside a vessel and applying force to assist in making turns, reducing speed, providing propulsion, and docking. Commercial container vessels, as well as most of the ocean-going vessels, are required to have tug assistance in the Harbor (Harbor Safety Committee, 2004). However, some vessels have internal "tugs" (typically bow and stern thrusters) that allow the vessel to propel without engaging the main engines, thus can accomplish maneuvers with the same precision as a tug-assisted vessel. These ships are not required to have external tug assistance. No vessels using internal tugs would be associated with the proposed Project.

Physical Oceanographic Real Time System. In partnership with NOAA, National Ocean Service (NOS), California Office of Spill Prevention and Response (OSPR), USGS, and some businesses operating in the Ports, the Marine Exchange operates PORTS as a service to those making operational decisions based on oceanographic and meteorological conditions in the vicinity of the Port. PORTS is a system of environmental sensors and supporting telemetry equipment that gathers and disseminates accurate real-time information on tides, visibility, winds, currents, and sea swell to maritime users to assist in the safe and efficient transit of vessels in the Port area. Locally, PORTS is designed to provide crucial information in real time to mariners, oil spill response teams, managers of coastal resources, and others about Harbor water levels, currents, salinity, and winds.

The instruments that collect the PORTS information are deployed to provide data at critical locations and to allow "now-casting" and forecasting using a mathematical model of the oceanographic processes of the Harbor. Data from the sensors are fed into a central collection point. Raw data from the sensors are integrated and synthesized into information and analysis products, including graphical displays of PORTS data.

The Port of Los Angeles and Port of Long Beach Harbor Safety Plan (HSP) contains additional procedures for vessels operating in the Port vicinity. The vessel operating procedures stipulated in the HSP are considered Good Marine Practice. Some of the procedures are federal, state, or local regulations, while other guidelines are nonregulatory "Standards of Care." Port Tariffs also contain requirements for marine vessel activity within Port jurisdiction. Another important safety measure is the issuance of the weekly Local Notice to Mariners by the USCG. These notices list various activities that could pose a hazard to mariners in the Port

3.10.2.2 Navigational Hazards

Port Pilots can easily identify fixed navigational hazards in the Ports, including breakwaters protecting the outer Harbor, anchorage areas, and various wharfs and landmasses that compose the Harbor complex. These hazards are easily visible on radar and are currently illuminated. Four bridges cross the navigation channels of both Ports. All bridges have restricted vertical clearances, and two have restricted horizontal clearances as well.

Vessels that are waiting to enter the Harbor and moor at a berth can anchor at the anchorages outside and inside the breakwaters. Vessels do not require tug assistance to anchor outside the breakwater. The Port currently does not have any available anchorages inside the breakwater. For safety reasons, VTS will not assign an anchorage in the first row of sites closest to the breakwater to vessels longer than 656 feet (200 m).

Vessels are required by law to report failures of navigational equipment, propulsion, steering, or other vital systems to the USCG via the COTP office or the COTP representative at VTS as soon as possible. According to the VTS, approximately 1 in 100 vessels calling at the Ports of Los Angeles and Long Beach experiences a mechanical failure during their inbound or outbound transit.

Vessel Accidents. Although marine safety is thoroughly regulated and managed, accidents can occur during marine navigation. Marine vessel accidents include vessel collisions (between two moving vessels); allisions (between a moving vessel and a stationary object, including another vessel), and vessel groundings. The number of vessel allisions, collisions, and groundings (ACGs) in the Harbor has remained fairly constant between 1996 and 2003 (Table 3.10-1). Between 1996 and 2003, there were, on average, seven ACG incidents per year (U.S. Naval Academy, 1999). While there is no reliable data on the level of recreational boating incidents in the Harbor over this period, the level of commercial traffic transits has remained fairly constant (± 2 percent). During this time, there has also been a large amount of construction and channel deepening within the Ports. Each of these accidents was subject to USCG marine casualty investigation, and the subsequent actions taken were targeted at preventing future occurrences.

According to the USCG vessels accidents database, the Harbor area has one of the lowest accident rates among all U.S. ports, with a 0.0038 percent probability of a vessel experiencing an ACG during a single transit, as compared to the average 0.025 percent ACG probability for all U.S. ports (U.S. Naval Academy, 1999).

Table 3.10-1. Allisions, Collisions, and Groundings – Port of Los Angeles/Port of Long Beach (1996-2003)

Year	ACG Incidents			Total
	Allisions	Collisions	Groundings	
1996	2	4	1	7
1997	1	3	2	6
1998	1	2	3	6
1999	3	4	2	9
2000	3	2	1	6
2001	4	1	0	5
2002	6	5	0	11
2003	4	2	2	8

Source: Harbor Safety Committee, 2004; U.S. Naval Academy, 1999

Note: These commercial vessel accidents meet a reportable level defined in 46 CFR 4.05, but do not include commercial fishing vessel or recreational boating incidents.

Close Quarters. To avoid vessels passing too close together, the VTS documents, reports, and takes action on "close-quarters" situations. VTS close-quarters situations are described as vessels passing an object or another vessel closer than 0.25 nm, or 500 yards. These incidents usually occur in the Precautionary Area. No reliable data are available for close-quarters incidents outside the VTS area. Normal action taken in response to close-quarters situations includes initiating informal USCG investigation, sending Letters of Concern to owners and operators, having the involved vessel master visit VTS and review the incident, and USCG enforcement boardings. A 6-year history of the number of close-quarters situations is presented in Table 3.10-2. Given the relatively steady number of commercial transits over the past 5 years, a decreasing trend in close-quarters incidents is discernable (Harbor Safety Committee, 2004).

Table 3.10-2. Number of VTS-Recorded Close-Quarters Incidents, 1998-2003

Year	No. of Close Quarters
1998	9
1999	5
2000	1
2001	2
2002	6
2003	4

Source: Harbor Safety Committee, 2004

3.10.2.3 Factors Affecting Vessel Traffic Safety

This section summarizes environmental conditions that could affect vessel safety in the Harbor area.

Fog. Fog is a well-known weather condition in Southern California. Harbor area fog occurs most frequently in April and from September through January, when visibility over the San Pedro Bay is below 0.5 mile for 7 to 10 days per month. Fog at the Port of Los Angeles is mostly a land (radiation) type fog that drifts offshore and worsens in the late night and early morning. Smoke from nearby industrial areas often adds to its thickness and persistence. Along the shore, fog drops visibility to less than 0.5 mile on 3 to 8 days per month from August through April and is generally at its worst in December (Harbor Safety Committee, 2004).

Winds. Wind conditions vary widely, particularly in fall and winter. Winds can be strongest when the Santa Ana winds (prevailing winds from the northeast occurring from October through March) blow. The Santa Ana winds, though infrequent, may be violent. A Santa Ana condition occurs when a strong high-pressure system resides over the plateau region of Nevada and Utah and generates a northeasterly to easterly flow over Southern California. Aside from weather forecasts, one gets little warning of a Santa Ana wind onset. Good visibility and unusually low humidity often prevail for some hours before it arrives. Shortly before arriving on the coast, the Santa Ana may appear as an approaching dark-brown dust cloud. This positive indication often provides a 10- to 30-minute warning. The Santa Ana wind may come at any time of day and can be reinforced by an early morning land breeze or weakened by an afternoon sea breeze (Harbor Safety Committee, 2004).

Winter storms produce strong winds over San Pedro Bay, particularly southwesterly through northwesterly winds. Winds of 17 knots or greater occur about 1 to 2 percent of the time from November through May. Southwesterly through westerly winds begin to prevail in the spring and last into early fall (Harbor Safety Committee, 2004).

Tides. The mean range of tide is 3.8 feet for the Port of Los Angeles. The diurnal range is about 5.4 feet, and a range of 9 feet may occur at maximum tide.

Currents. The tidal currents follow the axes of the channels and rarely exceed 1 knot. The Harbor area is subject to seiche (i.e., waves that surge back and forth in an enclosed basin as a result of earthquakes) and surge, with the most persistent and conspicuous oscillation having about a 1-hour period. Near Reservation Point, the prominent hourly surge causes velocity variations as great as 1 knot. These variations often overcome the lesser tidal current, so that the current ebbs and flows at 0.5-hour intervals. The more restricted channel usually causes the surge through the Back Channel to reach a greater velocity at the east end of Terminal Island, rather than west of Reservation Point. In the Back Channel, hourly variation may be 1.5 knots or more. At times, the hourly surge, together with shorter, irregular oscillations, causes a very rapid change in water height and current direction/velocity, which may endanger vessels moored at the piers (Harbor Safety Committee, 2004).

USACE ship navigation studies indicate that in the Port channels, current magnitudes are essentially a negligible one-third knot or less. Maximum current velocity in the Angel's Gate area is less than 1 knot. These current magnitudes, determined during a simulation study, are depth-averaged values over three layers. According to Jacobsen Pilot Service, the Long Beach Queen's Gate has deeper water than Angel's Gate and has more open

waterways just inside the breakwater. The pilots have never experienced a current greater than 1 knot in this area (Harbor Safety Committee, 2004).

Water Depths. USACE maintains the Federal Channels in the Port of Los Angeles and the Port of Long Beach. Table 3.10-3 lists water depths in the Harbor. Some of the channels have been dredged deeper than the proposed Project depth required by the Port of Los Angeles and are maintained by the Port of Los Angeles.

Table 3.10-3. Water Depths within the Port of Los Angeles

Channel/Basin	Depth – MLLW ft (m)
Main Channel	-53 (-16.2)
Turning Basin	-53 (-16.2)
West Basin	-53 (-16.2)
East Basin	-53 (-16.2)
North Channel (Pier 300/400)	-53 (-16.2)
North Turning Basin	-81 (-24.7)
Approach and Entrance Channels	-81 (-24.7)

Source: Harbor Safety Committee, 2004

3.10.2.4 Vessel Traffic

A total of 2,850 vessels called at the Port in 2004, and vessel traffic to the Port has remained relatively constant over the past few years (Table 3.10-4). The increase in cargo volumes in recent years has been accommodated primarily by larger vessels, rather than additional vessels.

Table 3.10-4. Vessel Calls at the Port of Los Angeles

Year	Vessel Calls
2004	2,850
2003	2,660
2002	2,526
2001	2,899
2000	3,060
1999	2,630
1998	2,569
1997	2,786

Source: LAHD, 2004

Commercial vessel traffic in the West Basin consists mostly of container shipping, with a few tankers and some other marine traffic. Approximately 6 vessels transit the West Basin per day to support China Shipping container terminal operations at Berth 100, TraPac container terminal operations at Berths 136-147, Yang Ming container terminal operations at Berth 121, and Kinder Morgan liquid bulk operations at Berths 118-120. During 2003, construction of Phase I of the China Shipping Terminal was completed but was not operational, and no ships docked at Berth 100. Phase I became operational in the summer of 2004.

During the 2001 CEQA baseline year, approximately 177 commercial vessels (container ships) called at Berths 121-131 (see Table 3.10-5). However, there were no ship calls at Berth 100 because China Shipping container ships berthed at the Yang Ming Terminal wharfs.

Table 3.10-5. 2001 Vessel Calls at Berths 97-109, 118-120, and 121-131

Berths	Vessel Type	Number of Vessel Calls
97-109	Container Ship	0
121-131	Container Ship	177
118-120	Tankers	155
TOTAL		332

Source: LAHD, 2005

The previously approved Los Angeles Harbor Channel Deepening Project consists of deepening the main navigational channels and connected basins from -45 feet mean lower-low water (MLLW) to -53 feet MLLW (USACE and LAHD, 2000). The Channel Deepening Project would occur within the existing federal channel limits of the Port (Main Channel, the West Basin, East Basin, and Cerritos Channel) and five berthing areas (Berths 121-131, 136-139, 206-209, 212-221, and 226-236) to accommodate modern container ships and is expected to be completed by December 2007.

The existing depth for connected Harbor basins (Turning Basin, the West Basin, and East Basin) is -53 feet MLLW. The channel bank clearances are defined as the clearances between moving vessels and vessels berthed alongside the Los Angeles Main Channel and the East Basin Channel.

3.10.3 Applicable Regulations

Many laws and regulations are in place to regulate marine terminals, vessels calling at marine terminals, and emergency response/contingency planning. Responsibilities for enforcing or executing these laws and regulations are governed by various federal and local agencies, as described below.

Federal Agencies

A number of federal laws regulate marine terminals and vessels. In general, these laws address design and construction standards, operational standards, and spill prevention and cleanup. Regulations to implement these laws are contained primarily in Titles 33 (Navigation and Navigable Waters), 40 (Protection of Environment), and 46 (Shipping) of the *Code of Federal Regulations*.

Since 1789, the federal government has authorized navigation channel improvement projects; the General Survey Act of 1824 established the role of USACE as the agency responsible for the navigation system. Since then, ports have worked in partnership with USACE to maintain waterside access to port facilities.

U.S. Coast Guard

The USCG, through Title 33 (Navigation and Navigable Waters) and Title 46 (Shipping) of the CFR, is the federal agency responsible for vessel inspection, marine terminal operations safety, coordination of federal responses to marine emergencies, enforcement of marine pollution statutes, marine safety (navigation aids), and operation of the National Response Center (NRC) for spill response. Current USCG regulations require a federally licensed pilot aboard every tanker vessel mooring and unmooring at offshore marine terminals. At the request of the USCG, the Los Angeles Pilots and Jacobsen Pilots have agreed to ensure continuous service of a licensed pilot for vessels moving between the Port of Los Angeles and the Port of Long Beach outside the breakwater.

Department of Defense

The Department of Defense (DoD), through USACE, is responsible for reviewing all aspects of a project and spill response activities that could affect navigation. USACE has specialized equipment and personnel for maintaining navigation channels, removing navigation obstructions, and accomplishing structural repairs. USACE has jurisdiction under Section 10 of the Rivers and Harbors Act of 1899.

Other Organizations

Marine Exchange of Southern California

As described in Section 3.10.2.1, Vessel Transportation Safety, the Marine Exchange is a nonprofit organization affiliated with the Los Angeles Chamber of Commerce. The organization is supported by subscriptions from Port-related organizations that recognize the need for such an organization and use its services. This voluntary service is designated to enhance navigation safety in the Precautionary Area and Harbor area of the Ports. The Marine Exchange monitors vessel traffic in the Precautionary Area and operates PORTS (see Section 3.10.2.1) as a service to those making operational decisions based on oceanographic and meteorological conditions in the vicinity of the Ports.

Harbor Safety Committee

The Harbor Safety Committee (Committee) is responsible for planning the safe navigation and operation of tankers, barges, and other vessels in San Pedro Bay and approach areas. This Committee was created under the authority of Government Code Section 8670.23(a), which requires the Administrator of the Office of Oil Spill

Prevention and Response to create a Harbor Safety Committee for the Los Angeles/ Long Beach Harbor area. The Committee issued the original HSP in 1991 and has issued annual updates since. Major issues facing the Committee include the need for escort tugs, required capabilities of escort tugs, and need for new or enhanced vessel traffic information systems to monitor and advise vessel traffic.

The Committee developed a regulatory scheme to institutionalize Good Marine Practices and guide those involved in moving tanker vessels, which include the minimum standards that are applicable under favorable circumstances and conditions. The master or pilot shall arrange for additional tug assistance if bad weather, unusual port congestion, or other circumstances so require.

Harbor Safety Plan

The HSP provides specific rules for navigation of vessels in reduced visibility conditions. The HSP does not recommend transit for vessels greater than 150,000 DWT if visibility is less than 1 nm. For all other vessels, transit is not recommended if visibility is less than 0.5 nm.

The HSP establishes vessel speed limits. In general, speeds should not exceed 12 knots inside the Precautionary Area or 6 knots in the Harbor. These speed restrictions do not preclude the master or pilot from adjusting speeds to avoid or mitigate unsafe conditions. Weather, vessel maneuvering characteristics, traffic density, construction, dredging, and other possible issues are taken into account.

Vessel Transportation Service

As described previously, VTS is a shipping service operated by USCG or public/private sector consortiums (see Section 3.10.2.1). These services monitor traffic in both approach and departure lanes, as well as internal movement in Harbor areas. These services use radar, radio, and visual inputs to gather real-time vessel traffic information and broadcast traffic advisories and summaries to assist mariners. The VTS that services the Port of Los Angeles and the Port of Long Beach is located at the entrance of the Harbor. The system is owned by the Marine Exchange and is operated jointly by the Marine Exchange and the USCG under the oversight of the OSPR and the Port of Los Angeles/Port of Long Beach Harbor Safety Committee.

This system provides information on vessel traffic and ship locations so that vessels can avoid collisions, allisions, and groundings in the approaches to the Los Angeles/ Long Beach Harbor. The VTS assists in the safe navigation of vessels approaching the Port in the Precautionary Area. The partnership is a unique and effective approach that has gained acceptance from the maritime community.

3.10.4 Impacts and Mitigation Measures

3.10.4.1 Methodology

Impacts on marine transportation are assessed by determining the net increase in vessel traffic resulting from the proposed Project compared to the ability of the Port to safely accommodate vessel traffic and the potential for proposed Project-related activities during both construction and operation to increase risks to vessel traffic. Existing

regulations regarding vessel safety are designed to avoid potential impacts and are considered standard practice.

3.10.4.1.1 CEQA Baseline

Section 15125 of the CEQA Guidelines requires EIRs to include a description of the physical environmental conditions in the vicinity of a project that exist at the time of the NOP. These environmental conditions normally would constitute the baseline physical conditions by which the CEQA lead agency determines if an impact is significant. For purposes of this Recirculated Draft EIS/EIR, the CEQA baseline for determining the significance of potential Project impacts is the environmental setting prior to March 2001, pursuant to the ASJ described in Chapter 1, Section 1.4.3. The CEQA baseline for this proposed Project includes 45,135 TEUs per year that occurred on the Project site in the year prior to March 2001.

The CEQA baseline represents the setting at a fixed point in time and differs from the No Project Alternative (discussed in Section 2.5) in that the No Project Alternative addresses what is likely to happen at the site over time, starting from the existing conditions. The No Project Alternative allows for growth at the Project site that could be expected to occur without additional approvals.

3.10.4.1.2 NEPA Baseline

For purposes of this Recirculated Draft EIS/EIR, the evaluation of significance under NEPA is defined by comparing the proposed Project or other alternative to the NEPA baseline. To ensure a full analysis of the impacts associated with Phase I-III, the NEPA baseline does not include the dredging required for the Berth 100 wharf, the existing bridge across the Southwest Slip, or the 1.3 acres of fill constructed as part of Phase I (i.e., the project site conditions are considered without the in-water Phase I activities and structures). The NEPA baseline condition for determining significance of impacts includes the full range of construction and operational activities the applicant could implement and is likely to implement absent a permit from the USACE. The NEPA baseline for this project is not fixed. The NEPA baseline includes construction and operation of backlands container operations on as much as 117 acres, but does not include wharves, dredging, and improvements that would require federal permits. The NEPA baseline assumes 117 acres of upland development, which is greater than the 2001 baseline conditions. In addition, the NEPA baseline would store or manage up to 632,500 TEUs onsite, but no annual ships calls are included in the NEPA baseline (see Section 2.6.2 for further information).

Unlike the CEQA baseline, which is defined by conditions at a point in time, the NEPA baseline is not bound by statute to a “flat” or “no-growth” scenario. Therefore, the USACE could project increases in operations over the life of a project to properly describe the NEPA baseline condition. Normally, any ultimate permit decision would focus on direct impacts of the proposed Project to the aquatic environment, as well as indirect and cumulative impacts in the uplands determined to be within the scope of federal control and responsibility. Significance of the proposed Project or alternative is defined by comparing the proposed Project or alternative to the NEPA baseline (i.e., the increment). The NEPA baseline conditions are described in Section 2.6.2.

The NEPA baseline also differs from the No Project Alternative, under which the Port would take no further action to construct and develop additional backlands (other than the 72 acres that currently are developed). Under the No Project Alternative, no construction

would, occur other than the Phase I construction. However, the abandonment of the existing bridge and 1.3 acres of fill, as well as removal of the four A-frame cranes built as part of Phase 1 would occur. Forecasted increases in cargo throughput would still occur as greater operational efficiencies are realized.

3.10.4.2 Thresholds of Significance

According to the *City of Los Angeles CEQA Thresholds Guide* (City of Los Angeles, 2006), the determination of significance for marine transportation impacts shall be made on a case-by-case basis. While this document does not include specific provisions regarding marine transportation, the following criterion was developed in cooperation with the Port. The proposed Project would have a significant impact on marine transportation if it would:

VT-1 Potentially interfere with the operation of designated vessel traffic lanes and/or impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

3.10.4.3 Impacts and Mitigation

3.10.4.3.1 Proposed Project

3.10.4.3.1.1 Construction Impacts

Impact VT-1a: Proposed Project construction-related marine traffic would potentially interfere with operation of designated vessel traffic lanes and impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

Phase I Project elements were constructed between 2002 and 2003 and were operational by 2004, as allowed under the ASJ (discussed in Section 1.4.3). Phase II and Phase III in-water construction activities would occur within the existing federal channel limits of the Port (the channel and berthing areas). Project-related in-water activities, such as new wharf construction, would occur in the West Basin and Turning Basin area. Proposed in-water construction activities would require use of such marine-based construction equipment as derrick barge crane hoists and tugboats to support wharf construction at Berths 100 and 102 and to transport rock from Catalina Island.

The existing 1,200-foot wharf at Berth 100 was completed in 2003 as part of Phase I construction and involved the placement of 88,000 cubic yards (yd^3) of rock, 14,000 yd^3 of clean backfill material, and 652 separate 24-inch-diameter octagonal concrete wharf piles.

Dredging to the -53-foot channel depth for Berth 102 was completed previously as part of the Channel Deepening Project. The berth would be developed as a 1,300-foot-long container ship wharf in Phase II of the proposed Project. Of the 1,300 feet of new wharf, 925 feet would be constructed at Berth 102 on a previously approved dike built as part of the approved Channel Deepening Project. The new wharf at Berth 102 would extend northward from the existing Berth 100 wharf. The new wharf would also be constructed to extend Berth 100 an additional 375 feet south. The Berth 100 southern wharf extension (375 feet) would require new rock dike (116,000 yd^3) and fill (24,000 yd^3). The fill would be obtained from surplus clean fill located onsite (analyzed as part of the

Channel Deepening Project). Wharf construction would include pile driving and riprap placement.

Under the proposed Project, a total of 10 new A-frame cranes would be installed on the wharves at Berths 100 and 102. Their installation would require the use of general cargo ships for delivery to the Project site. Four A-frame cranes were installed during Phase I construction and are currently located at the Berth 100 wharf. Six additional A-frame cranes would be installed subsequently, one on Berth 100 south wharf and five at the Berth 102 wharf.

The types of marine-based construction equipment and the duration of its use at the Project site are presented in Table 3.10-6. Phase I in-water construction extended over a 1-year period during which equipment was active for a total of 160 workdays. When weighted by the number of pieces of equipment, this equates to 227 equipment workdays. On average there would be 1.4 pieces of equipment active daily over the 160 days when in-water construction occurred. Phase II in-water construction activities would result in a total of 56 workdays during which the equipment would be utilized for an average of 1.0 active construction pieces of equipment per day within the West Basin. Phase III in-water construction activities would result in a total of 162 workdays during which the equipment would be utilized also for an average of 1.0 active construction pieces of equipment per day.

The construction of the Berth 100 wharf lasted approximately 12 months (completed in 2003), with crane delivery at the end of 2002. The construction of an extension for Berth 102 and Berth 100 during Phase II could each last 15 months. Delivery and installation of the A-frame cranes would last up to 3 months during both Phase II and Phase III. Approximately 167 barge trips were required to support Phase I construction activities: 134 to transport rock from Catalina Island to Berth 100, 23 for dredging, 8 for fill, and 2 to transport piles. Phase II in-water construction would consist primarily of pile-driving activities for the Berth 102 wharf. Phase III in-water construction activities would result in 153 barge trips: 140 to transport rock from Catalina Island to Berth 100 (south extension), 11 for fill, and 2 for transportation of piles.

In-water construction activities in the West Basin could create hazards to vessel traffic and increase the potential for accidents. No specific accident data are available for the proposed Project area (Berths 97-109). Currently, the West Basin experiences a relatively low volume of commercial vessel traffic at six or fewer vessel trips per day. Due to the staggered nature of construction activities, the terminal would be partially operational as construction continues, which would increase slightly the number of vessels transiting the West Basin. During the 15-month period of Phase II construction activity and the 15 months of Phase III activity, vessels (derrick barge, tugboats, and general cargo ships delivering A-frame cranes) would increase vessel activity in the West Basin by an average of 1.0 active construction-equipment workday. This increase would not significantly increase the potential accident risk for vessels navigating in the West Basin area. The addition of an average of 1.4 active construction-equipment workdays during Phase I construction activities that occurred between 2002 and 2003 did not result in accidents.

Table 3.10-6. Marine-Based Construction Equipment Associated with the Proposed Project

Proposed Project Element	Activity	Equipment Type	Number of Active Equipment	Duration of Activity (Workdays)	Total Active Equipment Workdays
Phase I (2002-2003)					
Construct 1,000-foot Wharf at Berth 100	Piledriving	Derrick Barge Crane Hoist	1	48	48
	Riprap Placement	Tugboat	2	30	60
Construct 200-foot Wharf at Berth 100	Piledriving	Derrick Barge Crane Hoist	1	10	10
	Riprap Placement	Tugboat	2	37	74
	Dredge and Disposal	Derrick Barge Crane Hoist	1	14	14
		Tugboat	1	14	14
Crane Delivery and Installation		General Cargo Ship – Transit	1	2	2
		General Cargo Ship – Hoteling	1	5	5
Total (Phase I)			**10**	**160**	**227**
Average Number of Equipment Workdays (Phase I)					**1.4**
Phase II (2009-2011)					
Construct 925-foot Wharf at Berth 102	Piledriving	Derrick Barge Crane Hoist	1	44	44
Crane Delivery and Installation		General Cargo Ship – Transit	1	4	4
		General Cargo Ship – Hoteling	1	8	8
Total (Phase II)			**3**	**56**	**56**
Average Number of Equipment Workdays (Phase II)					**1.0**
Phase III (2010-2012)					
Construct 375-foot South Extension of Wharf at Berth 100	Piledriving	Derrick Barge Crane Hoist	1	18	18
	Riprap Placement	Tugboat	1	70	70
		Tugboat	1	70	70
Crane Delivery and Installation		General Cargo Ship – Transit	1	2	2
		General Cargo Ship – Hoteling	1	2	2
Total (Phase III)			**5**	**162**	**162**
Average Number of Equipment Workdays (Phase III)					**1.0**

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Vessel calls at Berths 118-120 and 121-131 represented approximately 11 percent of the total vessels calling at the Port in 2001. The additional barge trips would not significantly increase the potential accident risk for vessels navigating in the Port or West Basin area.

Barge trips required to transport rock from Catalina Island would increase traffic in the approach corridors to the Precautionary Area. However, the additional 167 barge trips would occur over as long as a 3-month period (per phase) and would not result in a significant contribution to vessel congestion in the approach corridors.

Although marine-based construction equipment could restrict vessel movement inside the turning basin, derricks and supply barges would be highly visible, well-marked, and relatively stationary. These activities are conducted routinely in the Port; and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts, including navigation hazard markings. Prior to activities that require anchoring vessels in the main navigation channels, the standard vessel safety regulations of the Port require dredging contractors to acquire an Anchorage Waiver Permit. An Anchorage Waiver Permit, issued by the USCG, requires notifying the COTP of expected activities, providing official and ongoing notice to mariners during construction, developing a mooring plan, and marking equipment and any debris for visibility. Compliance with Anchorage Waiver Permit requirements would ensure compliance with regulations governing the Outer Harbor of the Port and main navigation channel areas. Because standard safety precautions would be utilized by all contractors, the presence of supply barges/support boats would not substantially affect marine vessel safety in the main channels and connected basin areas. Accordingly, proposed in-water construction equipment would not interfere with existing operations at adjacent West Basin berths, including Yang Ming Container Terminal operations at Berth 121, Kinder Morgan liquid bulk operations at Berths 118-120, and TraPac Container Terminal operations at Berths 136-147.

CEQA Impact Determination

Construction activities could create in-water hazards to vessel traffic and increase the potential for accidents. Phase I, Phase II, and Phase III in-water construction activities would require use of marine-based construction equipment to support development of Berths 100 and 102. Although barge trips required to transport rock from Catalina Island would increase traffic in the Port and the approach corridors to the Precautionary Area, these barge trips would not result in a significant contribution to vessel congestion in the Port or approach corridors. These activities are routinely conducted in the Port, and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts and Department of the Army permits. Because standard safety precautions would be utilized by the Port in piloting these vessels through Harbor waters, the short-term presence of supply barges or support boats at Berths 100 and 102 and associated barge trips would not reduce the existing level of safety for vessel navigation in the Port. Therefore, construction impacts on vessel traffic would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No residual impacts would occur.

NEPA Impact Determination

Proposed Project construction activities include new wharf and dike construction, and upland development that is not included in the NEPA baseline. These construction activities could create in-water hazards and increase the potential for accidents for vessels navigating in the Main Channel or the West Basin areas, compared to NEPA baseline conditions. However, these activities are routinely conducted in the Port, and compliance with standard safety precautions for in-water activities is mandated in all Port contracts. In addition, USACE permit requirements also include safety provisions (e.g., USCG notification, monitoring of the VTS, and preparation of Dredge and Disposal Plans). Therefore, the temporary presence of supply barges or support boats at Berths 100 and 102 would not reduce the existing level of safety for vessel navigation in the Port. Construction impacts on vessel traffic would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impact

No residual impacts would occur.

3.10.4.3.1.2 Operational Impacts

Impact VT-1b: Proposed Project operations would not interfere with operation of designated vessel traffic lanes or impair the level of safety for vessels navigating the Main Channel, West Basin area, or the Precautionary Area.

Proposed Project operations would result in a maximum of 234 vessel calls per year at buildout (2030) and would increase no further through 2045 (Table 3.10-7).

Table 3.10-7. Existing and Projected Annual Vessel Calls at Berths 97-109 at Full Buildout (2045*)

Activity	CEQA Baseline (pre-March 2001)	NEPA Baseline Year 2005	NEPA Baseline Year 2045	Proposed Project (2045)	Annual Increase: Proposed Project Compared to CEQA Baseline	Annual Increase: Proposed Project Compared to the NEPA Baseline
Vessel Calls	0	0	0	234	234	234

CEQA Impact Determination

The proposed Project would result in an increase of 234 vessel calls per year (approximately 20 vessel calls per month) when functioning at maximum capacity (2030 and beyond), compared to existing vessel calls at Berths 97-109 under CEQA baseline conditions of zero prior to March 28, 2001. The addition of 234 vessel calls annually would represent an increase of just over 8 percent over total annual vessel calls of 2,912 at the Port in 2006. Although the additional 234 vessel calls would increase vessel traffic in the West Basin, Port, and Precautionary Area, the proposed

Project would not significantly increase vessel congestion in the open-ocean approach corridors.

Proposed Project improvements would also improve overall conditions in the Harbor by creating berths sized to accommodate modern, deep-draft vessels. The deep-draft berths would improve the efficiency of shipping and Port operations by reducing the relative number of vessels and vessel trips required to accommodate projected container throughput at the Port. The design parameters of the new wharves at Berths 97-109 would allow for safe maneuvering and passage through the West Basin of all ships that currently call at the Port. The deepening of the areas adjacent to the berths in this area as part of the Channel Deepening Project further ensures that the larger, deep-draft ships can navigate safely in the West Basin. While the increased ship size could affect maneuverability, the risk of accident is largely based on the number of vessels present and would, therefore, not have significant impacts on marine vessel safety within the Port.

Given the continued use of standard practices, including adherence to HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements, and Port tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot on board to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways, the projected increase in annual vessel calls at Berths 97-109 would not significantly decrease the margin of safety for marine vessels in the proposed Project area. Scheduling vessel calls at Berths 97-109 to accommodate available berths and anchoring vessels outside the breakwater until safe transit to Berths 97-109 is authorized by the COTP would ensure that the proposed Project-related 8 percent increase over the current number of the vessels that call at the Port annually would not result in changes to routing or vessel safety procedures. Continued implementation of COTP uniform procedures including advanced notification to vessel operators, vessel traffic managers, and Port Pilots identifying the location of dredges, derrick barges, and any associated operational procedures or restrictions (e.g., one-way traffic) ensure safe transit of vessels operating within and to and from the proposed Project area. Therefore, marine vessel safety impacts associated with proposed Project operations would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No residual impacts would occur.

NEPA Impact Determination

Proposed Project operations would result in an increase of 234 vessel calls per year (approximately 20 vessel calls per month) when functioning at maximum capacity in 2030 and beyond, compared to the NEPA baseline. This would represent an increase of just over 8 percent over total annual vessel calls of 2,912 at the Port in 2006. Although the additional 234 vessel calls would increase vessel traffic in the West Basin, Port, and Precautionary Area, the proposed Project would not significantly increase vessel congestion in the open-ocean approach corridors.

The additional vessel calls at Berths 97-109 would not result in adverse safety impacts under NEPA because of continued implementation of HSP speed-limit

regulations, adherence to limited-visibility guidelines, VTS monitoring requirements, and Port Tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot on board to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways. In addition, scheduling vessel calls at Berths 97-109 to accommodate available berths and anchoring vessels outside the breakwater until safe transit to Berths 97-109 is authorized by the COTP would ensure that the proposed Project-related 8 percent increase in vessel calls at the proposed Project site (when compared to the total number of vessel calls at the Port in 2006) would not require modifications to routing or vessel safety procedures.

Additionally, the proposed Project would have long-term beneficial effects on marine transportation, because existing wharf infrastructure would be upgraded to accommodate modern container ships. The deep-draft berths would improve the efficiency of shipping and Port operations by reducing the relative number of vessels and vessel trips required to accommodate projected container throughput at the Port. Therefore, impacts under NEPA would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

No residual impacts would occur.

3.10.4.3.2 Alternatives

Table 3.10-8 provides a comparison of annual vessel calls under the proposed Project to the seven Project alternatives discussed below.

Table 3.10-8. Comparison of Vessel Calls under the Proposed Project and Project Alternatives (2005-2045)

	2005	2015	2030	2045
Proposed Project	78	182	234	234
Alternative 1 – No Project	0	0	0	0
Alternative 2 – No Federal Action	0	0	0	0
Alternative 3 – Reduced Fill, No Berth 102 Wharf	78	104	130	130
Alternative 4 – Reduced Fill, No Berth 100 South Wharf	78	156	208	208
Alternative 5 – Reduced Construction and Operation: Phase 1 Construction Only	78	78	104	104
Alternative 6 – Omni Cargo Terminal	78	234	364	364
Alternative 7 – Nonshipping Alternative	0	0	0	0

3.10.4.3.2.1 Alternative 1 – No Project Alternative

Alternative 1 would utilize the terminal site, as constructed under Phase I of the proposed Project, for container storage. Thus, impacts associated with construction of the 72 acres of backlands and in-water elements would be assessed under Alternative 1 although the in-water elements would be abandoned in place. No additional Port action or federal action would occur and the Port would not take further actions to construct or develop additional backlands. Furthermore, the four existing A-frame cranes would be removed, and the existing wharf at Berth 100 would cease to be used for ship berthing or container loading and unloading operations. The 1.3 acres of fill added to waters of the U.S. during Phase I, as allowed under the ASJ and under USACE permit, would remain and be abandoned in place under Alternative 1. The 72 acres of backlands area would be used for storage of containers by Berths 121-131. The Catalina Express Terminal would not be relocated under Alternative 1.

Alt 1 – Impact VT-1a: Alternative 1 construction-related marine traffic would potentially interfere with operation of designated vessel traffic lanes or impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

Under the No Project Alternative (Alternative 1), the backlands area of the terminal site would not increase beyond the current 72 acres, and the backlands would continue to accommodate storage of cargo containers associated with vessels docking at the adjacent Yang Ming Terminal. No ships would dock at Berths 97-109 and the four existing A-frame cranes would be dismantled and removed.

Phase I in-water construction extended over a 1-year period during which equipment was active for a total of 160 workdays. When weighted by the number of pieces of equipment, this equates to 227 equipment workdays. On average, 1.4 pieces of equipment would have been active daily over the 160 days when in-water construction occurred. The construction of the Berth 100 wharf lasted approximately 12 months (completed in 2003), with crane delivery at the end of 2002. Approximately 167 barge trips were required to support Phase I construction activities—134 trips to transport rock from Catalina Island to Berth 100, 23 trips for dredging, 8 trips for fill, and 2 trips to transport piles.

In-water construction activities in the West Basin could create hazards to vessel traffic and increase the potential for accidents. No specific accident data are available for the proposed Project area (Berths 97-109). Currently, the West Basin experiences a relatively low volume of vessel traffic with six or fewer vessel trips per day. The addition of an average of 1.4 active construction-equipment workdays during Phase I construction activities that occurred between 2002 and 2003 did not result in accidents.

CEQA Impact Determination

Construction activities have the potential to create in-water hazards to vessel traffic and increase the potential for accidents. Phase I in-water construction activities required use of marine-based construction equipment. Barge trips required to transport rock from Catalina Island increased traffic in the Port and the approach corridors to the Precautionary Area. These barge trips, however, did not result in a significant contribution to vessel congestion in the Port or approach corridors. Such construction activities are routinely conducted in the Port, and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts and Department of the Army permits. Because

standard safety precautions were used by the Port in piloting these vessels through Harbor waters, the short-term presence of supply barges or support boats at Berth 100 and associated barge trips did not reduce the existing level of safety for vessel navigation in the Port. Therefore, construction impacts on vessel traffic were less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No residual impacts would occur.

NEPA Impact Determination

The impacts of this No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (see Alternative 2 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

A residual impact determination is not applicable.

Alt 1 – Impact VT-1b: Alternative 1 operations would not interfere with operation of designated vessel traffic lanes or impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

CEQA Impact Determination

Under the No Project Alternative (Alternative 1), the area devoted to backlands would increase to 72 acres from the CEQA baseline conditions, enabling supplemental container storage throughput at the terminal site to increase (from 45,135 TEUs annually to 457,100 TEUs). This increased storage throughput, however, would be associated with container terminal operations at the existing adjacent Yang Ming Container Terminal.

The No Project Alternative would not allow further physical improvements at the berths (beyond Phase I) and would include the removal of dock-side A-frame cranes. Container vessels would not have access to or be able to use Berths 97-109.

Alternative 1 would not result in significant safety hazards under CEQA to marine transportation because no container vessel operations or annual ship calls would occur under this alternative. Therefore, impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

The impacts of this No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action Alternative (see Alternative 2 in this document).

Mitigation Measures

Mitigation measures are not applicable.

Residual Impacts

A residual impact determination is not applicable.

3.10.4.3.2.2 Alternative 2 – No Federal Action Alternative

Alternative 2 would use the terminal site constructed as part of Phase I for container storage and would increase the backland area to 117 acres. Because of this, Phase I construction activities are included under Alternative 2 although the in-water elements would not be used. The Phase I dike, fill, and wharf would be abandoned in place.

Under Alternative 2, the Port would further develop the area of backlands to 117 acres. This action by the Port would not comprise a federal action or require federal approval. The four existing A-frame cranes would be removed, and the existing wharf at Berth 100 would cease to berth ships or accommodate container loading and unloading operations. The bridge constructed during Phase I would be abandoned and the 1.3 acres of fill added to waters of the U.S. during construction of Phase I of the proposed Project, as allowed under the ASJ and under USACE permit, would be abandoned in place. Alternative 2 would not require the relocation of the Catalina Express Terminal.

Alt 2 – Impact VT-1a: Alternative 2 construction-related marine traffic would potentially interfere with operation of designated vessel traffic lanes or impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

Under the No Federal Action Alternative (Alternative 2), the backlands area of the terminal site would ultimately increase to 117 acres, and they would continue to accommodate storage of cargo containers associated with vessels docking at the adjacent Yang Ming Terminal. No ships would dock at or use Berths 97-109, and the four existing A-frame cranes would be dismantled and removed.

Phase I in-water construction extended over a 1-year period during which equipment was active for a total of 160 workdays. When weighted by the number of pieces of equipment, this equates to 227 equipment workdays. On average, 1.4 pieces of equipment would have been active daily over the 160 days when in-water construction occurred. The construction of the Berth 100 wharf lasted approximately 12 months (completed in 2003), with crane delivery at the end of 2002. Approximately 167 barge trips were required to support Phase I construction activities—134 trips to transport rock from Catalina Island to Berth 100, 23 trips for dredging, 8 trips for fill, and 2 trips to transport piles.

In-water construction activities in the West Basin could create hazards to vessel traffic and increase the potential for accidents. No specific accident data are available for the proposed Project area (Berths 97-109). Currently, the West Basin experiences a relatively low volume of vessel traffic at six or fewer vessel trips per day. The addition

of an average of 1.4 active construction-equipment workdays during Phase I construction activities that occurred between 2002 and 2003 did not result in accidents.

CEQA Impact Determination

Phase I construction activities required the use of marine-based construction equipment that has the potential to create in-water hazards to vessel traffic and increase the potential for accidents. Such construction activities are routinely conducted in the Port, and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts and Department of the Army permits. Because standard safety precautions were used by the Port in piloting these vessels through Harbor waters, the short-term presence of supply barges or support boats at Berth 100 trips did not reduce the existing level of safety for vessel navigation in the Port. Barge trips required to transport rock from Catalina Island increased traffic in the Port and the approach corridors to the Precautionary Area. These barge trips, however, did not result in a significant contribution to vessel congestion in the Port or approach corridors. Therefore, construction impacts on vessel traffic were less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact.

NEPA Impact Determination

Phase I construction activities had the potential to create in-water hazards and increase the likelihood of accidents for vessels navigating in the Main Channel or the West Basin areas, compared to NEPA baseline conditions. However, these activities are routinely conducted in the Port, and compliance with standard safety precautions for in-water activities is mandated in all Port contracts. In addition, USACE permit requirements include safety provisions (e.g., USCG notification, monitoring of the VTS, and preparation of Dredge and Disposal Plans). The temporary presence of supply barges and support boats at Berth 100 during Phase I did not reduce the existing level of safety for vessel navigation in the Port. Barge trips required to transport rock from Catalina Island increased traffic in the Port and the approach corridors to the Precautionary Area. These barge trips, however, did not result in a significant contribution to vessel congestion in the Port or approach corridors. Construction impacts on vessel traffic were less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impact

No residual impacts would occur.

Alt 2 – Impact VT-1b: Alternative 2 operations would not interfere with operation of designated vessel traffic lanes or impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

CEQA Impact Determination

Under the No Federal Action Alternative (Alternative 2), the area devoted to backlands would increase, and container storage throughput at the terminal site would also increase. This increased container storage throughput, however, would be associated with existing and projected capacity of the adjacent Yang Ming Container Terminal. The backlands area at Berths 97-109 would increase to 117 acres and throughput to 632,500 TEUs annually.

The No Federal Action Alternative would not allow implementation of physical improvements at the berths of the terminal and would include the removal of dock-side A-frame cranes. Vessels would not be able to access the Berth 97-109 Container Terminal in West Basin. Alternative 2 would not result in significant safety hazards under CEQA to marine transportation because of the continued use of such standard navigation safety practices as use of pilots onboard incoming and outgoing vessels, compliance with the USCG Navigation Rules of the Road, and the use of tugboats for vessel maneuvering. Therefore, impacts would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Under this alternative, no further development (beyond Phase I) would occur in the in-water terminal area (i.e., no additional dredging, dike or fill placement, pile installation, or wharf construction). In addition, backland development of 117 acres and terminal operations, comprising container storage only and no vessel operations, under Alternative 2 would be the same as under the NEPA baseline. Therefore, potential impacts under NEPA would not occur because no substantial changes would occur in the environmental conditions between Alternative 2 and the NEPA baseline that could affect marine transportation.

Mitigation Measures

No mitigation measures are necessary under NEPA.

Residual Impacts

No residual impacts would occur.

3.10.4.3.2.3 Alternative 3 – Reduced Fill: No New Wharf Construction at Berth 102

Alternative 3 would include construction of the 375-foot southern extension of Berth 100 and installation of one additional A-frame crane during Phase III of construction and would thereby involve in-water construction activities. It would not include the wharf extension at Berth 102.

Alt 3 – Impact VT-1a: Alternative 3 construction-related marine traffic would potentially interfere with operation of designated vessel traffic lanes and impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

The existing 1,200-foot wharf at Berth 100 was completed as part of Phase I construction and involved the placement of 88,000 yd^3 of rock, 14,000 yd^3 of clean backfill material, and 652 separate 24-inch-diameter octagonal concrete wharf piles. This section of wharf was completed in 2003 and officially began operation on June 21, 2004, in accordance with the terms of the ASJ.

Construction activities associated with wharf extension at Berth 102 would not take place. Phase III in-water construction activities would occur within the existing federal channel limits of the Port (the channel and berthing areas), and the wharf extension would occur in the West Basin area. Proposed in-water construction activities would require use of such marine-based construction equipment as derrick barge crane hoists and tugboats to support the wharf construction at Berth 100 and to transport rock from Catalina Island. The 375-foot southern extension of the wharf at Berth 100 would require new rock dike (116,000 yd^3) and fill (24,000 yd^3). The fill would be obtained from surplus clean fill located onsite (analyzed as part of the Channel Deepening Project). Wharf construction would include pile driving and riprap placement. Additionally, a single A-frame crane would be installed at Berth 100.

The types of marine-based construction equipment and the duration of its use at the terminal site are presented in Table 3.10-6. Phase III in-water construction activities would require approximately 162 workdays. On average there would be 1 piece of equipment active daily over the 160 days when in-water construction occurred.

Phase III in-water construction activities would result in 153 barge trips, 140 to transport rock from Catalina Island to Berth 100 (south extension), 11 for fill, and 2 to transport piles required to construct the new wharf.

In-water construction activities in the West Basin could create hazards to vessel traffic and increase the potential for accidents. No specific accident data are available for the terminal area (Berths 97-109). Currently, the West Basin experiences a relatively low vessel traffic volume of six or fewer vessel trips per day. Due to the staggered nature of construction activities, the terminal would be partially operational as construction continues. This would increase slightly the number of vessels transiting the West Basin. During the 15-month period of Phase III construction activity, vessels (derrick barge, tugboats, and general cargo ships delivering A-frame cranes) would increase vessel activity in the West Basin by an average of 1.0 active construction-equipment workday. This increase would not significantly increase the potential accident risk for vessels navigating in the West Basin area. The addition of an average of 1.4 active construction-equipment workdays during Phase I construction activities that occurred between 2002 and 2003 did not result in accidents.

Vessel calls at Berths 118-120 and 121-131 represented approximately 11 percent of all the vessels calling at the Port in 2001. The additional barge trips would not significantly increase the potential accident risk for vessels navigating in the Port or West Basin area.

Barge trips required to transport rock from Catalina Island would increase traffic in the approach corridors to the Precautionary Area. However, the additional 153 barge trips that would occur over an approximately 3-month period would not result in a significant contribution to vessel congestion in the approach corridors.

Although marine-based construction equipment would restrict vessel movement inside the turning basin, derricks and supply barges would be highly visible, well-marked, and relatively stationary. These activities are routinely conducted in the Port, and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts, including navigation hazard markings. Prior to activities that require anchoring vessels in the main navigation channels, the standard vessel safety regulations of the Port require dredging contractors to acquire an Anchorage Waiver Permit. An Anchorage Waiver Permit, issued by the USCG, requires notifying the COTP of expected activities, providing official and ongoing notice to mariners during construction, developing a mooring plan, and marking equipment and any debris for visibility. Compliance with Anchorage Waiver Permit requirements would ensure compliance with regulations governing the Outer Harbor of the Port and main navigation channel areas. Because standard safety precautions would be utilized by all contractors, the presence of supply barges or support boats would not substantially impact marine vessel safety in the main channels and connected basin areas. Accordingly, proposed in-water construction equipment would not interfere with existing operations at adjacent West Basin berths, including Yang Ming Container Terminal operations at Berths 121-131, Kinder Morgan liquid bulk operations at Berths 118-120, and TraPac Container Terminal operations at Berths 136-147.

CEQA Impact Determination

Construction activities could create in-water hazards to vessel traffic and increase the potential for accidents. Phase III in-water construction activities would require use of marine-based construction equipment to support development of Berth 100. Although barge trips required to transport rock from Catalina Island would increase traffic in the Port and the approach corridors to the Precautionary Area, the additional barge trips would not result in a significant contribution to vessel congestion in the Port or approach corridors. These activities are routinely conducted in the Port, and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts and Department of the Army permits. Because standard safety precautions would be utilized by the Port in piloting these vessels through Harbor waters, the short-term presence of supply barges or support boats at Berth 100 and associated barge trips would not reduce the existing level of safety for vessel navigation in the Port. Therefore, construction impacts on vessel traffic would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Alternative 3 construction activities include extension of existing wharves that would require new rock dike and fill, as described previously. These construction activities could create in-water hazards and increase the potential for accidents for vessels navigating in the Main Channel or the West Basin areas during construction activities, compared to NEPA baseline conditions. However, these activities are routinely conducted in the Port, and compliance with standard safety precautions for in-water activities is mandated in all Port contracts. In addition, USACE permit requirements also include safety provisions (e.g., USCG notification, monitoring of the VTS, and preparation of Dredge and Disposal Plans). Therefore, the temporary presence of supply barges or support boats at Berth 100 would not reduce the existing level of safety for vessel navigation in the Port. Construction impacts on vessel traffic would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impact

Less than significant impact.

Alt 3 – Impact VT-1b: Alternative 3 operations would not interfere with operation of designated vessel traffic lanes or impair the level of safety for vessels navigating the Main Channel, West Basin, or the Precautionary Area.

Alternative 3 operations would result in a maximum of 130 vessel calls per year at buildout (2030) and would increase no further through 2045 (Table 3.10-7).

CEQA Impact Determination

Alternative 3 would increase vessel traffic by 130 ship calls per year (approximately 10 vessel calls per month) when functioning at maximum capacity (2030 and beyond), compared to vessel calls at Berths 97-109 under CEQA baseline conditions (zero in 2001). This would represent an increase of 4.5 percent over total annual vessel calls of 2,912 at the Port in 2006. Although the additional 130 vessel calls would increase vessel traffic in the West Basin, Port, and Precautionary Area, Alternative 3 would not significantly increase vessel congestion in the open-ocean approach corridors.

Development and operation of Alternative 3 would improve overall conditions in the Harbor by creating berth depths sized to accommodate modern, deep-draft vessels. The deep-draft berths would improve the efficiency of shipping and Port operations by reducing the relative number of vessels and vessel trips required to accommodate projected container throughput at the Port. The design parameters of the new wharves at Berths 97-109 would allow safe maneuvering and passage through the West Basin of all ships that currently call at the Port. The proposed deepening of the areas adjacent to the berths in this area as part of the Channel Deepening Project further ensures that the larger, deep-draft ships can safely navigate within the West Basin. While the increased ship size could affect maneuverability, the risk of accident is largely based on the number of vessels present and would, therefore, not have significant impacts on marine vessel safety within the Port.

Given the continued use of standard practices, including adherence to HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements (e.g., issuance of security calls by dredge operators on the VTS prior to commencement of dredge operations and transit to disposal sites), and Port Tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot on board to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways, the projected increase in annual vessel calls at Berths 97-109 would not significantly decrease the margin of safety for marine vessels in the terminal area. Scheduling of vessel calls at Berths 97-109 to accommodate available berths and anchoring vessels outside the breakwater until safe transit to Berths 97-109 is authorized by the COTP would ensure the 4.5 percent increase over the current number of the vessels that call at the Port annually would not result in changes to routing and/or vessel safety procedures. Continued implementation of COTP uniform procedures, including advance notification to vessel operators, vessel traffic managers, and Port Pilots identifying the locations of dredges, derrick barges, and any associated operational procedures or restrictions (e.g., one-way traffic), ensure safe transit of vessels operating within and to and from the terminal area. Therefore, marine vessel safety impacts associated with Alternative 3 operations would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Operations under Alternative 3 would result in an increase of 130 vessel calls per year (approximately 10 vessel calls per month) when functioning at maximum capacity in 2030 and beyond, compared to the NEPA baseline. This would represent an increase of 4.5 percent over total annual vessel calls of 2,912 at the Port in 2006. Although the additional 130 vessel calls would increase vessel traffic in the West Basin, Port, and Precautionary Area, Alternative 3 would not significantly increase vessel congestion in the open-ocean approach corridors.

The additional vessel calls at Berths 97-109 would not result in adverse safety impacts under NEPA because of continued implementation of HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements, and Port Tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot on board to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways. In addition, scheduling vessel calls at Berths 97-109 to accommodate available berths and anchoring vessels outside the breakwater until safe transit to Berths 97-109 is authorized by the COTP would ensure the 4.5 percent increase in vessel calls at the terminal site (when compared to the total number of vessel calls at the Port in 2006) would not require modifications to routing or vessel safety procedures.

Additionally, implementation of Alternative 3 would have long-term beneficial effects on marine transportation because existing wharf infrastructure would be upgraded to accommodate modern container ships. Therefore, impacts under NEPA would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

3.10.4.3.2.4 Alternative 4 – Reduced Fill: No South Wharf Extension at Berth 100

As part of Phase I construction, the 1,200 feet of wharf at Berth 100 that was placed in operation in June 2004 would remain. Under Alternative 4, a 925-foot-long wharf extension would be added to Berth 102 during Phase II of construction involving in-water activities. The 375-foot southern extension of the wharf at Berth 100 would not be constructed under this alternative.

Alt 4 – Impact VT-1a: Alternative 4 construction-related marine traffic would potentially interfere with operation of designated vessel traffic lanes and impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

In-water construction activities would occur within the existing federal channel limits of the Port (channel and berthing areas). The majority of such in-water activities as wharf extensions would occur in the West Basin area. Proposed in-water construction activities would require use of such marine-based construction equipment as derrick barge crane hoists and tugboats to support wharf construction at Berths 100 and 102 and to transport rock from Catalina Island.

Approximately 167 barge trips were required to support Phase I construction activities, 134 to transport rock from Catalina Island to Berth 100, 23 for dredging, 8 for fill, and 2 to transport piles required to construct the new wharf.

Dredging to the -53-foot channel depth for Berth 102 was completed previously as part of the Channel Deepening Project. The berth would be developed as a 1,300-foot-long container ship wharf in Phase II construction through the addition of a 925-foot extension at Berth 102 on a previously approved dike built as part of the approved Channel Deepening Project. The new wharf at Berth 102 would extend northward from the existing Berth 100 wharf. In addition to extension of the wharf at Berth 102, five A-frame cranes would be installed. Their installation would require the use of general cargo ships for delivery to the terminal site.

The types of marine-based construction equipment and the duration of its use at the terminal site are presented in Table 3.10-6. Phase II in-water construction activities would result in approximately 56 workdays, during which the equipment would be utilized for an average increase of 1.0 active construction-equipment workday in the West Basin.

The construction of the wharf extension at Berth 102 during Phase II could have a duration of 15 months. Delivery and installation of the A-frame cranes would last up to 3 months during Phase II. Approximately two barge trips would be needed to transport piles required to construct the new wharf.

In-water construction activities in the West Basin could create hazards to vessel traffic and increase the potential for accidents. No specific accident data are available for the terminal area (Berths 97-109). Currently, the West Basin experiences a relatively low volume of vessel traffic of six or fewer vessel trips per day. Due to the staggered nature of construction activities, the terminal would be partially operational as construction continues, which would increase slightly the number of vessels transiting the West Basin. During the 15-month period of Phase II construction activity, vessels (derrick barge, tugboats, and general cargo ships delivering A-frame cranes) would increase vessel activity in the West Basin by an average of 1.0 active construction-equipment workday. This increase would not significantly increase the potential accident risk for vessels navigating in the West Basin area. The addition of an average of 1.4 active construction-equipment workdays during Phase I construction activities that occurred between 2002 and 2003 did not result in accidents.

Vessel calls at Berths 118-120 and 121-131 represented approximately 11 percent of the total vessels calling at the Port in 2001. The additional barge trips would not significantly increase the potential accident risk for vessels navigating in the Port or West Basin area.

Barge trips required to transport rock from Catalina Island would increase traffic in the approach corridors to the Precautionary Area; however, the additional 167 barge trips that would occur over an approximately 3- to 4-month period would not result in a significant contribution to vessel congestion in the approach corridors.

Although marine-based construction equipment would restrict vessel movement inside the turning basin, derricks and supply barges would be highly visible, well-marked, and relatively stationary. These activities are routinely conducted in the Port, and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts, including navigation hazard markings. Prior to activities that require anchoring vessels in the main navigation channels, the standard vessel safety regulations of the Port require dredging contractors to acquire an Anchorage Waiver Permit. An Anchorage Waiver Permit, issued by the USCG, requires notifying the COTP of expected activities, providing official and ongoing notice to mariners during construction, developing a mooring plan, and marking equipment and any debris for visibility. Compliance with Anchorage Waiver Permit requirements would ensure compliance with regulations governing the Outer Harbor of the Port and main navigation channel areas. Because standard safety precautions would be utilized by all contractors, the presence of supply barges or support boats would not substantially affect marine vessel safety in the main channels and connected basin areas. Accordingly, proposed in-water construction equipment would not interfere with existing operations at adjacent West Basin berths, including Yang Ming Container Terminal operations at Berths 121-131, Kinder Morgan liquid bulk operations at Berths 118-120, and TraPac Container Terminal operations at Berths 136-147.

CEQA Impact Determination

Construction activities could create in-water hazards to vessel traffic and increase the potential for accidents. Phase II in-water construction activities would require use of marine-based construction equipment to support development of Berth 102.

Although barge trips required to transport rock from Catalina Island would increase traffic in the Port and the approach corridors to the Precautionary Area, the additional barge trips would not result in a significant contribution to vessel congestion in the Port or approach corridors. These activities are routinely conducted in the Port, and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts and Department of the Army permits. Because standard safety precautions would be utilized by the Port in piloting these vessels through Harbor waters, the short-term presence of supply barges or support boats at Berth 102 and associated barge trips would not reduce the existing level of safety for vessel navigation in the Port. Therefore, construction impacts on vessel traffic would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Construction activities under Alternative 4 include construction of a new wharf at Berth 102, as described previously. These construction activities could create in-water hazards and increase the potential for accidents for vessels navigating in the Main Channel or the West Basin areas during construction, compared to NEPA baseline conditions. However, these activities are routinely conducted in the Port, and compliance with standard safety precautions for in-water activities is mandated in all Port contracts. In addition, USACE permit requirements also include safety provisions (e.g., USCG notification, monitoring of the VTS, and preparation of Dredge and Disposal Plans). Therefore, the temporary presence of supply barges and support boats at Berth 100 would not reduce the existing level of safety for vessel navigation in the Port. Construction impacts on vessel traffic would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impact

Less than significant impact.

Alt 4 – Impact VT-1b: Alternative 4 operations would not interfere with operation of designated vessel traffic lanes or impair the level of safety for vessels navigating the Main Channel, West Basin, or the Precautionary Area.

Operation of Alternative 4 would result in a maximum of 208 vessel calls per year at buildout (2030) and would increase no further through 2045 (Table 3.10-7).

CEQA Impact Determination

Alternative 4 would increase vessel calls by 208 ship calls per year (approximately 10 vessel calls per month) when functioning at maximum capacity (2030 and beyond), compared to vessel calls at Berths 97-109 under CEQA baseline conditions

(zero in 2001). This would represent an increase of just over 7 percent over total annual vessel calls of 2,912 at the Port in 2006. Although the additional 208 vessel calls would increase vessel traffic in the West Basin, Port, and Precautionary Area, Alternative 4 would not significantly increase vessel congestion in the open-ocean approach corridors.

Development and operation of Alternative 4 would improve overall conditions in the Harbor by creating berth depths sized to accommodate modern, deep-draft vessels. The deep-draft berths would improve the efficiency of shipping and Port operations by reducing the relative number of vessels and vessel trips required to accommodate projected container throughput at the Port. The design parameters of the new wharves at Berths 97-109 would allow for safe maneuvering and passage through the West Basin of all ships that currently call at the Port. The proposed deepening of the areas adjacent to the berths in this area as part of the Channel Deepening Project further ensures that the larger, deep-draft ships can safely navigate in the West Basin. While the increased ship size could affect maneuverability, the risk of accident is largely based on the number of vessels present and would, therefore, not have significant impacts on marine vessel safety in the Port.

Given the continued use of standard practices, including adherence to HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements (e.g., issuance of security calls by dredge operators on the VTS prior to commencement of dredge operations and transit to disposal sites), and Port Tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot onboard to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways, the projected increase in annual vessel calls at Berths 97-109 would not significantly decrease the margin of safety for marine vessels in the terminal area. Scheduling vessel calls at Berths 97-109 to accommodate available berths and anchoring vessels outside the breakwater until safe transit to Berths 97-109 is authorized by the COTP would ensure the 7.1 percent increase over the current number of the vessels that call at the Port annually would not result in changes to routing or vessel safety procedures. Continued implementation of COTP uniform procedures, including advance notification to vessel operators, vessel traffic managers, and Port Pilots identifying the locations of dredges, derrick barges, and any associated operational procedures or restrictions (e.g., one-way traffic), ensure safe transit of vessels operating within and to and from the terminal area. Therefore, marine vessel safety impacts associated with Alternative 4 operations would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Alternative 4 operations would increase vessel traffic by 208 ship calls per year (approximately 10 vessel calls per month) when functioning at maximum capacity in 2030 and beyond, compared to the NEPA baseline. This would represent an increase of just over 7 percent over total annual vessel calls of 2,912 at the Port in 2006. Although the additional 208 vessel calls would increase vessel traffic in the West

Basin, Port, and Precautionary Area, the Alternative 4 would not significantly increase vessel congestion in the open-ocean approach corridors.

The additional vessel calls at Berths 97-109 would not result in adverse safety impacts under NEPA because of continued implementation of HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements, and Port Tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot onboard to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways. In addition, scheduling vessel calls at Berths 97-109 to accommodate available berths and anchoring vessels outside the breakwater until safe transit to Berths 97-109 is authorized by the COTP would ensure the 7.1 percent increase in vessel calls at the proposed terminal site (when compared to the total number of vessel calls at the Port in 2006) would not require modifications to routing or vessel safety procedures.

Additionally, implementation of Alternative 4 would have long-term beneficial effects on marine transportation because existing wharf infrastructure would be upgraded to accommodate modern container ships. Therefore, impacts under NEPA would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

3.10.4.3.2.5 Alternative 5 – Reduced Construction and Operation: Phase I Construction Only

Alternative 5 would include construction and operation of 72 acres of backlands, four wharf-side A-frame cranes, and a single road-bridge spanning the Southwest Slip. Construction of these Phase I improvements were completed in 2003 and have been operational since 2004, as allowed for under the ASJ. No additional facilities would be constructed over the life of the alternative.

Alt 5 – Impact VT-1a: Alternative 5 construction-related marine traffic would potentially interfere with operation of designated vessel traffic lanes and impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

Phase I elements were constructed between 2002 and 2003 and were operational by 2004. Approximately 167 barge trips were required to support Phase I construction activities: 134 barge trips to transport rock from Catalina Island to Berth 100, 23 barge trips for dredging, 8 barge trips for fill, and 2 barge trips to transport piles required to construct the new wharf. No further in-water construction activities would take place.

CEQA Impact Determination

Although barge trips required to transport rock from Catalina Island for Phase I construction increased vessel traffic in the Port and the approach corridors to the Precautionary Area, the additional barge trips did not result in a significant contribution to vessel congestion in the Port or approach corridors. These activities routinely are conducted in the Port, and contractors performing in-water construction

activities are subject to applicable rules and regulations stipulated in all LAHD contracts and Department of the Army permits. Because standard safety precautions were utilized by the Port in piloting these vessels through Harbor waters, the short-term presence of supply barges and support boats at Berth 100 and associated barge trips did not reduce the existing level of safety for vessel navigation in the Port. Therefore, construction impacts on vessel traffic were less than significant under CEQA, and no further in-water construction would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact.

NEPA Impact Determination

Alternative 5 includes in-water activities that were completed under Phase I (dredging, dike placement, and fill) that are not part of the NEPA baseline. Although barge trips required to transport rock from Catalina Island for Phase I construction increased vessel traffic in the Port and the approach corridors to the Precautionary Area, the additional barge trips did not result in a significant contribution to vessel congestion in the Port or approach corridors. These activities are routinely conducted in the Port, and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts and Department of the Army permits. Because standard safety precautions were utilized by the Port in piloting these vessels through Harbor waters, the short-term presence of supply barges and support boats at Berth 100 and associated barge trips did not reduce the existing level of safety for vessel navigation in the Port. Therefore, construction impacts on vessel traffic were less than significant under NEPA, and no further in-water construction would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

Alt 5 – Impact VT-1b: Alternative 5 operations would not interfere with operation of designated vessel traffic lanes or impair the level of safety for vessels navigating the Main Channel, West Basin, or the Precautionary Area.

Operations under Alternative 5 would result in a maximum of 104 vessel calls per year at buildout (2030) and would increase no further through 2045 (Table 3.10-7).

CEQA Impact Determination

Alternative 5 would increase vessel traffic by 104 ship calls per year (less than 10 vessel calls per month) when functioning at maximum capacity (2030 and beyond) compared to vessel calls at Berths 97-109 under CEQA baseline conditions (zero in 2001). This would represent an increase of 3.5 percent over total annual vessel calls at the Port in 2006 of 2,912. Although the additional 104 vessel calls would increase

vessel traffic in the West Basin, Port, and Precautionary Area, Alternative 5 would not significantly increase vessel congestion in the open-ocean approach corridors.

Given the continued use of standard practices, including adherence to HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements, and Port tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot onboard to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways, the projected increase in annual vessel calls at Berths 97-109 would not significantly decrease the margin of safety for marine vessels in the terminal area. Scheduling vessel calls at Berths 97-109 to accommodate available berths and anchoring vessels outside the breakwater until safe transit to Berths 97-109 is authorized by the COTP would ensure the 4.5 percent increase over the current number of the vessels that call at the Port annually would not result in changes to routing or vessel safety procedures. Continued implementation of COTP uniform procedures, including advanced notification to vessel operators, vessel traffic managers, and Port Pilots identifying the location of dredges, derrick barges, and any associated operational procedures or restrictions (e.g., one-way traffic), ensure safe transit of vessels operating within and to and from the terminal area. Therefore, marine vessel safety impacts associated with Alternative 5 operations would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Alternative 5 operations would increase vessel traffic by 104 ship calls per year (less than 10 vessel calls per month) when functioning at maximum capacity in 2030 and beyond, compared to the NEPA baseline. This would represent an increase of 3.5 percent over total annual vessel calls at the Port in 2006 of 2,912. Although the additional 104 vessel calls would increase vessel traffic in the West Basin, Port, and Precautionary Area, Alternative 5 would not significantly increase vessel congestion in the open-ocean approach corridors.

The additional vessel calls at Berths 97-109 would not result in adverse safety impacts under NEPA because of continued implementation of HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements (e.g., issuance of security calls by dredge operators on the VTS prior to commencement of dredge operations and transit to disposal sites), and Port Tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot onboard to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways. In addition, scheduling vessel calls at Berths 97-109 to accommodate available berths and anchoring vessels outside the breakwater until safe transit to Berths 97-109 is authorized by the COTP would ensure the 8 percent increase in vessel calls at the proposed terminal site (when compared to the total number of vessel calls at the Port in 2006) would not require modifications to routing or vessel safety procedures. Therefore, impacts under NEPA would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

3.10.4.3.2.6 Alternative 6 – Omni Terminal

This alternative would entail physical land improvements and wharf construction similar to the proposed Project. However, under this alternative, backlands would be constructed to match the needs of an omni terminal rather than a container terminal. Like the proposed Project, construction of Alternative 6 would involve construction of 2,500 linear feet of wharf improvements and the placement of 2.5 acres of fill into waters of the United States.

Alt 6 – Impact VT-1a: Alternative 6 construction-related marine traffic would potentially interfere with operation of designated vessel traffic lanes and impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

Phase I elements were constructed between 2002 and 2003 and were operational by 2004, as allowed under the ASJ (see Section 1.4.3). Phase II and Phase III in-water construction activities would occur within the existing federal channel limits of the Port (channel and berthing areas). The majority of such in-water activities as a new wharf would occur in the West Basin area. Proposed in-water construction activities would require use of such marine-based construction equipment as derrick barge crane hoists and tugboats to support wharf construction at Berths 100 and 102 and to transport rock from Catalina Island.

The existing 1,200-foot wharf at Berth 100 was completed as part of Phase I construction and involved the placement of 88,000 yd^3 of rock, 14,000 yd^3 of clean backfill material, and 652 separate 24-inch-diameter octagonal concrete wharf piles. This section of wharf was completed in 2003 and officially began operation on June 21, 2004, in accordance with the terms of the ASJ.

Dredging to the -53-foot channel depth for Berth 102 was completed previously as part of the Channel Deepening Project. The berth would be developed as a 925-foot-long container ship wharf in Phase II construction of Alternative 6. The existing Berth 100 is 1,200 feet long and would be extended by 375 feet.

Of the 1,300 feet of new wharf, 925 feet would be constructed at Berth 102 on a previously approved dike built as part of the Channel Deepening Project. The new wharf at Berth 102 would extend northward from the existing Berth 100 wharf. The new wharf would also be constructed to extend Berth 100 an additional 375 feet south. Only the Berth 100 southern wharf extension (375 feet) would require new rock dike (116,000 yd^3) and fill (24,000 yd^3). The fill would be obtained from surplus clean fill located onsite (analyzed as part of the Channel Deepening Project). Wharf construction would include pile driving and riprap placement.

Under Alternative 6, a total of five new A-frame cranes would be installed on the wharves at Berths 100 and 102. Their installation would require the use of general cargo ships for delivery to the terminal site. Four A-frame cranes were installed during Phase I

construction and are currently located at the Berth 100 wharf. One additional A-frame crane would be installed following completion of the wharf extension.

The types of marine-based construction equipment and the duration of its use at the terminal site are presented in Table 3.10-6. Phase I in-water construction extended over a 1-year period. Phase II in-water construction activities would result in a total of 56 workdays, during which the equipment would be utilized for an average increase of 1.0 active construction-equipment workday in the West Basin. Phase III in-water construction activities would result in a total of 162 workdays, during which the equipment would be utilized also for an average increase of 1.0 active construction equipment per day.

The construction of the Berth 100 wharf lasted approximately 12 months (completed in 2003), with crane delivery at the end of 2002. The construction of Berth 102 during Phase II could have a duration of 15 months, and construction of the Berth 100 extension could require up to 15 months. Delivery and installation of the A-frame cranes would last up to 3 months during both Phase II and Phase III. Approximately 167 barge trips were required to support Phase I construction activities, 134 barge trips to transport rock from Catalina Island to Berth 100, 23 barge trips for dredging, 8 barge trips for fill, and 2 barge trips were needed to transport piles required to construct the new wharf. Phase II in-water construction would consist primarily of pile-driving activities for the Berth 102 wharf. Phase III in-water construction activities would result 153 barge trips, 140 barge trips to transport rock from Catalina Island to Berth 100 (south extension), 11 barge trips for fill, and 2 barge trips would be required to transport piles required to construct the new wharf.

In-water construction activities in the West Basin could create hazards to vessel traffic and increase the potential for accidents. No specific accident data are available for the terminal area (Berths 97-109). Currently, the West Basin experiences a relatively low volume of vessel traffic of six or fewer vessel trips per day. Due to the staggered nature of construction activities, the terminal would be partially operational as construction continues, which would increase slightly the number of vessels transiting the West Basin. During the 15-month period of Phase II construction activity and the 15 months of Phase III activity, vessels (derrick barge, tugboats, and general cargo ships delivering A-frame cranes) would increase vessel activity in the West Basin by an average of 1.0 active construction-equipment workday. This increase would not significantly increase the potential accident risk for vessels navigating in the West Basin area. The addition of an average of 1.4 active construction-equipment workdays during Phase I construction activities that occurred between 2002 and 2003 did not result in accidents.

Vessel calls at Berths 118-120 and 121-131 represented approximately 11 percent of all the vessels calling at the Port in 2001. The additional barge trips would not significantly increase the potential accident risk for vessels navigating in the Port or West Basin area.

Barge trips required to transport rock from Catalina Island would increase traffic in the approach corridors to the Precautionary Area; however, the additional 128 barge trips that would occur over a 65-day period would not result in a significant contribution to vessel congestion in the approach corridors.

Although marine-based construction equipment would restrict vessel movement in the turning basin, derricks and supply barges would be highly visible, well-marked, and relatively stationary. These activities are routinely conducted in the Port, and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts, including navigation hazard markings. Prior to

activities that require anchoring vessels in the main navigation channels, the standard vessel safety regulations of the Port require dredging contractors to acquire an Anchorage Waiver Permit. An Anchorage Waiver Permit, issued by the USCG, requires notifying the COTP of expected activities, providing official and ongoing notice to mariners during construction, developing a mooring plan, and marking equipment and any debris for visibility. Compliance with Anchorage Waiver Permit requirements would ensure compliance with regulations governing the Outer Harbor of the Port and main navigation channel areas. Because standard safety precautions would be utilized by all contractors, the presence of supply barges and support boats would not substantially impact marine vessel safety in the main channels and connected basin areas. Accordingly, proposed in-water construction equipment would not interfere with existing operations at adjacent West Basin berths, including Yang Ming Container Terminal operations at Berths 121-131, Kinder Morgan liquid bulk operations at Berths 118-120, and TraPac Container Terminal operations at Berths 136-147.

CEQA Impact Determination

Construction activities could create in-water hazards to vessel traffic and increase the potential for accidents. Phase II and Phase III in-water construction activities would require use of marine-based construction equipment to support development of Berths 100 and 102. Although barge trips required to transport rock from Catalina Island would increase traffic in the Port and the approach corridors to the Precautionary Area, the additional barge trips would not result in a significant contribution to vessel congestion in the Port or approach corridors. These activities are routinely conducted in the Port, and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts and Department of the Army permits. Because standard safety precautions would be utilized by the Port in piloting these vessels through Harbor waters, the short-term presence of supply barges and support boats at Berths 100 and 102 and associated barge trips would not reduce the existing level of safety for vessel navigation in the Port. Therefore, construction impacts on vessel traffic would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Alternative 6 construction activities include new wharf and dike construction, as described previously. These construction activities could create in-water hazards and increase the potential for accidents for vessels navigating in the Main Channel or the West Basin areas during construction activities, compared to NEPA baseline conditions. However, these activities are routinely conducted in the Port, and compliance with standard safety precautions for in-water activities is mandated in all Port contracts. In addition, USACE permit requirements include safety provisions (e.g., USCG notification, monitoring of the VTS, and preparation of Dredge and Disposal Plans). Therefore, the temporary presence of supply barges and support boats at Berths 100 and 102 would not reduce the existing level of safety for vessel

navigation in the Port. Construction impacts on vessel traffic would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impact

Less than significant impact.

Alt 6 – Impact VT-1b: Alternative 6 operations would not interfere with operation of designated vessel traffic lanes or impair the level of safety for vessels navigating the Main Channel, West Basin, or the Precautionary Area.

Operations under Alternative 6 would result in a maximum of 364 vessel calls per year at buildout (2030) and would increase no further through 2045 (Table 3.10-7).

CEQA Impact Determination

Alternative 6 would result in an increase of 364 calls per year (approximately 30 vessel calls per month) when functioning at maximum capacity (2030 and beyond), compared to vessel calls at Berths 97-109 under CEQA baseline conditions (zero in 2001). This would represent an increase of 12.5 percent over total annual vessel calls of 2,912 at the Port in 2006. Although the additional 364 vessel calls would increase vessel traffic in the West Basin, Port, and Precautionary Area, Alternative 6 would not significantly increase vessel congestion in the open-ocean approach corridors.

Improvements made under Alternative 6 would improve overall conditions in the Harbor by creating berth depths sized to accommodate modern, deep-draft vessels. The deep-draft berths would improve the efficiency of shipping and Port operations by reducing the relative number of vessels and vessel trips required to accommodate projected container throughput at the Port. The design parameters of the new wharves at Berths 97-109 would allow safe maneuvering and passage through the West Basin of all ships that currently call at the Port. The proposed deepening of the areas adjacent to the berths in this area as part of the Channel Deepening Project further ensures that the larger, deep-draft ships can safely navigate in the West Basin. While the increased ship size could affect maneuverability, the risk of accident is largely based on the number of vessels present and would therefore not have significant impacts on marine vessel safety within the Port.

Given the continued use of standard practices, including adherence to HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements, and Port Tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot onboard to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways, the projected increase in annual vessel calls at Berths 97-109 would not significantly decrease the margin of safety for marine vessels within the proposed terminal area. Scheduling vessel calls at Berths 97-109 to accommodate available berths and anchoring vessels outside the breakwater until safe transit to Berths 97-109 is authorized by the COTP would ensure the 12.5 percent increase over the current number of vessels that call at the Port annually would not result in changes to routing or vessel safety procedures.

Continued implementation of COTP uniform procedures, including advanced notification to vessel operators, vessel traffic managers, and Port Pilots identifying the location of dredges, derrick barges, and any associated operational procedures and/or restrictions (e.g., one-way traffic), ensure safe transit of vessels operating within and to and from the terminal area. Therefore, marine vessel safety impacts associated with Alternative 6 operations would be less than significant under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Alternative 6 operations would increase vessel traffic by 364 ship calls per year (approximately 30 vessel calls per month) when functioning at maximum capacity in 2030 and beyond compared to the NEPA baseline. This would represent an increase of 12.5 percent over total annual vessel calls of 2,912 at the Port in 2006. Although the additional 364 vessel calls would increase vessel traffic in the West Basin, Port, and Precautionary Area, Alternative 6 would not significantly increase vessel congestion in the open-ocean approach corridors.

The additional vessel calls at Berths 97-109 would not result in adverse safety impacts under NEPA because of continued implementation of HSP speed-limit regulations, adherence to limited-visibility guidelines, VTS monitoring requirements, and Port tariffs requiring vessels of foreign registry and U.S. vessels that do not have a federally licensed pilot onboard to use a Port Pilot for transit in and out of the San Pedro Bay area and adjacent waterways. In addition, scheduling vessel calls at Berths 97-109 to accommodate available berths and anchoring vessels outside the breakwater until safe transit to Berths 97-109 is authorized by the COTP would ensure the 12.5 percent increase in vessel calls at the terminal site (when compared to the total number of vessel calls at the Port in 2006) and would not require modifications to routing or vessel safety procedures. Therefore, impacts associated with Alternative 6 operations would be less than significant under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

3.10.4.3.2.7 Alternative 7 – Nonshipping Use

Alternative 7 would increase the backland area to 117 acres and use the terminal site constructed as part of Phase I for a Regional Center composed of retail, office park, and light industrial uses. Because of this, the Phase I construction activities are included under Alternative 7 although the in-water elements would not be used. The dike, fill, and the wharf would be abandoned in place.

Alternative 7 would convert the site from shipping and containerized storage to retail, office park, and light industrial uses on 117 acres. A public dock would be constructed

but would be developed only to support small watercraft. Additional wharves would not be constructed and the Catalina Express Terminal would not be relocated under this alternative.

Alt 7 – Impact VT-1a: Alternative 7 construction-related marine traffic would not interfere with operation of designated vessel traffic lanes and impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

Under Alternative 7 Phase I in-water construction extended over a 1-year period during which equipment was active for a total of 160 workdays. When weighted by the number of pieces of equipment, this equates to 227 equipment workdays. On average, 1.4 pieces of equipment would have been active daily over the 160 days when in-water construction occurred. The construction of the Berth 100 wharf lasted approximately 12 months (completed in 2003), with crane delivery at the end of 2002. Approximately 167 barge trips were required to support Phase I construction activities—134 trips to transport rock from Catalina Island to Berth 100, 23 trips for dredging, 8 trips for fill, and 2 trips to transport piles. Minor additional in-water work would occur related to the public dock.

In-water construction activities in the West Basin could create hazards to vessel traffic and increase the potential for accidents. No specific accident data are available for the proposed Project area (Berths 97-109). Currently, the West Basin experiences a relatively low volume of vessel traffic at six or fewer vessel trips per day. The addition of an average of 1.4 active construction-equipment workdays during Phase I construction activities that occurred between 2002 and 2003 did not result in accidents.

CEQA Impact Determination

Phase I construction activities required the use of marine-based construction equipment that has the potential to create in-water hazards to vessel traffic and increase the potential for accidents. Such construction activities are routinely conducted in the Port, and contractors performing in-water construction activities are subject to applicable rules and regulations stipulated in all LAHD contracts and Department of the Army permits. Because standard safety precautions were used by the Port in piloting these vessels through Harbor waters, the short-term presence of trips by supply barges or support boats at Berth 100 did not reduce the existing level of safety for vessel navigation in the Port. Barge trips required to transport rock from Catalina Island increased traffic in the Port and the approach corridors to the Precautionary Area. These barge trips, however, did not result in a significant contribution to vessel congestion in the Port or approach corridors. Therefore, construction impacts on vessel traffic were less than significant under CEQA.

Under Alternative 7, only minor additional in-water work would occur in the vicinity of Berth 95 related to the public dock. These activities are routinely conducted in the Port, and compliance with standard safety precautions for in-water activities is mandated in all Port contracts. In addition, USACE permit requirements include safety provisions (e.g., USCG notification, monitoring of the VTS, and preparation of Dredge and Disposal Plans). Therefore, no significant impact under CEQA would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Phase I construction activities had the potential to create in-water hazards and increase the likelihood of accidents for vessels navigating in the Main Channel or the West Basin areas, compared to NEPA baseline conditions. However, these activities are routinely conducted in the Port, and compliance with standard safety precautions for in-water activities is mandated in all Port contracts. In addition, USACE permit requirements include safety provisions (e.g., USCG notification, monitoring of the VTS, and preparation of Dredge and Disposal Plans). The temporary presence of supply barges and support boats at Berth 100 during Phase I did not reduce the existing level of safety for vessel navigation in the Port. Barge trips required to transport rock from Catalina Island increased traffic in the Port and the approach corridors to the Precautionary Area. These barge trips, however, did not result in a significant contribution to vessel congestion in the Port or approach corridors. Construction impacts on vessel traffic were less than significant under NEPA.

Under Alternative 7, only minor additional in-water work would occur in the vicinity of Berth 95 related to the public dock. These activities are routinely conducted in the Port, and compliance with standard safety precautions for in-water activities is mandated in all Port contracts. In addition, USACE permit requirements include safety provisions (e.g., USCG notification, monitoring of the VTS, and preparation of Dredge and Disposal Plans). Therefore, no significant impact under NEPA would occur because there would be no substantive change in environmental conditions between Alternative 7 and the NEPA baseline.

Mitigation Measures

No mitigation is required.

Residual Impact

Less than significant impact.

Alt 7 – Impact VT-1b: Alternative 7 operations would not interfere with operation of designated vessel traffic lanes or impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.

CEQA Impact Determination

Implementation of Alternative 7 would include minor marine operations associated with vessels used for recreational purposes and would result in impacts similar to those experienced under the No Project Alternative (Alternative 1). No significant impacts would occur under CEQA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

NEPA Impact Determination

Under Alternative 7, Regional Center operations would not include vessel calls. Therefore, significant impacts under NEPA would not occur because no substantive change would occur in environmental conditions between Alternative 7 and the NEPA baseline.

Mitigation Measures

No mitigation is required.

Residual Impacts

Less than significant impact.

3.10.4.3.3 Summary of Impact Determinations

The following Table 3.10-9 summarizes the CEQA and NEPA impact determinations of the proposed Project and its alternatives related to Marine Transportation, as described in the detailed discussion in Section 3.10.4.3. This table is meant to allow easy comparison between the potential impacts of the proposed Project and its alternatives with respect to this resource. Identified potential impacts may be based on federal, state, or City of Los Angeles significance criteria, Port criteria, and the scientific judgment of the report preparers.

For each type of potential impact, the table describes the impact, notes the CEQA and NEPA impact determinations, describes any applicable mitigation measures, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in this table. Note that impact descriptions for each of the alternatives are the same as for the proposed Project, unless otherwise noted.

Table 3.10-9. Summary Matrix of Potential Impacts and Mitigation Measures for Marine Transportation Associated with the Proposed Project and Alternatives

Alternative	Environmental Impacts*	Impact Determination	Mitigation Measures	Impacts after Mitigation
3.10 Marine Transportation				
Proposed Project	**VT-1a:** Proposed Project construction-related marine traffic would not interfere with operation of designated vessel traffic lanes and impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
	VT-1b: Proposed Project operations would not interfere with operation of designated vessel traffic lanes or impair the level of safety for vessels navigating the Main Channel, West Basin, or Precautionary Area.	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
Alternative 1 No Project Alternative	**VT-1a**	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Not applicable	Mitigation not required	NEPA: Not applicable
	VT-1b	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Not applicable	Mitigation not required	NEPA: Not applicable
Alternative 2 No Federal Action	**VT-1a**	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
	VT-1b	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact

Table 3.10-9. Summary Matrix of Potential Impacts and Mitigation Measures for Marine Transportation Associated with the Proposed Project and Alternatives (continued)

Alternative	Environmental Impacts*	Impact Determination	Mitigation Measures	Impacts after Mitigation
3.10 Marine Transportation (continued)				
Alternative 3 Reduced Fill Alternative, No Berth 102 Wharf	**VT-1a**	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
	VT-1b	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
Alternative 4 Reduced Fill Alternative, No Berth 100 South	**VT-1a**	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
	VT-1b	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
Alternative 5 Reduced Construction and Operation: Phase I Construction Only	**VT-1a**	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
	VT-1b	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact

Table 3.10-9. Summary Matrix of Potential Impacts and Mitigation Measures for Marine Transportation Associated with the Proposed Project and Alternatives (continued)

Alternative	Environmental Impacts*	Impact Determination	Mitigation Measures	Impacts after Mitigation
3.10 Marine Transportation (continued)				
Alternative 6 Omni Cargo Terminal	**VT-1a**	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
	VT-1b	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
Alternative 7 Nonshipping Alternative: Retail, Office, Light Industrial Land Uses	**VT-1a**	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact
	VT-1b	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Less than significant impact	Mitigation not required	NEPA: Less than significant impact

Note:

*Unless otherwise noted, all impact descriptions for each of the Alternatives are the same as those described for the proposed Project.

3.10.4.4 Mitigation Monitoring

Because the proposed Project would have no significant impacts on marine transportation, no mitigation measures or a monitoring program are required.

3.10.5 Significant Unavoidable Impacts

No significant unavoidable impacts on marine transportation would occur during construction or operation of the proposed Project or alternatives.